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1.0   Purpose

Change management refers to a formal process for making planned and unplanned changes to the Tuskegee production IT environment. The primary objective of this document is to provide standardized methods and procedures to meet the change management requirements supporting Tuskegee's operations. The business processes detailed in this document meet the foundation requirements for industry best practices as detailed within the Information Technology Infrastructure Library (ITIL) directly relating to IT change management. This will ensure the day-to-day IT functions performed to provide effective change management satisfy corporate governance audit requirements that ultimately reduce risk. In addition to meeting all the audit requirements, these guidelines will provide a process for efficient and prompt handling of all IT changes completed by the IT department.

Change management generally includes the following steps:

Submission: During this step an change is identified and a ch
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Scope

This policy applies to all changes to IT services provided by

All changes to IT services must follow a

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Initiating the Change (New Request for a Change)

Changes are identified by the business unit or the Help desk. Anyone identifying a requirement for a change functions as the Change Initiator and is responsible for providing the necessary information to identify the basic requirements associated with the change.

The Change Management

analysis is documented within the "Impact" fields in ServiceDesk. After the Change Coordinator reviews, categorizes, and prioritizes the RFC, they will assign a resource depending on

– High risk to system availability (system/service outage expected during Prime/Peak Times)
– Complex implementation and back-out plans, back-out likely to extend the window
timeframe
– Affects security of data on infrastructure
– Impacts service level agreements (e.g. Business Prime/Peak Time)
– Outside vendor support is typically required

Business Risk and Impact Analysis

This section details the potential infrastructure and business risks and impacts associated with a change, and the criteria necessary to assign a risk level to a change. The Change Coordinator works with the business units closely associated or impacted by the proposed change to conduct a business risk and impact analysis. The business risk and impact analysis is completed when a new change record is created. The business risk and impact process evaluates the impact of the change as it relates to the ability of the university to conduct business. The key objective is to confirm that the change is consistent with current business objectives. The following points should be considered while performing the business risk and
impact assessment:

Evaluate business risk/impact of both doing and not doing the change. Determine if the implementation of the change conflicts with business operations.
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o   High (4) – Involves IT resources from more than two workgroups and crosses IT divisions or

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Production Migration	No Risk	Assignment group	Assignment group	Assignment group	Assignment group
	No Risk	Mgr of Assignment group	Mgr of Assignment		

Moderat

	No Risk	Assignment group based on subcategory, Peer Review	Assignment group based on subcategory, Peer Review	Assignment group based on subcategory, Review	Assignment based on subcategory, Review

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It is essential that requests for   submitted and a   imely manner. This will allow compl   cu e document   processi and obtaining the approvals i   ti prior to the   lementa date.

Lead times are the number of   ti Initiation or   t be completed prior to the reques   e tion date.   days wi vary, depending on the priority   s vel.

several weeks (or even months) notice prior to the requested im

identifies the workflow associated with change management approval at the company:

The process of authorizing a change request depends upon the category and priority of the change and will be handled in the following manner:
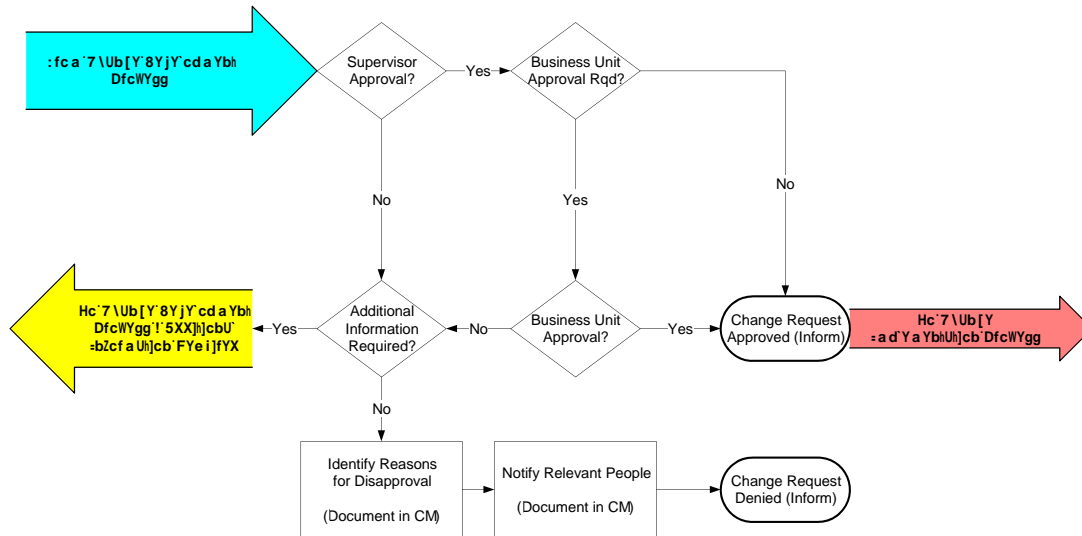
Emergency priority changes are escalated to the appropriate IT business unit manager for fasttrack
Approval - All emergency changes will be entered into ServiceDesk (after the fact) and tracked by the CAB.
Routine changes are approved by the appropriate IT Business Unit Manager and progress directly to the change implementation phase.
Minor changes can be approved by the Change Coordinator or the appropriate IT Business Unit
Manager or appropriate peer approval.
All other major and significant changes must be approved by the established approval authority
as identified in the change record. Approval authority level is dependent on the change
category.
Changes that are maintenance types of changes, usually within the operations and systems
support areas, can be approved at the manager level, but will usually involve a peer review only.

