

UNIVERSITY OF TOLEDO INTERNAL AUDIT DEPARTMENT

ENSURE CONTINUITY OF SYSTEMS

Control practices

The following control objectives provide a basis for strengthening your control environment for the process of ensuring continuity of systems. When you select an objective, you will access a list of the associated business risks and control practices. That information can serve as a

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Effectiveness and efficiency of operations

A. Management and users are involved in and approve IT systems development.

Business risks

- Systems will not be designed according to user needs.
- Systems will not be properly implemented.
- Data will not be properly maintained.

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C. Appropriate authorization and approval is required for any changes to IT systems.

Business risks

- Data will not be processed accurately or properly.
- Programmed controls, such as validity tests, that may prevent reasonably unanticipated errors will be rendered inoperative.
- Systems reporting will not provide users with sufficient data to verify the accuracy, completeness, and appropriateness of processing.
- Ongoing maintenance costs will be significantly higher.
- Operating efficiency (both technical and functional) will be reduced.

Control practices

1. Require IT group to authorize and approve all systems and program change
2. Control and report all emergency changes (such as quick fixes to systems).
3. Document emergency fixes properly and in a timely manner.
4. Require user department authorization and approval for all systems and program changes except those required to correct programming errors.
5. Require an approved change request for all changes.
6. Ensure that programming supervisors perform a thorough supervision and review of program changes. This involves a detailed code review, processing the change against test data, and parallel processing.
7. Require change requests to be in writing and include the reasons for the requested changes.
8. Require changes to be documented and approved by employees who do not have duties surrounding the execution of the change.
9. Retain original backup versions of program change files until several revisions have been processed and new programs are tested and updated.

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F. Information systems are available as needed.

Business risks

- Business continuation planning will be poor or lacking.
- IT safeguards will be inadequate.

Control practices

1. Establish and maintain senior management commitment for business contingencies.
2. Maintain a formal business continuity plan.
3. Assess the impact of new or modified systems on business continuation procedures.
4. Establish alternative processing arrangements.
5. Test business continuation procedures regularly.