|  |  |  |  |
| --- | --- | --- | --- |
| Project: |   | Assess. Date: |  |

# Chapter 1 – Goals

| # | Risk | Component | Critical phase | Severity of risk (1-5) | Probability of occurrence (1-5) | Risk level (severity\* probability) | Preemptive Action |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | There is no focused application expert | 1.1 | Analysis |  |  |  |  |
|  | The application expert is insufficiently committed or involved  | 1.1 | Analysis |  |  |  |  |
|  | The application expert and the users are over-involved  | 1.1 |  |  |  |  |  |
|  | The application expert or the main user is non-authoritative | 1.1 |  |  |  |  |  |
|  | The application expert or the main user is unprofessional | 1.1 | Analysis |  |  |  |  |
|  | The application expert lacks the practical ability to devote the required time | 1.1 | Analysis Testing |  |  |  |  |
|  | Replacement of the application expert and high-ranking users during the course of the project | 1.1 |  |  |  |  |  |
|  | Unclear goals and objectives  | 1.2 | Analysis |  |  |  |  |
|  | Too many problems that the system will not solve and that will cause problems during commissioning | 1.3 | Training & Com-missioning |  |  |  |  |
|  | Problems that the system will create, and that will cause problems in commissioning and regular operation | 1.3 | Training & Com-missioning |  |  |  |  |
|  | Unrealistic user expectations | 1.3 | Analysis |  |  |  |  |
|  | Imprecise and changing requirements | 1.3 |  |  |  |  |  |
|  | Unfamiliar application in the organization or the market | 1.6 | Analysis |  |  |  |  |
|  | Application still open (likelihood of changes) | 1.6 |  |  |  |  |  |

# Chapter 2 – Application

| # | Risk | Component | Critical phase | Severity of risk (1-5) | Probability of occurrence (1-5) | Risk level (severity\* probability) | Preemptive Action |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Too many functional or technical constraints that prevent ideal application  | 2.1 | Design & Build |  |  |  |  |
|  | Functional requirement for which the technical implementation is not clear in advance | 2.1 | Design & Build |  |  |  |  |
|  | Demand for development of a sophisticated or complex system  | 2.1 | Design & Build |  |  |  |  |
|  | Many different types of users  | 2.2 | Analysis |  |  |  |  |
|  | Many sites that will have to be supported | 2.2 | Training & Com-missioning |  |  |  |  |
|  | Novel user interface  | 2.4 | Training & Com-missioning |  |  |  |  |
|  | Difficulties can be expected in defining the user interface (screen size, color, etc.) | 2.4 | Design & Build |  |  |  |  |
|  | New work procedures for end users | 2.5 | Training & Com-missioning |  |  |  |  |
|  | Work procedures have not been fully defined | 2.5 |  |  |  |  |  |
|  | Complex work procedures that depend on a number of users for their definition | 2.5 | Analysis |  |  |  |  |
|  | Complex work procedures for which no O&M analysis has been performed | 2.5 | Analysis |  |  |  |  |
|  | Complex or large transactions that could cause slow performance | 2.6 | Installation & Trial-run |  |  |  |  |
|  | Integration of and additions to existing files | 2.11 | Design & Build |  |  |  |  |
|  | Existing data must be converted – major processing of errors | 2.12 | Installation & Trial-run |  |  |  |  |
|  | Unknown quantity of reports and queries  | 2.15 | Design & Build |  |  |  |  |
|  | There will be problems in defining reports and queries | 2.15 | Design & Build |  |  |  |  |
|  | Need for particularly flexible reports – source of lack of client satisfaction  | 2.15 | Training & Com-missioning |  |  |  |  |
|  | Objects chart not finalized | 2.13 |  |  |  |  |  |
|  | Strict data security requirements  | 2.19 |  |  |  |  |  |
|  | Integration of a new security tool in the organization/ market | 2.19 |  |  |  |  |  |
|  | Data security risks | 2.19 |  |  |  |  |  |
|  | Strict reliability requirements  | 2.19 |  |  |  |  |  |
|  | Strict performance requirements | 2.21 | Installation & Trial-run |  |  |  |  |
|  | Numerous participating or connected systems  | 2.22 | Design & Build |  |  |  |  |
|  | Numerous workstation integrations | 2.22 | Design & Build |  |  |  |  |
|  | Problems connecting systems or interfaces to other systems  | 2.22 | Installation & Trial-run |  |  |  |  |
|  | Numerous interfaces with internal systems  | 2.22 | Design & Build |  |  |  |  |
|  | Numerous inputs from outside systems – dependence on other systems  | 2.22 | Design & Build |  |  |  |  |
|  | Numerous special requirements  | 2.23 | Design & Build |  |  |  |  |

