



PJN Note: This document represents pass one at a new ‘lightweight’ SUM. The modus operandi has been to consider trying to look at the minimal categories required to write something useful. The “e-Framework Guide” (never released) was looking into making the e-framework components less daunting to read and produce. This document has been written with those ideas in mind.

Service Usage Model

- Name: Selection of a new e-journal
- Alternative Names:

Problem Description

PJN Note: A big weakness of the e-framework was that it was impossible to search for problems. One could search for solutions – but most people when looking for an answer describe the problem that they are having. This section is taken from the SUM rationale and description sections.

The ordering of a new e-journal subscription in an academic library is a complex, labour intensive process. This is because there are many purchasing deals available for an e-journal; each deal offers different terms and conditions (e.g. subscription for one year vs long term subscription; does the subscription include access to back issues etc.) at a different price. The library is required to purchase the *correct* deal given the needs of the academic staff and the budget available. This process is made more difficult because all possible deals are not always visible to the library, and change throughout the academic year. Consortium deals also need to be taken into account.

Further, the requirements of the academic staff are not always clear, as academics “just want the journal”, rather than being concerned with the intricacies of the ordering process.

There are few support tools, so staff will typically manage the process using spreadsheets, emails and paper forms. In summary, the process is very labour, skill and time intensive. Selection of the wrong deal could lead to spending too much money on the subscription, or academic needs not being met.

Business Process Modelling

PJN Note: This is actors, business objects and processes. The guide describes this section as the SUM’s setting in the real world.

Actors:

Academic departments:

- Start the process by making the request for a new e-journal subscription.
- Negotiate sharing costs with other departments, if necessary.
- Agree with library that a particular subscription deal is approved.

Library staff:

- Clarify the needs of the department in the original request.
- Determine if there is a better option available for satisfying the original request.
- Cross check that budget is available for the subscription request.
- Locate the supplier(s) of the e-journal.
- Investigate the deals on offer for a particular e-journal
- Determine the best deal for the department and institution, given budgetary constraints, and availability of packaged deals for other e-journals (for any department) from same supplier.
- Order the new e-journal subscription

Business Objects:

Budgets – money available from a specific department or for the library to pay for an e-journal subscription.

Requests – a request from a department for an e-journal. As a minimum this needs to include the name of the e-journal, the requesting academic, and the contact at the department that will be negotiating and signing off the budget.

Titles – The title of the e-journal content being requested

Title Availability – the terms of the availability of a specific e-journal.

Deals – the set of “purchase options” for a specific e-journal, including the price and license terms and conditions.

Processes:

Make Request:

1. An academic staff member makes a request to the library for a new e-journal subscription.

Clarify Request

1. Library staff clarify with the requester their requirements for the subscription. Note that this is not a one to one mapping of deal terms to requirements. At this stage the precise deal terms will not be known.
2. If the request could be satisfied more easily (for example, if the request is for a single issue or limited use of an e-journal that could be satisfied by document delivery), then advise of alternate option.

Identify e-journal source

1. The identity of the e-journal is determined.
2. The Publisher of the e-journal is determined.
3. The list of known e-journals of interest per publisher is consolidated.

Identify deals

1. The e-journal source(s) are consulted for deals related to the e-journal. The sources checked for deals include:
 - Existing deals of which it may be part
 - Shared resources with affiliated institutions
 - Nationwide deals negotiated by above campus organisations
 - Publishers
2. Each deal is then analysed against the resources available to the department(s), library and/or institution.
 1. This analysis process may require library staff to review and/or trial new publishers and platforms.
 2. The analysis may require communication regarding cost sharing between several departments, if package deals of multiple subscriptions from the same publisher are an option.
 3. This analysis will require further communication with the department to ensure that the budget for the deal still exists.
 4. This analysis includes checking that the terms and conditions of the license of the subscription are acceptable.

