Engineering IT Application Development Governance Workflow

This document is intended to define the governance structure and processes to be used in guiding the activities of the Engineering IT Application Development (App Dev) Team. This document was created by and its content owned by the Engineering IT Administrative Working Group Governance body (App Gov), who intend to review it no less than annually. The guidelines here are to be incorporated within the Engineering IT Application Development workflow as appropriate.

Applications are considered to have a common lifecycle, beginning with their initial development, through ongoing maintenance, potential changes during production, and eventually ending with sunset or redevelopment. This document addresses governance process for each phase.
For purposes of this document, the following definitions apply:

- **AppTrack:** A portal tool designated as the central clearinghouse for information and communication regarding all portal applications.
- **User**: An individual that uses the system to complete his/her job responsibilities. Users can sign up to receive notifications of approved and implemented changes.
- **Stakeholder**: The individual(s) designated by a unit that is paying to use a given application, who is granted rights to submit, vote, or comment on enhancements and change requests to that application within the AppTrack system. Stakeholders can choose to be notified of changes via the AppTrack system
- **Functional Area Subcommittee (FASC):** A group of stakeholders with subject matter expertise that provide guidance and recommendations to App Gov concerning application changes and sunset.
- **Functional Area Subcommittee Chair (FASC-C)**: A stakeholder and member of App Gov within the College of Engineering who is charged with stewarding the overall functionality of an application.
- **Engineering IT Administrative Working Group** (App Gov): The governance body tasked with application oversight.

Initial Development

For significant development projects, reference the development workflow in AppTrack. Such projects may be development of a new application or substantive redevelopment of an existing application such that core requirements and functionality may change. Below are detailed guidelines for the approval and prioritization process.

- New application ideas may be submitted by a stakeholder within the College of Engineering to engrit-apps@illinois.edu or via AppTrack system.
  - Ideas for new or redeveloped applications originating from outside the College of Engineering will not be considered unless accompanied by a champion within Engineering.
- The Assistant Director for Application Development will review the request within 2 weeks of receipt. He/she can:
  - Request additional information from the requestor.
  - Turn down the request where there is an existing tool in place and refer the requestor.
  - Accept the initial request and assign an EngrIT Analyst to outline basic, high-level requirements.

- If assigned for review, the EngrIT Analyst will perform the following <u>within 4 weeks</u> of assignment:
  - o Meet with the requesting stakeholder and any other subject matter experts as appropriate.
  - o Produce a basic outline of the envisioned application based on the gathered requirements.
  - o Conduct an initial market scan to look for alternatives to building a new/redesigned application.
  - o Create a report for App Gov review using AppTrack which includes:
    - The application overview.
    - A rough estimate of effort (person hours) to deliver the app.
    - Any alternatives discovered in the market scan.
- Each new/redesign application request will be vetted by a functional area subcommittee for initial prioritization.
  - o The subcommittees are tasked with reviewing any proposed applications that fall within the functional area and providing a recommendation to the full App Gov group <u>within 2 weeks</u> of receipt.
  - o The subcommittees are chaired by a member of the App Gov.
  - o The subcommittees will meet in advance of scheduled review by the full App Gov group.
- No less than once per semester App Gov group will:
  - o Review current status of all active application development projects.
  - o Review all submitted requests for new development or redevelopment, including a summary of those which were not forwarded for analysis and why.
    - Will review only requests received at least 2 weeks prior to the scheduled meeting.
    - All committee members are expected to review the requests from a big picture perspective rather than individual unit needs and expectations.
  - o Provide project prioritization to the Engineering IT App Dev team.
    - This meeting must include:
      - A quorum of ¾ of App Gov members.
      - The Assistant Director of Application Development.
    - Create a weighted ranking of projects based upon:
      - Impact to stability of existing applications.
      - Criticality of the application or process to unit mission.
      - Impact to number of users and / or units.
      - Length of time the request been pending.
      - Ability of proposed application to reduce effort in other areas (ROI).
    - Based upon ranking of applications and committee deliberations:
      - Accept or reject individual applications for development.
      - Provide a recommended priority order of projects for at least the coming semester.

Production Applications

Applications which have left the active development process and "launched" are considered to be "in production" for purposes of this document. Applications which are in production require ongoing maintenance and support, which generates ongoing staff costs.

