

INDIANA UNIVERSITY



FINANCIAL INFORMATION SYSTEM

Overview Document

**Financial Management Support Department
March, 1994**

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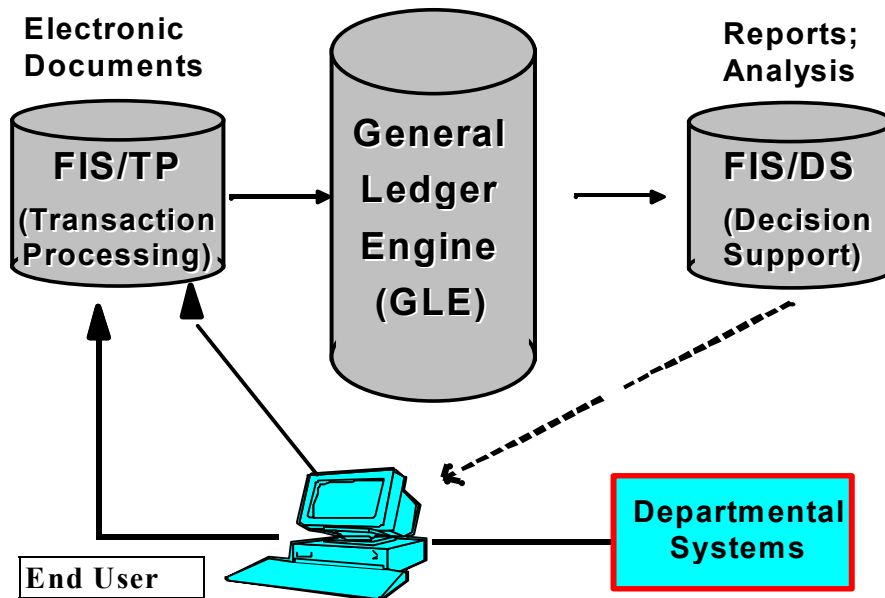
Introduction

In 1991, Indiana University set out to develop a new system to manage its internal financial resources. It had become clear, with the advent of Responsibility Center Management (RCM), that the existing financial system, which had been developed in the late sixties, had many weaknesses. Financial Management Support (FMS) and the University Budget Office (UBO), working in partnership with the campuses, RCs and departments, designed the new system, called the Financial Information System (FIS). A host of advisory committees, with wide representation, provided guidance throughout the development process. When the basic design specifications had been completed by these advisory committees, FMS, together with University Computing Service (UCS) and an external software consulting firm, American Management Systems, collaborated on the actual development of the system. This process is now nearing completion and implementation began in May 1994.

The FIS concept is a simple one. Electronic documents, initiated on a personal computer, are processed by an FIS component called Transaction Processing (FIS/TP). This component electronically routes the "documents" through an approval process and eventually passes them to the university's financial data repository called the General Ledger (FIS/GL). Each organization (whether department, responsibility center, or campus) has access to those data for its reporting and analysis needs, through another FIS component called Decision Support (FIS/DS). Organizations that have their own departmental systems can, if they wish, augment those with enhanced data from the FIS.

Below is a simple depiction of these main components of the FIS.

FIS Conceptual Model



The FIS is important to those who use and process financial information for a variety of reasons. The FIS:

- reduces paper trails
- allows for faster turnaround
- allows for decisions to be made based upon up-to-date information
- reduces mistakes and the need to correct errors, since checks and balances are built into the system
- gives more control and management flexibility to departments
- creates more appropriate data and permanent computer records

The FIS is also important to the university for several reasons. It:

- supports responsibility center management
- makes financial information more accessible and current for everyone in the university
- reduces labor-intensive monitoring

Anyone who is authorized to access university data can use the FIS, including:

- those who initiate financial transactions
- those who review and approve financial transactions
- those who manage fiscal affairs for an organization

The FIS exploits the investment that the university has made in various technologies in recent years, such as:

- the graphical user interface (Windows or Macintosh) used by many faculty and staff
- the university's computer network
- relational database technology.

It also builds on the use of work flow technology begun by the Purchasing system, TOPS, which first deployed the concept of electronic routing and approval. UCS is planning greater use of this concept with new infrastructure tools being developed.

Various demonstrations and tutorials will be available in support of the new FIS system. Each organization's primary contact will have access to a workbook explaining the implementation process. A model of distributed support has been created, involving "expert" users at all levels, from departments to responsibility centers, campuses, and university administration. In addition, an extensive training curriculum will be offered, including seminars for technical support staff and hands-on classes in FIS applications.

This training and support will be available on all campuses and classes may be tailored according to the needs of individual units.