# Chapter 3 - Technology

| # | Risk | Component | Critical phase | Severity of risk (1-5) | Probability of occurrence (1-5) | Risk level (severity\* probability) | Preemptive Action |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Novel or “immature” technology in a specific area | 3.0 |  |  |  |  |  |
|  | Lack of familiarity with the main hardware (in the organization/market) | 3.1 | Design & Build |  |  |  |  |
|  | Large-scale hardware purchasing | 3.1 | Installation & Trial-run |  |  |  |  |
|  | Hardware upgrade  | 3.1 | Installation & Trial-run |  |  |  |  |
|  | Need for hot backup in the operating system or hardware | 3.1 | Installation & Trial-run |  |  |  |  |
|  | Integration of special equipment | 3.4 | Installation & Trial-run |  |  |  |  |
|  | Lack of familiarity with the operating system (in the organization/market) | 3.10 | Installation & Trial-run |  |  |  |  |
|  | Need to purchase an operating system | 3.10 | Installation & Trial-run |  |  |  |  |
|  | Need to upgrade the operating system | 3.10 | Installation & Trial-run |  |  |  |  |
|  | Lack of familiarity with the database (in the organization/market) | 3.11 | Design & Build |  |  |  |  |
|  | Lack of familiarity with the development languages (in the organization/market) | 3.13 | Design & Build |  |  |  |  |
|  | Need to purchase development languages | 3.13 | Design & Build |  |  |  |  |
|  | Lack of infrastructure in a specific area | 3.13 | Installation & Trial-run |  |  |  |  |
|  | Lack of familiarity with development tools | 3.13 | Design & Build |  |  |  |  |
|  | Need to select development tools | 3.13 | Analysis |  |  |  |  |
|  | Instability or immaturity of development tools | 3.13 | Design & Build |  |  |  |  |
|  | Faulty localization of (off-the-shelf) development tools  | 3.13 | Design & Build |  |  |  |  |
|  | Complexity of the physical infrastructure  | 3.30 | Installation & Trial-run |  |  |  |  |
|  | Integration with off-the-shelf products (version changes, change in organization policy, support level, etc.) | 3.20 | Design & Build |  |  |  |  |
|  | Commissioning of user-unfriendly tools | 3.20 | Training & Com-missioning |  |  |  |  |
|  | Lack of familiarity with system operation and production tools  | 3.15 | Installation & Trial-run |  |  |  |  |
|  | Complications with local telecommunications | 3.30 | Installation & Trial-run |  |  |  |  |
|  | Integration into a public network | 3.31 | Installation & Trial-run |  |  |  |  |
|  | Integration into an unstable or overloaded telecommunications network | 3.31 | Installation & Trial-run |  |  |  |  |
|  | Integration with tangent technologies | 3.33 | Installation & Trial-run |  |  |  |  |

