

Generic Project Risk Factors

Using this table for risk identification:

A project team might use this table to prompt their thinking about risks for their project. The team can decide which factors are relevant at what rating, then proceed to state the specific risks they suspect could affect their project.

When the project completes, the team should review its performance with risk management and see if there are factors to add to this table or if there are cues that should be changed to help future projects in the organization better identify their risks.

Material in the risk factor table is organized with the following headers:

Project Domain ID	Name for an area in which projects might be done, with risk factors in this table generally found in this type of project. A sequentially assigned number for risk factors in this domain. When new factors are added, they get the next available sequential number, thus items within a category may not be in numerical order.
Risk Category	Header that names the category in which the following risk factors belong.
Risk Factors	Named areas of potential risk to projects in this domain.
Low Risk Cues	Characteristics of this factor when it can be considered low risk to a project.
Medium Risk Cues	Characteristics of this factor when it provides a medium risk to a project.
High Risk Cues	Characteristics of this factor when it should be considered high risk to a project.
Rating	Level of risk you think is true of this project.
Low	This project exhibits the low risk cue, or appears to have no risk in this area.
Medium	This project exhibits the medium risk cue, or something similar in threat.
High	This project exhibits the high risk cue, or something similar in threat.
Not Applic	This factor is not applicable to this project.
Need Info	We need information from someone else (perhaps an expert) to make a judgment.
TBD	The project is not far enough along to make a rating; we need to review this later.
Notes	Space for notes during rating, for later reference on reasons a rating was chosen.

ID	Risk Factors	Low Risk Cues	Medium Risk Cues	High Risk Cues						Notes
					Low	Medium	High	Not Applic	Need Info	
Mission and Goals										
1	Project Fit to Customer Organization	directly supports customer organization mission and/or goals	indirectly impacts one or more goals of customer	does not support or relate to customer organization mission or goals						
2	Project Fit to Provider Organization	directly supports provider organization mission and/or goals	indirectly impacts one or more goals of provider	does not support or relate to provider organization mission or goals						
3	Customer Perception	customer expects this organization to provide this product	organization is working on project in area not expected by customer	project is mismatch with prior products or services of this organization						
4	Work Flow	little or no change to work flow	will change some aspect or have small effect on work flow	significantly changes the work flow or method of organization						
Program Management (if project is part of a program)										
5	Goals Conflict	goals of projects within the program are supportive of or complimentary to each other	goals of projects do not conflict, but provide little direct support	goals of projects are in conflict, either directly or indirectly						
6	Resource Conflict	projects within the program share resources without any conflict	projects within the program schedule resources carefully to avoid conflict	projects within the program often need the same resources at the same time (or compete for the same budget)						
7	Customer Conflict	multiple customers of the program have common needs	multiple customers of the program have different needs, but do not conflict	multiple customers of the program are trying to drive it in very different directions						
8	Leadership	program has active program manager who coordinates projects	program has person or team responsible for program, but unable to spend enough time to lead effectively	program manager concept is not in use						
9	Program Manager Experience	program manager has deep experience in the domain	program manager has some experience in domain, is able to leverage subject matter experts	program manager is new to the domain						
10	Definition of the Program	program is well-defined, with a scope that is manageable by this organization	program is well-defined, but unlikely to be handled by this organization	program is not well-defined or carries conflicting objectives in the scope						
Decision Drivers										
11	Political Influences	no particular politically-driven choices being made	project has several politically motivated decisions, such as using a vendor selected for political reasons, rather than qualifications	project has a variety of political influences or most decisions are made behind closed doors						
12	Convenient Date	date for delivery has been set by reasonable project commitment process	date is being partially driven by need to meet marketing demo, trade show, or other mandate not related to technical estimate	date is being totally driven by need to meet marketing demo, trade show, or other mandate; little consideration of project team estimates						
13	Use of Attractive Technology	technology selected has been in use for some time	project is being done in a sub-optimal way, to leverage the purchase or development of new technology	project is being done as a way to show a new technology or as an excuse to bring a new technology into the organization						
14	Short Term Solution	project meets short term need without serious compromise to long term outlook	project is focused on short-term solution to a problem, with little understanding of what is needed in the long term	project team has been explicitly directed to ignore the long term outlook and focus on completing the short term deliverable						
Organization Management										
15	Organization Stability	little or no change in management or structure expected	some management change or reorganization expected	management or organization structure is continually or rapidly changing						