The new Financial Information System at IU is composed of a number of separate but interrelated components:

1. The **Chart of Accounts** is the set of controlling tables which defines the financial information.
2. The **General Ledger** is the repository of all financial and budget information for the university.
3. **Transaction Processing** is the environment which allows account managers and organizations to transact financial business through their computers, rather than using the paper forms currently available.
4. **Decision Support** is a new environment which allows account managers and others to access financial information and will provide tools to assist in the analysis of the financial information.
5. **Labor Distribution** is a system which ties together the position budgeting with the payroll and accounting process to provide better and more timely information.
6. **Capital Assets Management** is a system used to track and account for all capital assets of the university, including moveable equipment, land and buildings.
7. **Accounts Receivable** is a system which provides all departments a non-student revenue receivable system which formats bills or invoices, and processes payments while performing all of the accounting work. It also provides reports stating the current status for a department's receivables.
8. **Contracts and Grants** is a system which tracks research proposals and resulting grants for all areas within the university. It is linked to the Financial Information System so it can reflect the budgets and expenditures of the grants as well.

Each of these components replaces one of the processes and/or systems currently in operation. The goal of the new FIS system is to increase current levels of functionality by offering additional applications and environments.

The following is a brief overview and breakdown of each component of the FIS system.

I. Chart of Accounts

The Chart of Accounts is the set of tables which defines the codes and coding structures within the Financial Information System. The following is a brief overview of the Chart of Accounts.

*(*For a detailed explanation of the Chart of Accounts, please refer to the Chart of Accounts Reference Document)*

The Chart of Accounts is composed of six major tables which define the financial attributes of the university. They are:

A. Chart Code

The system is set up to allow for multiple charts of accounts. Each chart has its own set of accounts, sub-accounts, object codes, and sub-object codes. The charts to be implemented at the beginning of the project are:

Chart	Chart Code
Bloomington Campus	BL
Bloomington Auxiliary	BA
Indianapolis Campus	IN
Indianapolis Auxiliary	IA
Hospitals	HO
Northwest Campus	NW
South Bend Campus	SB
Kokomo Campus	KO
Fort Wayne Campus	FW
East Campus	EA
Southeast Campus	SE
University Administration	UA

Each chart must then map to the university (official) Chart of Accounts, which is a set of summarized object codes that will allow consistent financial reporting across all charts.

B. Account

The Account Table, replaces, in part, the current Account Title File. It provides the following additional functions:

1. The campus, fund group and department coding are attributes in the data base, not necessarily part of the account number. The purpose is to base all reports and edits on the attributes, not on the values of the account number so that account numbers do not have to change when the attributes of the account change (e.g. change in department).

NOTE: This means that departments and/or responsibility centers (RCs) continue to use the same account numbers, but reporting and editing is based on the attributes not on the account number, and the assignment of new account numbers need not follow the same pattern as in the past.

2. The attribute for the department is replaced by an "organization" code. See below.
3. A new attribute is a "continuation account". No account can be closed out unless there is a continuation account specified. Late transactions against the closed account are automatically posted to the continuation account.
4. Attributes for each account allow units to set parameters so that sufficient funds checking can be customized by account and be changeable during the year.

C. Object Code

The Object Code Table replaces the current income/expense class table. It contains all valid object codes for income, expense and balance sheet items for both accounting and budgeting purposes. Additional features include:

1. An attribute indicating the object type of object code. Since all object codes, including cash and accrual object codes are contained in this table, the following object types are options:
 - Cash/Income
 - Income not Cash
 - Cash not Income
 - Expense/Expenditure
 - Expense not Expenditure
 - Expenditure not Expense
 - Asset
 - Liability
 - Fund Balance

2. An attribute indicating if the code is a summary type of object code. There are three levels of summarization within the object code table:

Object Code. This is the most detailed and can be used for budget or actual transactions.

Level. This is the first level summary of object codes. It cannot be used for actual transactions, but can be used for budgets (depending on the rules for the account).

Consolidation. This is a summary of Levels. This level also cannot be used for actual transactions, but can be used for budgets (depending on the rules for the account). NOTE: This corresponds closely to the "level" in the current system.

3. There are no longer "object codes" for each position. (*See Labor Distribution*)

D. Organization

One of the key concepts of the new Chart of Accounts is that of the Organization. An organization can be any unit which reports to another unit or organization within the university system, such as a department, RC, campus, etc. Thus, an organization is a collection of accounts (within one or many fund groups) or a collection of other units or organizations.

1. One attribute of an organization is the unit or other organization to which it reports. The organization allows for a fiscal hierarchy to be developed, thereby facilitating easy consolidations for an RC or department, and is a part of the new document routing process. (*See Transaction Processing*)
2. An additional attribute is the Responsibility Center code to which the organization belongs.
3. Each organization has an address and a manager so that correspondence and other communication can be distributed within the university.

E. Sub-account

A Sub-account allows an account manager to break down an account into multiple smaller accounts in order to better track the detailed budget and expenses.

1. Sub-accounts are established by the account manager and inherit all of the attributes of the account.
2. Sub-accounts can be used to record any accounting or budget transaction. All standard reports as well as the budget vs. actual reports are available at the sub-account level.
3. Sufficient funds checking will NOT be done at the sub-account level.

F. Sub-object Code

Sub-object Codes allow account managers to specify a more detailed breakdown of the object codes.