- Maintenance and support are provided for all applications in production, including:

- o Assisting users with using an application and answering questions about it.
        - o Remedying reported "bugs", where a bug indicates the program is failing to function per its design specification.
        - o Process or response levels will vary based on the application's scope and criticality.
- Access
    - o Individual Apps will be categorized by App Gov as open or closed:
        - ▪ "Open" – Apps to which any campus unit can request access.
        - ▪ "Closed" – Apps that are legacy or specific to few units and are not to be expanded.
    - o Units and departments interested in using a particular application:
        - ▪ May attend a demo and Q/A session on the application presented by an EngrIT Analyst.
        - ▪ May request setup of the application by request to engrit-apps@illinois.edu.
            - • May not request changes to the application as a part of setup for their unit.

Change Requests

Applications which are considered in production may generate requests for changes or enhancements. Some requests will be driven by changes to other systems on which the application depends. Other requests may be due to changes in university policy, needed system updates, or stakeholder desire for additional or differentiated functionality beyond the existing scope of the application. This section defines the process for evaluating and prioritizing change requests for existing applications.

- **Users** should take any requested changes or enhancements to their designated stakeholder.
- **Stakeholders** may submit ideas or requests for changes or additions to existing applications.
    - o Requests are submitted through the AppTrack application or email to engri-apps@illinois.edu.
    - o Any stakeholder may participate in the comment and voting portion of AppTrack for submitted change requests.
- The **Functional Area Subcommittee** (FASC) will review designated changes prior to implementation. *NOTE: Each functional area has differing requirements and will work with the Engineering IT App Dev team to determine the appropriate framework for designating changes that require review prior to implementation.*
    - o FASC must approve designated changes before changes are implemented by Engineering IT.
        - ▪ Requests should be marked "approved", "denied", or "need further discussion" within 2 weeks of receipt.
        - ▪ FASC should consider the following in making their decision:
            - • Avoidance of "harm" or degradation to existing utilization of the application.
            - • Avoiding duplication of functionality between applications or systems.
            - • Limitation of complexity where truly unnecessary.
            - • Compliance with University policy, procedure, and practice.
            - • How long the request has been pending.
            - • Return on investment in terms of streamlining other work processes.
- **Engineering IT App Dev team** will estimate the scope of a change.
    - o Changes which will impact program integrity or change core functionality will be referred to the new development / redevelopment workflow.

- Projects estimated to be under 40 hours of work may simply be queued for implementation. Engineering IT will reserve some amount of capacity to handle these kind of routine small requests.
    - Changes estimated to be over 40 hours of work will be entered into the new development queue of projects for regular prioritization.
- **App Gov** will evaluate each functional area's change request process once per semester.
    - Areas to be reviewed are:
        - Change request review timeframes
        - Change request testing timeframes
        - Change request development timeframes
        - Overall stakeholder communication

Sunset

Applications which have been in production for some time may reach a state where either utilization has dropped substantially, or future utilization is called into question. This may be driven by aging technology, changing business process, or a changing marketplace of other solutions. Whatever the cause, the developing situation will suggest either planning for decommission of an application or substantive redevelopment "from the ground-up."

- Engineering IT App Dev team may suggest an application for sunset review to App Gov.
- Once a request is received, App Gov will:
    - Solicit input from the functional area subcommittee and any remaining stakeholders of the application.
    - Decide whether to take further action on the request or close the request.
    - If further action is needed, develop a proposal for retirement of the application.
- Based on the decision of App Gov the request may move into one of the other processes outlined in this document:
    - Change requests will be entered into AppTrack and follow the Change Request process.
    - Redevelopment proposals will go to the Assistant Director for Application Development and follow the new project development process.

Attachment:

Change Request Workflow

Attachment

Change Request Process

User (Anyone who touches apps)
- Use assigned apps
- Sign up for change notifications, if desired
- Recommend change to stakeholder

Stakeholder (Super user ID'd by dept')
- Change needed / appropriate
  - yes
- Submits a change request in Apptrack
- Ticket emailed to engrit-apps

Business Analyst
- Review
  - No approval / input needed from FASC → Work with stakeholder for clarity → Assign to developer → Development HR app? — No → Testing with stakeholder/ user → Production
  - Needs approval / input from FASC
- Assign to HR hold status in Apptrack
- Send to FASC Chair for review

Admin., Fin., Facility, Acad., & Comm FASC
- Review request → Respond within 2 weeks — Yes → Approve? — Yes

HR FASC
- Review request → Respond within 2 weeks — Yes → Approve? — no
- Testing → Respond within 2 weeks → Approve? — no

System Function (AppTrack)
- Notify stakeholder