16 Organization Roles and Responsibilities	individuals throughout the organization understand their own roles and responsibilities and those of others	individuals understand their own roles and responsibilities, but are unsure who is responsible for work outside their immediate group	many in the organization are unsure or unaware of who is responsible for many of the activities of the organization
17 Policies and Standards	development policies and standards are defined and carefully followed	development policies and standards are in place, but are weak or not carefully followed	no policies or standards, or they are ill-defined and unused
18 Management Support	strongly committed to success of project	some commitment, not total	little or no support
19 Executive Involvement	visible and strong support	occasional support, provides help on issues when asked	no visible support; no help on unresolved issues
20 Project Objectives	verifiable project objectives, reasonable requirements	some project objectives, measures may be questionable	no established project objectives or objectives are not measurable
Customers/Users			
21 User Involvement	users highly involved with project team, provide significant input	users play minor roles, moderate impact on system	minimal or no user involvement; little user input
22 User Experience	users highly experienced in similar projects; have specific ideas of how needs can be met	users have experience with similar projects and have needs in mind	users have no previous experience with similar projects; unsure of how needs can be met
23 User Acceptance	users accept concepts and details of system; process is in place for user approvals	users accept most of concepts and details of system; process in place for user approvals	users do not accept any concepts or design details of system
24 User Training Needs	user training needs considered; training in progress or plan in place	user training needs considered; no training yet or training plan is in development	requirements not identified or not addressed
25 User Justification	user justification complete, accurate, sound	user justification provided, complete with some questions about applicability	no satisfactory justification for system

Project Characteristics

26 Project Size	small, non-complex, or easily decomposed	medium, moderate complexity, decomposable	large, highly complex, or not decomposable
27 Reusable Components	components available and compatible with approach	components available, but need some revision	components identified, need serious modification for use
28 Supplied Components	components available and directly usable	components work under most circumstances	components known to fail in certain cases, likely to be late, or incompatible with parts of approach
29 Budget Size	sufficient budget allocated	questionable budget allocated	doubtful budget is sufficient
30 Budget Constraints	funds allocated without constraints	some questions about availability of funds	allocation in doubt or subject to change without notice
31 Cost Controls	well established, in place	system in place, weak in areas	system lacking or nonexistent
32 Delivery Commitment	stable commitment dates	some uncertain commitments	unstable, fluctuating commitments
33 Development Schedule	team agrees that schedule is acceptable and can be met	team finds one phase of the plan to have a schedule that is too aggressive	team agrees that two or more phases of schedule are unlikely to be met

Product Content

34 Requirements Stability	little or no change expected to approved set (baseline)	some change expected against approved set	rapidly changing or no agreed-upon baseline
35 Requirements Completeness and Clarity	all completely specified and clearly written	some requirements incomplete or unclear	some requirements only in the head of the customer
36 Testability	product requirements easy to test, plans underway	parts of product hard to test, or minimal planning being done	most of product hard to test, or no test plans being made
37 Design Difficulty	well defined interfaces; design well understood	unclear how to design, or aspects of design yet to be decided	interfaces not well defined or controlled; subject to change

38 Implementation Difficulty	content is reasonable for this team to implement	content has elements somewhat difficult for this team to implement	content has components this team will find very difficult to implement
39 System Dependencies	clearly defined dependencies of the project and other parts of system	some elements of the system are well understood and planned; others are not yet comprehended	no clear plan or schedule for how the whole system will come together

Deployment

40 Response or other Performance Factors	readily fits boundaries needed; analysis has been done	operates occasionally at boundaries	operates continuously at boundary levels
41 Customer Service Impact	requires little change to customer service	requires minor changes to customer service	requires major changes to customer service approach or offerings
42 Data Migration Required	little or no data to migrate	much data to migrate, but good descriptions available of structure and use	much data to migrate; several types of data or no good descriptions of what is where
43 Pilot Approach	pilot site (or team) available and interested in participating	pilot needs to be done with several sites (who are willing) or with one who needs much help	only available pilot sites are uncooperative or in crisis mode already