1. Any account manager can request a sub-object code. Sub-object codes are established by account. Therefore, each account has its own detailed list of sub-object codes.
2. Sub-object codes can be used to record any accounting or budget transactions. All standard reports, including budget vs. actual reports, reflect the sub-object codes.
3. Checks for sufficient funds will NOT be done at the sub-object code level.

G. Project

A Project allows an account manager to set up a project (e.g. a one-time, or intermittent departmental event or activity) which spans multiple accounts. Each relevant transaction can then be coded with the project code, in addition to the account number, so that the total costs associated with a project can be calculated.

1. Each project has a project manager who is responsible for the creation and maintenance of the project information.
2. Each project has a home organization (usually the organization of the project manager).
3. Any person can use a project code on a transaction, regardless of the project manager or home organization.
4. Reports can be run utilizing the decision support tools so that total costs of a project can be tracked.

II. General Ledger

The General Ledger is the official repository of all of the financial information of the university. Below is a brief overview of the functionality of the General Ledger.

(For a detailed description of the functionality and processes, please refer to the General Ledger Reference Document)

A. General Ledger Data

The General Ledger is a repository of financial and budget information. It is composed of three main databases:

1. **Balances.**
 - a. This system can keep balances on-line for multiple fiscal years. (It is designed to have at least 4 years of balances. After that, the balances will be archived so that they will continue to be available indefinitely, but will not be on-line.)
 - b. The system keeps both actual (accounting) balances and budget balances by month.
 - c. The system has the ability to store the following balances:
 - Actual (accounting)
 - July 1 Budget
 - Adjusted Base Budget
 - Current Budget
 - Actual Statistics
 - Current Budget Statistics
 - External Encumbrances
 - Internal Encumbrances
 - Pre-encumbrances
 - Transfer of Funds
 - d. The system stores the balances by the General Ledger Key, which is composed of the following:
 - Chart Code
 - Account Number
 - Sub-account Number
 - Object Code
 - Sub-object Code

(See Chart of Accounts for a detailed explanation of each of these codes)

2. **General Ledger Entries.** These are the detailed transactions which update the balances. *(For a detailed description of the new General Ledger Entry record and format, see "Department Transition - Modifying Programs which Create Automated Entries into the G/L")*
 - a. These detailed transactions will not be as easily available for historical reporting. They will be kept for an extended period for auditing purposes, but they will be archived after 18 months to a file where accessibility will not be immediate.
 - b. There are some additional information fields available on the Ledger Entries which are not carried in the Balances:
 - *Project. (See Chart of Accounts)*
 - *Department Specific Information.* This is a field which can be used by the account manager or department for any number of purposes, such as product codes or other costing information.
 - *Transaction Description.* This is a short description which is established when the transaction is created.
 - *Organization Document Number.* This reference code is established by the department or account manager to record the departmental document number. It appears on all standard reports in order to make reconciliation easier.
3. **Open Encumbrances.** This file reflects information about any open encumbrance, such as the transaction description, original amount, amount offset to date, and current outstanding encumbrance. All types of encumbrances are reflected in this file by encumbrance type.

B. General Ledger Interfaces

General Ledger interfaces feed data into the General Ledger. These include:

1. **Payroll.**
 - a. Encumbrance of payroll wage and fringe benefit expense. The new Labor Distribution system automatically calculates the projected wage and fringe benefit expense for each appointment. This calculation is done after every payroll.

- b. Expansion of the General Ledger key in the Human Resources Information System (HRIS). The new Labor Distribution system allows for the use of the expanded General Ledger key (sub-accounts and sub-object codes) for payroll related expense.
2. ***Accounts Payable.***
 - a. Reflection of actual cash expenditure. The FIS reflects expenditures at the time invoices are received, which is current practice. However, the FIS will also reflect all payables in the operational account (instead of a campus clearing account) and all payables will stay in the account until the check is cut to cover the expenditure.
 - b. Accounts Payable balances. The new system tracks Accounts Payable balances at the account level (rather than at the campus level).
 - c. Pre-encumbrances. The new system allows for the pre-encumbrance of purchase requisitions, which will then be replaced by an external encumbrance when the purchase order is generated.
 - d. Expansion of the General Ledger key in Purchasing/Accounts Payable. This takes place via a new version of the electronic requisition. (*See Transaction Processing*)
 3. ***Bursar Accounts Receivable System.***
 - a. Expansion of the General Ledger key. This is done by expanding the Accounting Translation Table within the Bursar Accounts Receivable System (BARS).
 4. ***Interdepartmental (ID) Billings.***
 - a. There are 3 different classes of Interdepartmental Billings:
 - Intramural invoices are processed via the new Transaction Processing (TP) environment. They are still subject to approvals of everyone involved.
 - ID billings are automated within the billing department. The billing department then generates a file to send through the Transaction Processing environment, so that the department being billed can adjust the accounting information. In these cases, the ID bill is routed so the department being billed can alter the accounting

distribution (if desired). If no action is taken by the department being billed within 3 working days, the bill is automatically approved.

- ID billings reflect a charge to an account based on a pre-established agreement. These are directly input into the General Ledger without any approval requirements.