# Chapter 4 - Implementation

| # | Risk | Component | Critical phase | Severity of risk (1-5) | Probability of occurrence (1-5) | Risk level (severity\* probability) | Preemptive Action |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Lack of management commitment to the project which is reflected in the allocation of required resources  | 4.1 |  |  |  |  |  |
|  | Failure to set up committees to manage the project | 4.1 |  |  |  |  |  |
|  | Lack of involvement or commitment by the steering committee  | 4.1 |  |  |  |  |  |
|  | Steering committee lacks budgetary authority | 4.1 |  |  |  |  |  |
|  | Professional project staff and/or involved parties not specified | 4.1 | Analysis |  |  |  |  |
|  | Numerous third parties involved (vendors) | 4.1 |  |  |  |  |  |
|  | Numerous internal involved parties | 4.1 |  |  |  |  |  |
|  | Development by a third party | 4.1 |  |  |  |  |  |
|  | No project manager representing the organization in a system developed by a third party | 4.1 |  |  |  |  |  |
|  | Lack of commitment by internal parties (in the organization) | 4.1 |  |  |  |  |  |
|  | Lack of involvement of O&M | 4.1 | Analysis |  |  |  |  |
|  | Inexperienced project manager | 4.1 |  |  |  |  |  |
|  | Inexperienced systems analysts | 4.1 | Analysis |  |  |  |  |
|  | Inexperienced developers | 4.1 | Design & Build |  |  |  |  |
|  | Unknowledgeable personnel – in a specific area | 4.1 | Design & Build |  |  |  |  |
|  | Temporary manpower or high personnel turnover | 4.1 |  |  |  |  |  |
|  | Transfer of personnel to other projects | 4.1 |  |  |  |  |  |
|  | Shortage of key personnel at critical periods of the project | 4.1 |  |  |  |  |  |
|  | Faulty interpersonal communications in the project staff | 4.1 |  |  |  |  |  |
|  | Faulty interpersonal communications between project staff and users | 4.1 |  |  |  |  |  |
|  | Lack of prior experience in specific areas of the project | 4.1 |  |  |  |  |  |
|  | Lack of professional personnel with the required security clearance | 4.1 |  |  |  |  |  |
|  | Operating teams lack familiarity with tools, operating systems or hardware | 4.1 | Design & Build |  |  |  |  |
|  | Project with an inflexible schedule | 4.2 |  |  |  |  |  |
|  | Lack of resources for system development within the assigned time frame | 4.2 |  |  |  |  |  |
|  | Project scope (scheduled by years) | 4.2 |  |  |  |  |  |
|  | Long intervals between milestones | 4.2 |  |  |  |  |  |
|  | Complexity or difficulties in project implementation | 4.2 |  |  |  |  |  |
|  | Complex work plan | 4.2 |  |  |  |  |  |
|  | No first deliverable – one year after the start of the project | 4.2 |  |  |  |  |  |
|  | Lack of existing and available documentation  | 4.5 | Training & Com-missioning |  |  |  |  |
|  | Lack of defined standards for writing and development | 4.5 | Design & Build |  |  |  |  |
|  | Lack of procedures for costing and integrating changes in system analysis | 4.6 | Design & Build |  |  |  |  |
|  | Problems that can be expected in commissioning the system | 4.7 | Training & Com-missioning |  |  |  |  |
|  | Problems that can be expected in importing data into the system | 4.7 | Installation & Trial-run |  |  |  |  |
|  | Numerous required procedures | 4.7 | Training & Com-missioning |  |  |  |  |
|  | User is not experienced enough to integrate the system | 4.7 | Training & Com-missioning |  |  |  |  |
|  | User is not prepared to receive the system | 4.7 | Training & Com-missioning |  |  |  |  |
|  | Numerous training courses required | 4.7 | Training & Com-missioning |  |  |  |  |
|  | O&M changes required parallel to the system | 4.7 | Training & Com-missioning |  |  |  |  |
|  | Development of the system by configurations | 4.9 | Installation & Trial-run |  |  |  |  |
|  | Inexperienced testers | 4.8 | Testing |  |  |  |  |
|  | Problems to be expected in system testing | 4.8 | Testing |  |  |  |  |
|  | Inability to run tests, including load tests, live database scenarios, and the suitability of the client environment | 4.8 | Testing |  |  |  |  |
|  | Setting up a testing environment | 4.8 | Testing |  |  |  |  |
|  | Numerous tests required | 4.8 | Testing |  |  |  |  |
|  | Lack of involvement of Quality Assurance | 4.8 |  |  |  |  |  |
|  | The project requires multiple pilots | 4.8 |  |  |  |  |  |
|  | No use of a pilot (beta version) | 4.8 |  |  |  |  |  |

# Chapter 5 - Cost

| # | Risk | Component | Critical phase | Severity of risk (1-5) | Probability of occurrence (1-5) | Risk level (severity\* probability) | Preemptive Action |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Difficulty of precisely estimating development valuations | 5 |  |  |  |  |  |
|  | Definition of budgetary constraints for the project | 5 |  |  |  |  |  |
|  | Uncertainty about the costing of all the system's components | 5 |  |  |  |  |  |
|  | Too many component 98s in the system documents | 5 | Analysis |  |  |  |  |
|  | Issuing the RFP | 5 |  |  |  |  |  |
|  | No feasibility study or evaluation of alternatives was performed |  |  |  |  |  |  |
|  | Changes will destabilize the software |  |  |  |  |  |  |
|  | There is no defined development methodology (not according to MethodA) |  |  |  |  |  |  |
|  | New analysis or development method |  |  |  |  |  |  |
|  | Numerous legal approvals required |  |  |  |  |  |  |