**Impact Analysis Checklist for Requirements Changes**

##### Implications of the Proposed Change

1. Will the change enhance or impair the ability to satisfy any business requirements?
2. Do any existing requirements in the baseline conflict with the proposed change?
3. Do any other pending requirements changes conflict with the proposed change?
4. What are the business or technical consequences of not making the change?
5. What are possible adverse side effects or other risks of making the proposed change?
6. Will the proposed change adversely affect performance or other quality attributes?
7. Is the proposed change feasible within known technical constraints and current staff skills?
8. Will the proposed change place unacceptable demands on any resources required for the development, test, or operating environments?
9. Must any tools be acquired to implement and test the change?
10. How will the proposed change affect the sequence, dependencies, effort, or duration of any tasks currently in the project plan?
11. Will prototyping or other user input be required to validate the change?
12. How much effort that has already been invested in the project will be lost if this change is accepted?
13. Will the proposed change cause an increase in product unit cost, such as by increasing third-party product licensing fees?
14. Will the change affect any marketing, manufacturing, training, or customer support plans?

##### System Elements Affected by the Proposed Change

1. Identify any user interface changes, additions, or deletions required.
2. Identify any changes, additions, or deletions required in reports, databases, or files.
3. Identify the design components that must be created, modified, or deleted.
4. Identify the source code files that must be created, modified, or deleted.
5. Identify any changes required in build files or procedures.
6. Identify existing unit, integration, and system tests to be modified or deleted.
7. Estimate the number of new unit, integration, and system tests needed.
8. Identify help screens, training or support materials, or other user documentation that must be created or modified.
9. Identify other applications, libraries, or hardware components affected by the change.
10. Identify any third-party software to be acquired or modified.
11. Identify any impact the proposed change will have on the project management plan, quality assurance plan, configuration management plan, or other plans.

**Effort Estimation for a Requirements Change**

|  |  |
| --- | --- |
| **Effort (Labor Hours)** | **Task** |
|  | Update the SRS or requirements depository |
|  | Develop and evaluate a prototype |
|  | Create new design components |
|  | Modify existing design components |
|  | Develop new user interface components |
|  | Modify existing user interface components |
|  | Develop new user documentation and help screens |
|  | Modify existing user documentation and help screens |
|  | Develop new source code |
|  | Modify existing source code |
|  | License and integrate third-party software |
|  | Modify build files and procedures |
|  | Write new unit and integration tests |
|  | Modify existing unit and integration tests |
|  | Perform unit and integration testing after implementation |
|  | Write new system and acceptance tests |
|  | Modify existing system and acceptance tests |
|  | Modify automated test suites |
|  | Perform regression testing |
|  | Develop new reports |
|  | Modify existing reports |
|  | Develop new database elements |
|  | Modify existing database elements |
|  | Develop new data files |
|  | Modify existing data files |
|  | Modify various project plans |
|  | Update other documentation |
|  | Update requirements traceability matrix |
|  | Review modified work products |
|  | Perform rework following reviews and testing |
|  | Other tasks |
|  | **TOTAL ESTIMATED EFFORT** |

Procedure:

1. Identify the subset of the above tasks that will have to be done.
2. Allocate resources to tasks.
3. Estimate effort required for pertinent tasks listed above, based on assigned resources.
4. Total the effort estimates.
5. Sequence tasks and identify predecessors.
6. Determine whether change is on the project’s critical path.
7. Estimate schedule and cost impact.

**Impact Analysis Report Template**

Change request ID: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Title: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Description: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Evaluator: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date prepared: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Estimated total effort: \_\_\_\_\_\_\_\_\_\_\_ labor hours

Estimated schedule impact: \_\_\_\_\_\_\_\_\_\_\_ days

Additional cost impact: \_\_\_\_\_\_\_\_\_\_\_ dollars

Quality impact: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Other components affected: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Other tasks affected: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Life cycle cost issues: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_