The initial conversion replaces all intramural invoices with the TP environment, while all other ID billings will feed directly into the General Ledger until the billing departments change their processes to feed TP. (An automated feed to TP will be developed.)

- b. Expansion of the General Ledger key. The billing departments will need to modify their processes and/or systems before departments can use the expanded General Ledger Key (sub-accounts and sub-object codes).

(For a detailed description of the new General Ledger Entry record and format, see "Department Transition - Modifying Programs which Create Automated Entries into the G/L")

C. Other General Ledger Processes

1. *Indirect Cost Recovery.*

The new system calculates the indirect costs to grants much as it does now. It is designed so that it can be run more frequently than once a month (hopefully daily).

2. *Sufficient Funds Checking.*

The new General Ledger does not check transactions to see if there are sufficient funds before processing them, but the Transaction Processing environment does have the capability to do the checking. Reports will be provided to identify accounts which are in (or close to) overdraft position.

3. *New Standard Reports. (See Decision Support)*

- Cash Operating Statement (replaces Statement of Account)
- Cash Operating Detail
- Balance Sheet
- Income Statement

- Income Statement Detail

NOTE: All new standard reports are printed at the sub-account level. In other words, if a department sets up a number of sub-accounts as part of an account, each sub-account gets the monthly standard report.

III. Transaction Processing

The Transaction Processing environment is an "electronic forms" environment which replaces the current paper processes. Below is a brief overview of the system.

(For a detailed explanation of the Transaction Processing environment, please refer to the Transaction Processing Implementation Workbook)

A. Features

The system is designed to eliminate the need to handle paper documents and keep duplicate copies of information. The basic features of the system are:

1. ***Creation of financial documents.*** The system creates "electronic forms" in place of the paper ones currently used. The implementation schedule is as follows:

Phase 1 (4th quarter, 93-94)	Phase 1 (Cont.) (4th quarter, 93-94)
Internal Billing	Creation/Maintenance of Chart of Account information
Distribution of Income/Expense	Accounts
Journal Voucher (restricted access)	Account Delegates
Transfer of Cash/Funds	Object Codes
Budget Adjustment	Organizations
Accrual Transactions	Sub-accounts
Pre-encumbrance	Sub-objects
Indirect Cost Recovery Adjustments	Projects
General Error Correction	Review/Hierarchy
Non-Cash Disbursement	Users

NOTE: Each of the documents in the first column can correct previously processed transactions, or, in some cases, create recurring entries.

Phase 2 (1st quarter, 94-95)	Phase 3 (2nd quarter, 94-95)	Phase 4 (??)
Cash Receipt	Hourly Pay Advices	Motor Pool Vehicle Requests ??
Payroll Funding Distribution Change	Payroll Vouchers	Physical Plant Work Orders ??
Position Maintenance	Accounts Receivable Transactions	Central Stores Requests ??
Budget Construction	Personnel Action Forms (PAFs)	
Capital Assets Creation/Maintenance Transactions	Purchase Requisitions	
Expense Transfers	Miscellaneous Disbursements	
	Check Requests	
	Expense Transfers	

2. **Document Retrieval.** The system can locate and display a document after it has been submitted. It can display a document while it is in the approval process, as well as after it has been approved and processed.
3. **Retrieval of other financial information.** The system can retrieve all of the other information in the FIS, including all of the valid codes in the reference tables, the attributes to each account or object code, and balances and ledger entries contained in the General Ledger.

B. Environment

The Transaction Processing environment takes advantage of the workstations on faculty and staff desks. It utilizes the processing power of the workstation to make the process simpler and more consistent with other applications in use. It has the following requirements:

1. Workstations must be connected to the university network.
2. Users of the system must be identified and have a "Smart Card" security pass card. (These will be issued as people identify themselves as users within the Transaction Processing environment.)

3. Workstations must be configured to access the proper programs, either on a local area network (LAN), on a database server, or on the individual workstation.
4. Users must access the Transaction Processing System in one of two ways:
 - Client/Server* - This mode allows for the basic program to reside on the PC and will only go to the server to retrieve more information. The system can then take advantage of the PC's graphic processing capability and utilize the mouse and the graphic features of the monitor. This mode requires a Windows or Macintosh workstation with at least 8 megabytes of memory.
 - Character Mode* - This mode allows the user to connect to a bigger machine and execute the application on that machine. The only requirement is that the workstation be able to TELNET to the bigger machine. In this mode, the mouse will not be usable (combinations of keys will be necessary to navigate through the system), and the graphics will not be visible on the monitor.

C. Routing Control Tables

One of the primary features of the Transaction Processing system is the concept of pre-established routing. In other words, when a document is created, the system routes the document to the proper people based on tables established by the account manager and organizations. The tables necessary to accomplish this are:

1. ***Account Table***. The account table contains the account manager and account supervisor. It also contains the reference to the organization to which the account belongs. (*See Chart of Account*)
2. ***Organization***. The organization table contains the organization manager as well as the organization at the next level in the fiscal hierarchy. (*See Organization*)
3. ***Review/Hierarchy***. This table can be used by an organization to establish the required routing for each document for that organization. This table also contains special processing codes which can be used to indicate that a particular routing is for review only, that a particular routing should only take place if the transaction is over a certain dollar amount, or that a particular routing should only take place if a transaction puts the account "over budget".