In each case, the appropriate person or body makes a decision on whether the change should be implemented based on the information supplied in the RFC.

If the RFC is rejected, the RFC is closed and the Change Initiator is informed of the decision. The reasons for the rejection are added to the change record.

Implementation and Documentation Phase

Once an RFC is approved, it moves into the Implementation and Documentation Phase.

This phase is concerned with the steps necessary to successfully implement the change:
• Complete final planning
• Establish the schedule and complete required notifications
• Complete the change implementation
• Test, validate and accept the change
• Complete final change documentation
The diagram below shows the steps and workflow associated with completing the change:

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During this step the Change Coordinator reviews all comments and recommendations to ensure all required tasks have been completed. They conduct this review with the IT business unit manager, the change implementer and the change initiator. This phase is also used by the change implementer to complete any final change development necessary to complete the implementation

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The Change Coordinator establishes the appropriate schedule for the implementation of the change. The schedule is based on several factors including the change priority, other changes being implemented, and system availability. Once the schedule has been established the Change Coordinator ensures the change is noted on the consolidated change schedule and notifies all interested parties of the pending change.

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The Change Implementer implements the change in accordance with the implementation plan and during the scheduled time. This is generally a technical implementation. Failure of an implementation at this level will normally require the Change Implementer to follow the back-out plan to ensure normal system operations. Significant changes within the environment that require a major program development effort

will follow the guidelines established in the SDLC document and established Customer Project Management procedures. In general these include the following requirements which all change implementations must follow:

Developing an implementation project plan.
Verify testing was successful.
Applying the change to production.
Validating the change in production.
Resolving problems caused by the change.
Writing a brief summary of the results.
Updating the Change Management application with results of the implementation.

Testing / Validation and Acceptance

Once a change has been implemented, the IT Business unit responsible for the change and end users who will be using the change will conduct testing following the test plan developed during the change development phase. Accurate documentation and analysis of any abnormalities is documented in the change record.

The Change Coordinator or the CAB designee will rate the change with one of the following ratings:

Acceptance – with no comments.
Acceptance – with minor exceptions (note that these exceptions will either be fixed under the
current change or may require the creation of another new change).
Rejection – normally used only if the implemented change doesn't meet the required business
needs. This results in a failed change determination and must be thoroughly reviewed to identify
the root cause of the failure. This will normally result in the creation of a new change request.

Change Review and Acceptance

Following a successful change implementation, a change review must be conducted to determine if the change resulted in the desired outcome. In most cases, this review process might be very brief. For a routine change, where the effect has been small and the results relatively predictable, the review process will be limited to checking that the change has provided the user with the desired functionality.

Monitor Change Production Environment

In order to determine whether the deployed change has been effective, it is necessary to monitor the changes in the production environment. For a small change, this may consist of checking on the desired functionality. For larger changes, it might require the monitoring of network and server information, performance data, event logs, or response times. A number of different tools and technologies are available for monitoring a change in the production environment. The actual tools used will depend on the nature of the change, the components of the IT infrastructure that are affected, and the skills and experience of personnel performing the monitoring activity. The Change Coordinator will typically determine the best tool needed based on the specific change.

Post-Implementation Review

The Change Coordinator is responsible for ensuring that a post-implementation review is completed and presented to the CAB. The findings of the post implementation review are documented within the company's selected technology platform record. After sufficient information has been gathered from monitoring to determine the effectiveness of the change, a post-implementation review is held.

The CAB Chairperson or Change Coordinator will schedule and moderate the review meeting for large changes. During the review, reference must be made to the original RFC, which states the objectives of the change and offers some measurable indicators for gauging the effectiveness of the change. The measured effects of the change can be > tauging a

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Reports from the university's selected technology platform will provide meaningful and concise information about past and current changes. This information will permit the evaluation of the impact of changes, dependencies, and trends.

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NOTE: These are currently recommended reports that should be developed. This section will need revision at semi-annual intervals. The Change Management Reports include:

• Reasons for Change (user requests, emergency, enhancements, business requirements, service
  call/incident/problem fixes, procedures/training improvement, etc.)
• Number of successful changes
• Number of failed changes
• Number of changes backed-out, together with the reasons (e.g. incorrect assessment, bad build)
• Number of Incidents traced to the change and the reasons
• Number of RFCs (and any trends in origination)
• Number of implemented changes reviewed, and the size of review backlogs
• Data from previous periods (last period, last year) for comparison
• Number of RFCs rejected
• Number of changes per category

The above reports can be used as a basis for assessing the efficiency and effectiveness of the Change Management process.