Development Process

44 Alternatives Analysis	analysis of alternatives complete, all considered, assumptions verifiable	analysis of alternatives complete, some assumptions questionable or alternatives not fully considered	analysis not completed, not all alternatives considered, or assumptions faulty
45 Commitment Process	changes to commitments in scope, content, schedule are reviewed and approved by all involved	changes to commitments are communicated to all involved	changes to commitments are made without review or involvement of the team
46 Quality Assurance Approach	QA system established, followed, effective	procedures established, but not well followed or effective	no QA process or established procedures
47 Development Documentation	correct and available	some deficiencies, but available	nonexistent
48 Use of Defined Development Process	development process in place, established, effective, followed by team	process established, but not followed or is ineffective	no formal process used
49 Early Identification of Defects	peer reviews are incorporated throughout	peer reviews are used sporadically	team expects to find all defects with testing
50 Defect Tracking	defect tracking defined, consistent, effective	defect tracking process defined, but inconsistently used	no process in place to track defects
51 Change Control for Work Products	formal change control process in place, followed, effective	change control process in place, not followed or is ineffective	no change control process used

Development Environment

52 Physical Facilities	little or no modification needed	some modifications needed; some existent	major modifications needed, or facilities nonexistent
53 Tools Availability	in place, documented, validated	available, validated, some development needed (or minimal documentation)	unvalidated, proprietary or major development needed; no documentation
54 Vendor Support	complete support at reasonable price and in needed time frame	adequate support at contracted price, reasonable response time	little or no support, high cost, and/or poor response time
55 Contract Fit	contract with customer has good terms, communication with team is good	contract has some open issues which could interrupt team work efforts	contract has burdensome document requirements or causes extra work to comply
56 Disaster Recovery	all areas following security guidelines; data backed up; disaster recovery system in place; procedures followed	some security measures in place; backups done; disaster recovery considered, but procedures lacking or not followed	no security measures in place; backup lacking; disaster recovery not considered

Project Management (PM)

57 PM Approach	product and process planning and monitoring in place	planning and monitoring need enhancement	weak or nonexistent planning and monitoring
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58 PM Experience	PM very experienced with similar projects	PM has moderate experience or has experience with different types of projects	PM has no experience with this type of project or is new to project management
59 PM Authority	has line management or official authority that enables project leadership effectiveness	is able to influence those elsewhere in the organization, based on personal relationships	has little authority from location in the organization structure and little personal power to influence decision-making and resources
60 Support of the PM	complete support by team and of management	support by most of team, with some reservations	no visible support; manager in name only

Team Members

61 Team Member Availability	in place, little turnover expected; few interrupts for fire fighting	available, some turnover expected; some fire fighting	high turnover, not available; team spends most of time fighting fires
62 Mix of Team Skills	good mix of disciplines	some disciplines inadequately represented	some disciplines not represented at all
63 Team Communication	clearly communicates goals and status between the team and rest of organization	team communicates some of the information some of the time	rarely communicates clearly within team or to others who need to be informed
64 Application Experience	extensive experience in team with projects like this	some experience with similar projects	little or no experience with similar projects
65 Expertise with Application Area (Domain)	good background with application domain within development team	some experience with domain in team or able to call on experts as needed	no expertise in domain in team, no availability of experts
66 Experience with Project Tools	high experience	average experience	low experience
67 Experience with Project Process	high experience	average experience	low experience
68 Training of Team	training plan in place, training ongoing	training for some areas not available or training planned for future	no training plan or training not readily available
69 Team Spirit and Attitude	strongly committed to success of project; cooperative	willing to do what it takes to get the job done	little or no commitment to the project; not a cohesive team
70 Team Productivity	all milestones met, deliverables on time, productivity high	milestones met, some delays in deliverables, productivity acceptable	productivity low, milestones not met, delays in deliverables
71 Staffing Level in Key Areas	all areas of the project work have more than one person available to the project	single individuals cover one or more key areas of the project work	only one person with expertise in most of the key technology or process areas

Technology

72 Technology Match to Project	technology planned for project is good match to customers and problem	some of the planned technology is not well-suited to the problem or customer	selected technology is a poor match to the problem or customer
73 Technology Experience of Project Team	good level of experience with technology	some experience with the technology	no experience with the technology
74 Availability of Technology Expertise	technology experts readily available	experts available elsewhere in organization	will need to acquire help from outside the organization
75 Maturity of Technology	technology has been in use in the industry for quite some time	technology is well understood in the industry	technology is leading edge, if not "bleeding edge" in nature

Maintenance and Support

76 Design Complexity	easily maintained	certain aspects difficult to maintain	extremely difficult to maintain
77 Support Personnel	in place, experienced, sufficient in number	missing some areas of expertise	significant discipline or expertise missing
78 Vendor Support	complete support at reasonable price and in needed time frame	adequate support at contracted price, reasonable response time	little or no support, high cost, and/or poor response time

Total Categories 14
Total Factors 78