4. ***Special Conditions.*** This table allows for "special" required approvals where transactions affect specific sub-fund groups and/or object code levels.

IV. FIS/DS (Decision Support)

FIS/DS is the name for a collection of services that provide access to the information within the Financial Information System. These include not only reporting, but also data extraction, post-processing, analysis, display and printing. Below is a brief overview of these services.

(For detailed information about the various parts of FIS/DS, see the FIS/DS Reference Manual)

FIS/DS enables the user to:

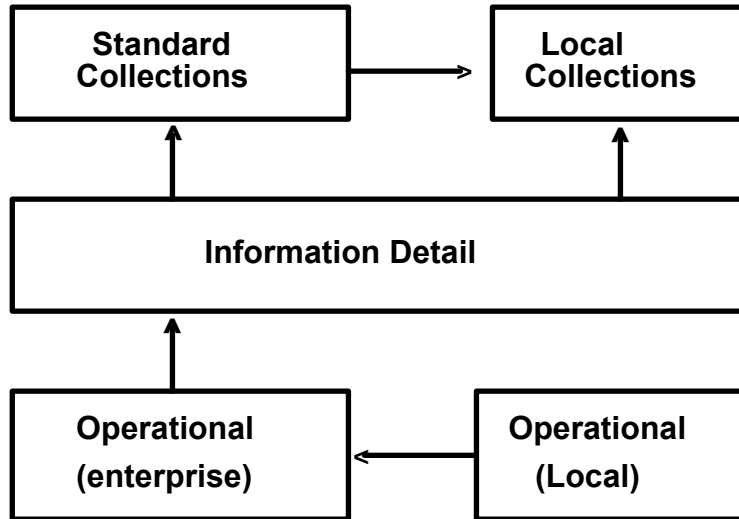
- Produce standard reports on a scheduled basis;
- Run pre-defined queries on an ad hoc basis;
- Access and extract appropriate detail information;
- Access pre-defined "views" of the data;
- Access pre-defined extracts or summaries of data (standard collections);
- Drill down through levels of detail;
- Transfer the data to local resources (LAN or desktop);
- Integrate such data using workstation-based reporting and analysis tools.

The proposed model of Decision Support for Indiana University is made up of the following components:

- A Data Architecture;
- An Information Delivery Architecture;
- and*
- A Layered Set of Services.

A. Data Architecture

Below is a representation of the data architecture proposed for Indiana University. It forms the foundation for the FIS/DS functionality described later.



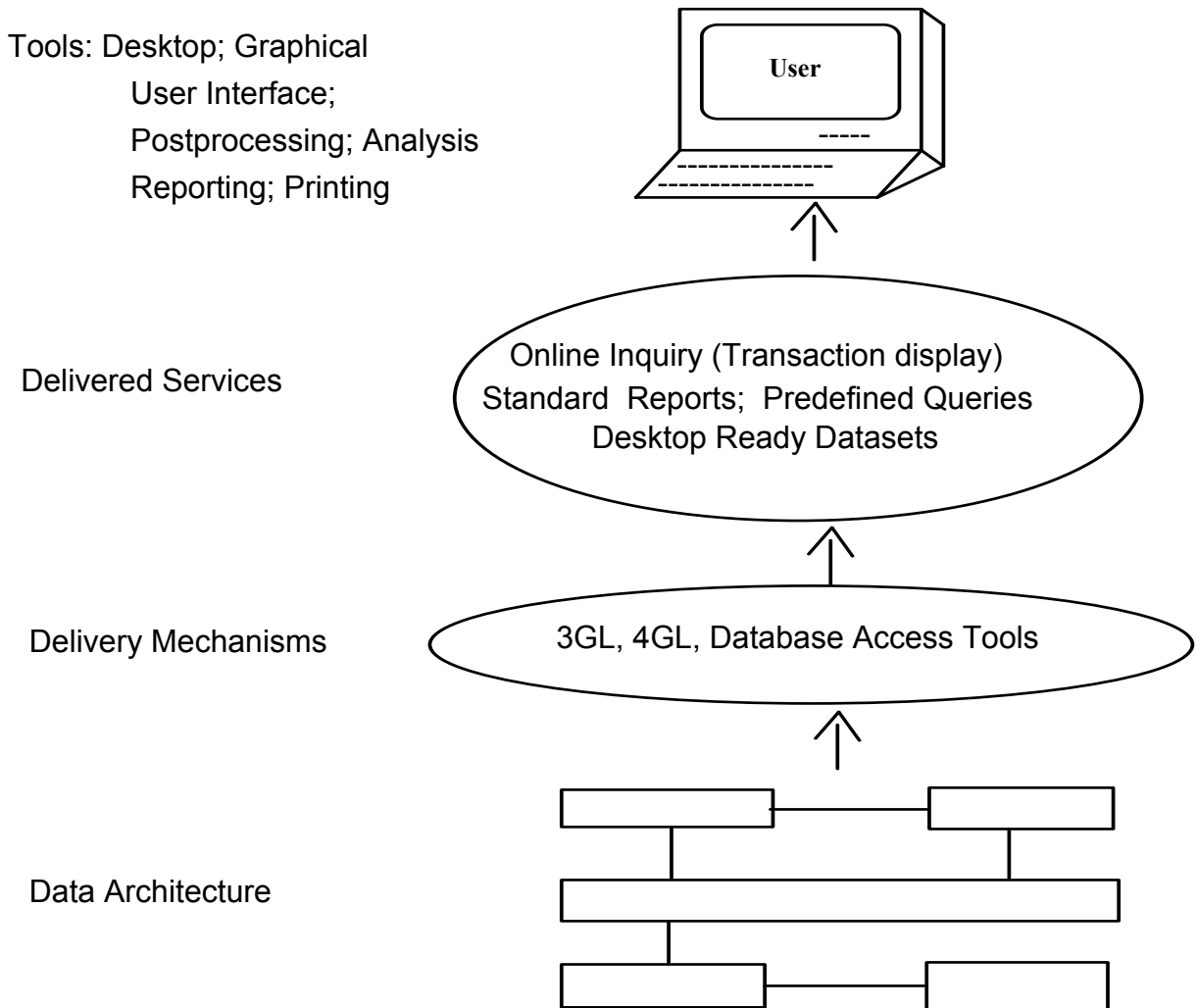
It uses a data model with the following four stages:

1. **Operational** (Enterprise) data are the source data maintained either by on-line transactions or by batch programs within the system. Two examples of these are the on-line FIS/TP databases and the CoA/GLE databases. These databases are optimized for transaction processing and updating. They are highly secured and updating these tables is only possible through the FIS/TP transactions and scheduled production job streams under the control of the data center staff. In some cases, operational data may also exist in local systems. But this is the exception, not the norm.
2. **Information Detail** data are the replicated or extracted datasets that form the basis of the FIS/DS repository. This is the first step in beginning to make "information" out of data. These databases are optimized for query processing and/or ad hoc access and are read-only in nature.
3. **Standard Collections** are standard "views" or extracts defined by the service providers (Financial Management Support (FMS) and University Budget Office (UBO)) for use by any units in the institution. Examples here include point-in-time datasets, campus summaries of various kinds, RC summaries, etc. These datasets are also optimized for query processing and/or ad hoc access and are read-only in nature.
4. **Local Collections** are maintained on local resources, typically a LAN server. FMS/UBO will co-operate with RCs in the establishment of these local collections which represent data of particular interest to the local

unit. Examples here might include unit transaction details, point-in-time datasets at local levels of aggregation, etc. FMS/UBO will refresh these databases on a regular basis.

B. Information Delivery Architecture

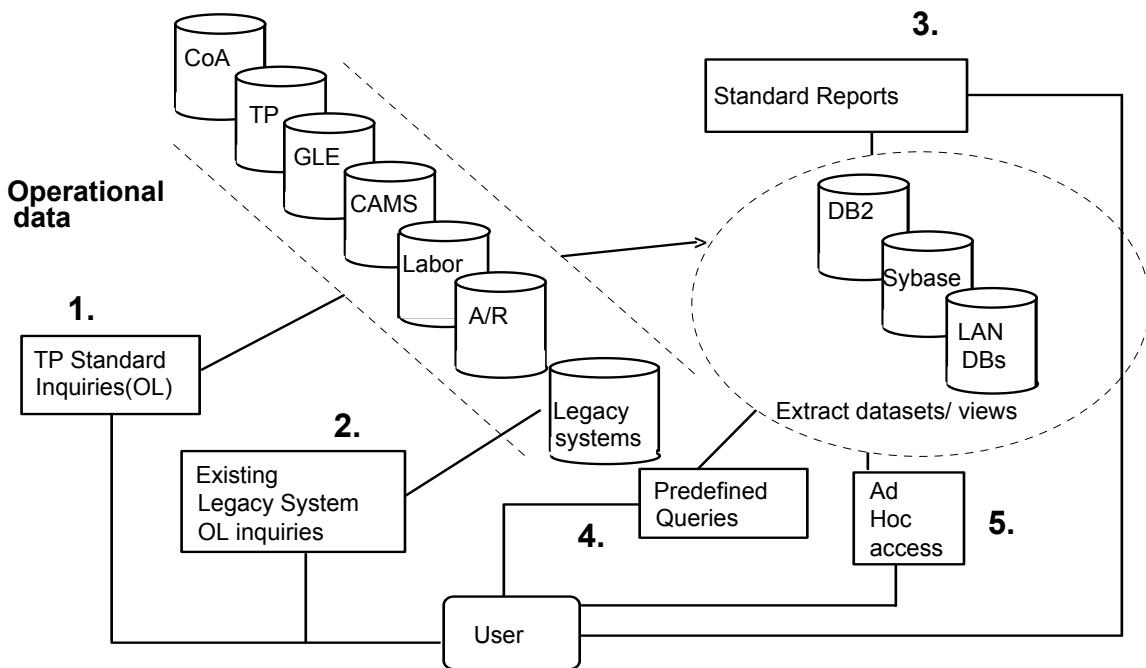
Using the data architecture described above, a set of information delivery tools is used to provide the layered set of services described in the next section. Below is a depiction of this delivery process.