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This section describes the activities necessary for the Change Organization to audit their effectiveness of change. The Change Manager will conduct an annual audit that will include an examination of the following items:

• CAB minutes and Forward Scheduling Calendar (FSC)
• Review records for random RFCs and implemented changes

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function and are not intended to correspond with organizational job titles. Specific roles have been defined according to industry best practices. In some cases, many persons might share a single role; and in other cases, a single person may assume many roles. The significant roles defined for the change management process are:

• Change Manager
• Change Initiator
• Change Coordinator
• Change Task Assignee or Change Implementer
• Change Management System Administrator

Committees are also defined in terms of the roles they play and the responsibilities they have in the context of the change management function. At a minimum, there are normally at least two committees established: the Change Advisory Board (CAB) and the Change Advisory Board Emergency Committee, which typically have management responsibilities for the change management process.

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The Change Manager is responsible for managing the activities of the change management process for the IT organization. This individual focuses on the process as a whole more than on any individual change. However, the Change Manager is involved in every step of the process – from receipt of an RFC to the implementation of the change in the IT environment. The Change Manager is ultimately responsible for the successful implementation of any change to the IT environment. The Change Manager's responsibilities include:

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The Change Administrator directly supports the change manager and is responsible for all of the administrative functions associated with the Change Management program. These duties include maintaining the CAB meeting schedule as well as preparing the agenda; publishing any reports required for the meeting, and publishing the CAB meeting minutes; updating the policies and procedures guide as required by the Change Manager; and assisting with the publishing of any change management reports required to support business management and the CAB
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Change Initiator

The Change Initiator (normally someone within the IT Business Unit) originates changes by submitting a Request for Change (RFC) to the Help Desk or the Change Coordinator in the appropriate IT Business Sample Change Management Policies & Procedures Guide Evergreen Systems, Inc. P24 Unit. Everyone is authorized to initiate an RFC. The Change Initiator is responsible for providing sufficient information on the change that the Change Coordinator can complete the new change form within the company's selected technology platform. This person is notified whether the change was approved and is kept up-to-date on the status of the RFC throughout the change process. The Change Initiator assists the Change Manager and CAB in determining the RFC priority and, at the conclusion of the change, participates in the post-implementation review.

Change Coordinator

The Change Manager assigns (with the CAB's approval) an individual to be the Change Coordinator for a particular change - Change Coordinators will be assigned to each IT business unit. The Change Coordinator is responsible for planning and coordinating all of the phases of the change from initiation through acceptance and documentation. The Change Coordinator will document all relevant information in the company's selected technology platform. The Change Coordinator will routinely provide project status feedback to the Change Manager and identify any problems as they arise. The Change Coordinator presents all formal updates and proposals to the CAB after the CAB approves the RFC for passage through the various change implementation, review and closure phases.The Change Coordinator must work withg   M   me

appropriate Change Task Assignee to perform the tasks required to plan and implement the change.

(Note: When using a standard change category established technology platform, the tasks and Task Assignees are already identified. The Change Coordinator can make modifications as required to meet specific requirements.)

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The Change Management System Administrator is responsible for modifying and maintaining the company's selected technology platform, including the development and administration of the Change Management reports.

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The Change Advisory Board (CAB) is the change management decision-making authority for the IT
organization. The primary responsibilities of the CAB are to:
• Establish and manage overall change management policies and provide guidance
• Oversee the Scheduling Calendar (this is a report generated from within the company's selected technology platform)
• Review and approve all pending requests for high-risk and high-impact changes (The CAB may grant approval authority at levels lower than the CAB)
• Review completed changes and make recommendations for approval
• Appoint people to key roles within the Change Management program

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The CAB is made up of individuals with stakeholder interest in the IT production environment. Since RFCs can impact any part of IT and any organizational group, the makeup of the CAB reflects the focus of the particular RFC being reviewed. In general, the CAB is composed of individuals who have a wide range of expertise and are familiar with business requirements, the user community, and IT system technology. It's important to note that additional CAB members may be required according to the RFCs being considered and if necessary may include input from security, services, vendors and customer user groups. The CAB Chairperson, will make these decisions and notify resources if they need to attend the regularly scheduled CAB or an emergency session.

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The CAB is scheduled to hold an extensive meeting monthly with update meetings held on a weekly basis or as required. The monthly and weekly meetings will provide an overall review of the technical and business impact, prioritization, approval, and scheduling of pending RFCs. The monthly meetings will als-   Pc   diroval, Â   b   Ã

Date, time, and location (if relevant) of the meeting.
Format of the meeting. As an alternative to holding face-to-face meetings, CAB meetings may
be held using a conferencing software or by telephone conference calls. NetMeeting is preferred
because it enables CAB members to share documentation and use electronic whiteboards.
The reviewing order for RFCs (agenda). CAB members may be interested in only a small number
of the proposed changes and might join the meeting only when necessary.
A link to all of the RFCs being reviewed at the meeting and a forward schedule of the change calendar for discussion

Appendix A

Key Definitions
Key definitions for change management used in this document include:

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available change windows. Scheduling changes against the FSC also ensures that multiple, interdependent changes are not scheduled at the same time.

Release – A collection of one or more changes that includes new and/or changed Configuration Items
that are tested and then introduced into the production environment.