

MITS Budget Evaluation

Case Providing Department: Management Information Technology and

System Office

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1. Background

During the annual budget collection and evaluation cycle, MITS receives IT-related budget requests from all functional departments and schools across the university. These requests fall into four categories: software, hardware, system development, and intelligent transformation.

This process previously relied entirely on Excel spreadsheets, with the workflow as follows:

1) **Template creation and distribution:**

The MITS department designs and produces a template file covering the four categories of budget requests.

2) **Offline execution and completion:**

The PAGO department distributes the template to all budget departments via email.

3) Submission of budget requests:

Each budget department submits its completed budget request file via the Intranet. The deputy director of the department downloads each file individually and packages them for distribution to internal functional teams within MITS, assigning them to initiate budget evaluation tasks.

4) Decentralized evaluation:

Each internal team downloads the Excel files and independently completes the evaluation and input for its respective business domain.

5) Initial consolidation and aggregation:

After the submission deadline, designated staff collect the evaluation files completed by each team and attempt to consolidate the four categories of budget requests by department/school into separate Excel files through manual copy-paste or formula-based linking, in order to provide evaluation feedback.

Although this process appears straightforward, it is essentially a “decentralized – centralized” offline management model. Its inherent deficiencies are amplified during collaboration and data integration, manifesting in the following issues:

1. Version control chaos and data integration challenges

This is the most critical issue in the entire process. Each Excel file submitted by budget departments contains all four budget categories, and each category is evaluated by a different team. As a result, every Excel file must be edited and saved by multiple teams, leading to a large number of files with different contents and versions existing simultaneously at any given time. When it comes to post-evaluation data consolidation, the situation becomes extremely chaotic:

1) The “final version” is never truly final:

Consolidated budget files are based on versions submitted by different teams at different points in time. From the moment they are created, these consolidated files may already represent outdated or incomplete “snapshots.”

2) Repetitive and inefficient consolidation work:

Aggregators must spend significant time on mechanical file merging and reconciliation. Every update potentially requires the entire consolidation process to be repeated, resulting in low efficiency.

2. Misalignment between static processes and dynamic business needs

The budget evaluation period is not a fully closed, static process, yet the original Excel-based approach cannot accommodate this inherent dynamism.

Pain point 1: Difficulty incorporating supplementary submissions

Even after evaluation tasks have been distributed, budget departments may submit additional budget requests. These supplementary requests lack a standardized entry point and are typically sent via email as new Excel files, leading to fragmented information that is easily overlooked and difficult to integrate into consolidated datasets.

Pain point 2: Difficulty maintaining continuous updates to consolidated data

Even after initial consolidation, teams may need to update their evaluation data due to error corrections or newly submitted requests. They may modify their local files and resend them via email, potentially overwriting other teams' data and leaving the consolidated file in a perpetually "possibly outdated" state.

3. Secondary issues arising from the above

- 1) Data accuracy and consistency cannot be guaranteed:

Manual consolidation and updates are error-prone, and inconsistent interpretations caused by communication gaps may lead to data discrepancies.

2) Low collaboration efficiency:

The entire process is characterized by waiting, repeated communication, and manual operations, significantly slowing down the overall budget evaluation timeline.

3) Lack of clear audit trails:

It is difficult to effectively track “who modified which data at what time,” creating challenges for subsequent audits and accountability.

2. Solutions

To address the shortcomings of the traditional Excel-dependent offline evaluation process, a **centralized, online budget evaluation and management tool**—the *Budget Evaluation Application*—was custom-built on a no-code platform.

The application is designed to completely replace the Excel-based budget distribution and consolidation workflow by providing a unified,

efficient, and reliable collaborative platform through digitalization and process reengineering.

The four offline budget forms (software, hardware, system development, and intelligent transformation) were migrated online, enabling a unified entry point for budget request submission, evaluation, and workflow management.