C. Layered Set of Services

Within the context of the Financial Information System project, FIS/DS utilizes databases, tools and services to provide clients with convenient access to, and interpretation of, their financial information. Compared with traditional mainframe-based reporting packages, this environment takes advantage of workstation-based database access tools, the Transmission Control Protocol/Internet Protocol (TCP/IP) network and a set of data repositories derived from the Chart of Accounts, General Ledger Engine and Transaction Processing operational databases.

The diagram below shows the relationship between operational and extract databases and the specific functionality that will be available to the user from each.



The five numbered areas above represent the **Layered Set of Services** that make up the proposed FIS/DS functionality. They are listed in order of increasing user flexibility.

- FIS/TP Standard Inquiries:*** These are on-line, pre-defined transactions designed within FIS/TP to provide input to the operator during the completion of a FIS/TP transaction. The source is the FIS/TP production database. The inquiries are account related and are available by university, campus or RC.

Examples include: Account balances;
 Open encumbrances;
 Month to date transactions.

(See FIS/TP section for further details)

2. **Existing Legacy System On-Line Inquiries:** These include existing Customer Information Communication System (CICS) screens designed for accessing data in current legacy systems such as The On-Line Purchasing System (TOPS), HRIS etc.

3. **Standard Reports:** These are off line, pre-written reports produced on a scheduled basis and available to every unit. They have been developed as an integral part of the FIS and represent the standard financial reports expected in any financial system. There is also a new component with which an account manager can request the appropriate standard reports on-line and have them printed at her/his local printer. Examples include:
 - Cash Operating Statement (replaces Statement of Account)
 - Cash Operating Detail
 - Labor Operating Statement (replaces Expense Distribution Report)
 - Labor Operating Detail

 - Budget Report
 - Accrual Income Statement
 - Accrual Income Statement Detail
 - Budget vs. Actual Detail
 - Balance Sheet
 - Cash Operating Summary (multiple accounts)
 - Balance Sheet Summary (multiple accounts)
 - Budget vs. Actual Summary (multiple accounts)

The first four reports are created and delivered monthly to all account managers. The rest of the reports will be created and delivered to those account managers who request them.

4. **Pre-defined Queries:** These are off line, pre-defined queries produced only on demand. The departmental user changes specific parameters, such as account number or accounting period. Users will be able to copy a pre-defined query and use it as a template to create a report. (NOTE: All of the standard reports are available as standard queries.) These reside in an Information Center-like environment under a menu structure and would be selected for production as needed. The output form could be printed or electronic, or even just the raw data (unformatted) sent to the user via the File Transfer Protocol (FTP) service. This library is a constantly growing and changing set of available queries.

A special set of pre-defined queries will feature a new group of software products designed for financial consolidation and high level monitoring of specific performance indicators. These are **Hyperion** (most applicable to

Responsibility Centers or very large departments) and *OnTrack*, (most applicable to campus-level management).

5. *Ad Hoc access*: This represents the ultimate flexibility for the user. Using desktop-based access tools, the user is able to extract data, move it to a local resource (LAN or desktop) and post-process it at his/her discretion to produce custom reports, charts etc., using a spreadsheet product such as Excel or LOTUS 1-2-3.

V. Labor Distribution

The Labor Distribution System is a system designed to integrate the budgeting and accounting aspects of compensation-related expenses. Below is a brief overview of the system.

(For a detailed explanation of the Labor Distribution System, please refer to the Labor Distribution System Reference Document)

A. Labor Ledger

The Labor Ledger is a subsidiary ledger to the General Ledger containing detailed information about salaries, wages and fringe benefits. In other words, the General Ledger contains summary information about salary and fringe benefits and actual expenses (summarized at the object code level, i.e., academic salaries, non-exempt staff salaries, etc.). The Labor Ledger contains detail by position and person. It also contains information about the budgeted amount, the actual expenses, and the projected encumbrances. It is broken down by month.

B. Calculated Salary Foundation

One of the main objectives of the new system is to calculate the base salary for a person (or position) based on the beginning budget established by the account manager and any PAFs which are processed during the year. This allows the account manager to process PAFs without necessarily having to adjust the budget. This calculated salary foundation (CSF) can then be used as the basis for salary setting during budget construction.

C. Budget Construction and Salary Setting

The new system has a new budget construction process where budget construction for income and expense line is done at the same time salary setting is done. The salary setting process can be done at any time during the process, but the final salary budget numbers are summarized and stored in the General Ledger at a summary level.

D. Appointment Funding Transaction

One of the aims of the Labor Distribution system is to redirect funding distributions from Human Resources (HR) to accounting. In other words, after a person is appointed to a position at a certain rate of pay for a specific amount of time, the accounts used to fund that person will fall under the jurisdiction of budget and accounting.

Therefore, there is a separate transaction which will allow departments to adjust the funding of a position during an appointment period, and it does not require the same routing as the PAF.

E. Calculation of Encumbrances

The system is set up to recalculate salary and fringe benefit encumbrances (projected expenses through the end of the appointment). These recalculations are done after each run of a payroll.

F. Position Management

The Labor Distribution system incorporates a position management system, where a position number is defined and tracked in both the budget and payroll portions of the system. The position number corresponds to the current budget lines, with two advantages:

1. The position number does not change when an account number changes. This allows a position to be tracked over time.
2. A specific transaction allows departments (or HR) to combine positions together to reflect an actual position. In the case of faculty and staff who now have multiple budget lines because they are funded out of multiple accounts, this transaction allows those budget lines to be collapsed into one position which can then be tracked.
3. A further transaction allows Human Resources or the Dean of Faculties to maintain attributes associated with each position so that reports can be generated based on specific positions or groups of positions.

G. New Labor Reports

There are two new standard reports defined. (*See Standard Reports*) And there are some standard inquiries. (*See Standard Inquiries*) Further reports are to be developed as the system is deployed.

VI. Capital Assets Management

The Capital Assets Management System replaces the current Property Management System. It contains a database with all university assets and is used to manage and track all assets. Below is a brief overview of the system.

(For a detailed explanation of the system, refer to the Capital Assets Management Reference Document)

A. Maintenance of Assets

Forms currently required to record changes in assets are available in the Transaction Processing environment. These forms are commonly used to record location changes, dispositions, gifts and "take home" agreements.

Departments have workstation access to their fixed assets. Designated departmental staff have the ability to modify certain non-financial information pertaining to their capital equipment, such as location, status and description.

Asset managers are able to group assets by assigning a reference number which is available as a reference key for reports.

Reference tables are included in the design of the system. These client-maintained tables store information related to asset maintenance along with useful warranty information. The non-capital equipment table can be used for what is now commonly called "setup data." The asset manager is able to record pertinent information relating to non-capital equipment or components.

B. Inquiry to Asset Data Base

On-line viewing and common report selection is available for the asset manager. Ad-hoc queries and data transfer are provided as part of the Decision Support function. *(See Decision Support)*

C. Bar-Coding Inventory Process

Most university moveable equipment is identified with bar-coded tags. This enables departments to use optical scanning equipment when doing their physical inventories. Each department has the ability to transfer this information to FMS using a computer transfer process. FMS then compares the results to the information current on the file, and prints out exception report(s) which are then reviewed and sent to the department for resolution.

D. Depreciation

The new system is set up with the ability to depreciate assets in two different ways; one for the official university records, and, if desired, one for the department's use.

VII. Accounts Receivable

This system replaces the current Form 31/32 system. It allows departments to record their invoices and payments electronically, and automatically generate invoices and billing statements. It also creates the corresponding accounting entries when an invoice and/or payment is processed. Below is a brief overview of the system.

(For a detailed explanation of the Accounts Receivable system, refer to the Accounts Receivable Reference Document)

A. Invoice Entry/Maintenance

The system provides a transaction which allow departments to enter their invoices, maintain the invoices, print the invoices and look up current and old invoices. Invoices can be printed in the department, or can be printed centrally on a regular basis.

B. Customer Entry/Maintenance

A transaction is provided to allow each department to set up and maintain its own customer database. All customers, invoices and payments are attributed to a particular department. There is an overall customer list which lists all customers by name, so that departments can get an entire picture of a customer's relationship with the university.

C. Reports

The system provides some standard reports;

- Monthly Billing Statement
- Aged Trial Balance

There are also a number of on-line inquiries which allow departments to view the information about their customers, invoices and/or payments.

D. Payment Processing

One of the key aspects of this receivable system is that the majority of the payments are processed through a lock-box, and the payment information automatically updates the Accounts Receivable System. Departments still have the ability to record individual payments (via the cash receipt voucher (CRV) document), but the vast majority of the payments will be handled automatically.

VIII. Contracts and Grants

The Contracts and Grants System tracks all external proposals submitted by the university and then tracks the subsequent contract or grant received for the research or public service activity. This system is tied directly to the financial information in the FIS in order to reflect the activity on the contract or grant, and to prepare the financial reports necessary to support the activity.

A. Proposals

Information concerning proposal activity includes project titles, submission dates, organizations submitting the proposals, requested direct cost and indirect cost, project directors submitting the proposals and agencies to whom the proposals are submitted.

B. Awards

Information concerning award activity includes project titles, entry dates, organizations receiving the awards, awarded direct cost and indirect cost, project directors receiving the awards, agencies who funded the awards, and the limitations of particular contracts or grants. There is a link to one or more accounts for each award, so that financial activity can be reported.