To ensure data security and avoid overwhelming evaluators with excessive information, role-based access control was implemented so that each user can only view and edit the data and fields relevant to their responsibilities:

- **Budget Maintenance (Front-line Teams):**

Can view and edit budget requests where the *IT Coordinator* field matches the user and the *Status* is “Draft” (limited to budget request – related fields only).

- **Budget View (Front-line Teams):**

Can only view budget requests where the *IT Coordinator* field matches the user and the *Status* is “Pending Evaluation,” “Evaluated,” or “Confirmed.”

- **Budget Evaluation (Second-line Teams):**

Can view and edit budget requests where the *Evaluator* field matches the user and the *Status* is “Pending Evaluation” (limited

to evaluation-related fields only); can also adjust the workflow owner (assigned evaluator).

- **Budget View (Second-line Teams):**

Can only view budget requests where the *Evaluator* field matches the user and the *Status* is “Draft,” “Evaluated,” or “Confirmed.”

- **Budget Administrator:**

Has full permissions, including viewing, creating, editing, deleting, duplicating, importing, exporting, adjusting workflow owners, terminating workflows, activating workflows, and performing batch updates.

Using the **hardware budget request form** as an example, the figure below illustrates the budget submission form and evaluation workflow.

When a new budget request is submitted to the system, tasks are first assigned based on departmental workload distribution. Front-line MITS team members contact the budget department to verify the rationality and accuracy of the request description, after which the task is transferred to second-line team leaders to assign specific evaluators.

If the information provided by the budget department or collected by the front-line team is insufficient, the request can be returned for supplementation. After final review by the evaluator’s direct supervisor and the department director, the evaluation result is finalized and locked, preventing further modification.

发起流程 编辑 数据管理 流程分析

IT Coordinator
Zibing.Mao X

Request
The subsequent sections are to be completed by the designated collectors.

*Campus: SIP
*Academic Year: AY2526
*Department Type: Academic (selected), Admin
*Applicant: [Empty]

*School / Center: School of AI and Advanced Computing
*Department: School of AI and Advanced Computing

*Category: Teaching
*Hardware Model: [Empty]
*Qty: [Empty]

*Specification: [Empty]
*Justification: [Empty]

*Module: [Empty]
Module code and module title

*User Estimated Cost(CNY): [Empty]
Expected Date: [Empty]
Reflected in the Area Strategic Plan: [Empty]
Shared by: [Empty]

Any other requirement (Hardware training, etc.): [Empty]

Submit Save as Draft

Figure 55 Hardware Budget Request Form

Once data enters the system, **all modifications are automatically logged.**

Change histories can be viewed through the data logs on the right side of the form, providing full transparency.

Figure 56 Budget supplement

3. Outcomes and Benefits

The adoption of the Budget Evaluation Application fundamentally reshaped the budget collection and evaluation process, precisely addressing each pain point. The key outcomes and benefits are summarized as follows:

1) Establishment of a single source of truth:

All budget departments submit their requests through a unified application, ensuring that only one authoritative dataset exists throughout the process.

(In the first year of deployment, as the budget collection deadline

had already passed, existing Excel files were imported into the system by the department.)

2) Centralized storage with real-time data:

Teams enter and submit data online, with all information stored centrally. This eliminates the coexistence of multiple file versions and transforms data consolidation from tedious “merging” into efficient “real-time viewing.”

3) Timely notifications to prevent omissions:

When new budget requests are entered into the system, responsible team leaders within MITS automatically receive notifications and assign evaluators. These requests become tracked to-do items directly linked to the main budget dataset, ensuring flexibility without information fragmentation.

4) Standardized handling of supplementary submissions:

If budget departments identify omissions or need to add new requests, they can submit them directly through the system before the PAGO-defined deadline.

5) Online updates with modification logs:

Before the evaluation deadline, teams can update the data they are responsible for. All changes—including modifier, timestamp, and content—are logged, providing solid evidence for subsequent audits.

6) Agile responsiveness:

Built on a no-code platform, the application can be rapidly adjusted and iterated as business rules evolve, continuously supporting management innovation.