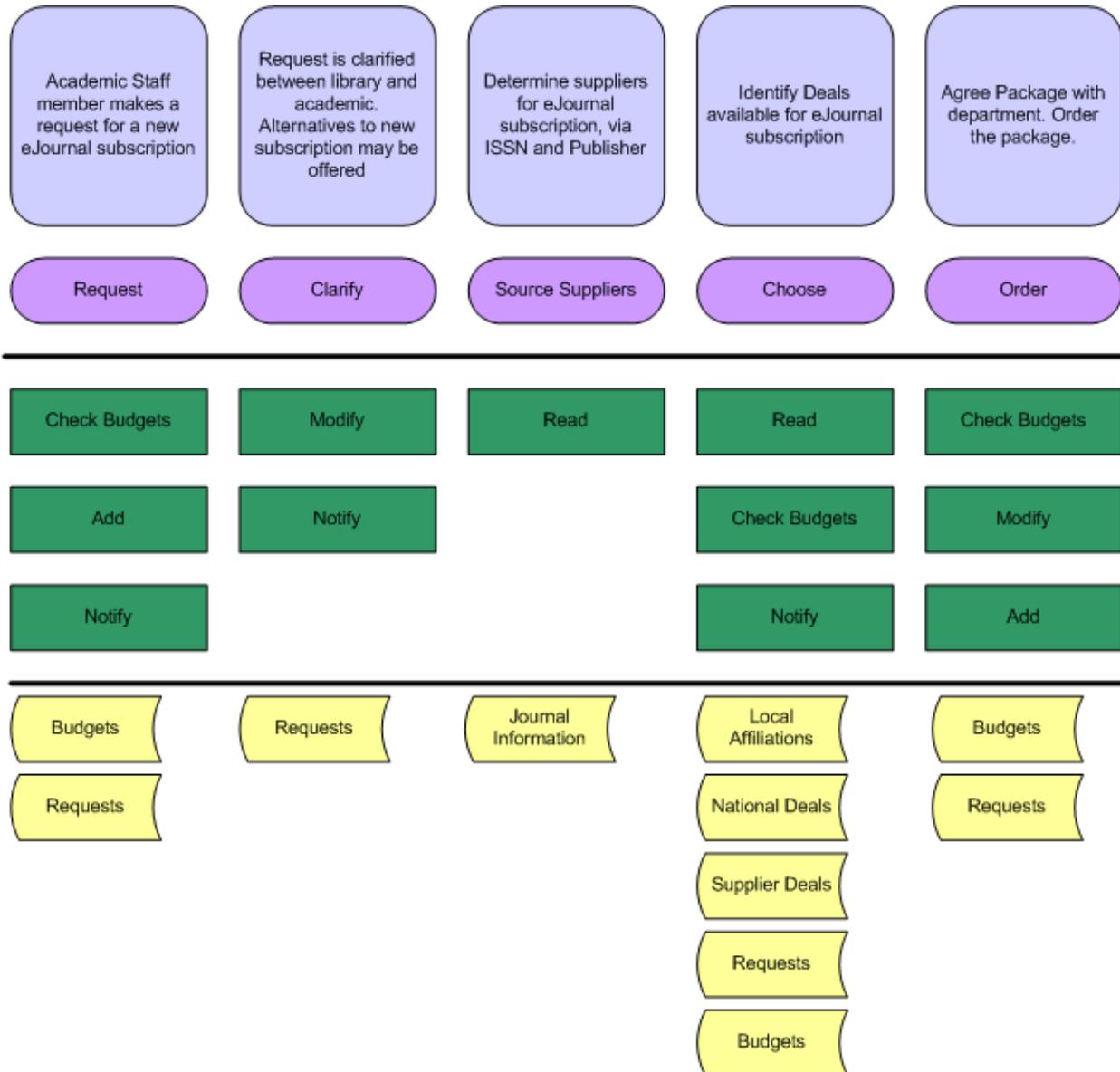
Agree package

1. Once a deal, or package of deals has been determined, the requesting department(s) may need to sign off the deal. This is to guarantee that the funds are in place for when the order is placed.

Order

1. The order for the deal or package is placed within the Library Management System.

Diagram



Functionality

PJN Note: The process part of the BPM section above now needs to be ‘implemented’. This implementation is initially viewed in terms of ‘functions’ which consist of a service or set of services providing whole or part of what is required to deliver the business process described above. Usually, there is a close mapping of functions to processes, but functions should ideally be re-usable.

Make Request (Add)

An add request needs to be made to the library. The Add request contains:

- The “request” business object, as defined in the BPM section.

Behaviour:

1. The budget from the department is cross checked.
2. If there is available budget then the request is placed into a queue.
3. If there is no available budget then the request is rejected.
4. A librarian is alerted to review the queue.
5. The requester is alerted as to the status of the request.

Clarify Request (Replace)

As a librarian reviews an individual request, it may be necessary to obtain further details from the department. Ultimately, the request business object may be replaced with another one, which contains more information. It is assumed that humans will undertake the clarification conversations 'out of band'. If the request business object is sufficiently complete, clarification conversations could be reduced or eliminated. The Replace request contains:

- The "request" business object, as defined in the BPM section.

Behaviour:

1. The system actions the new business object as a new subscription request

Note: In a human based system it would be at this point that requests might be cancelled if other avenues for acquisition of the desired content exist. This could potentially be determined from the initial request object.

Identify available deals

This function is concerned with data matching and is a good candidate for automation. This function identifies the source(s) for a particular subscription, and then locates the deals that are available. This list is then sent to the librarian for consideration. The request contains:

- The e-journal "Title" information
- The identifier of the requesting department

Behaviour:

1. The ISSN and Publisher information for the title are determined via external directory.
2. Update internal database to consolidate list of titles for publisher.
3. Check for local availability via affiliations
4. Check for other availability via above campus services
5. Check for deals from publisher
 - .1 Check for cross department packages.
 - .2 Check budget of requesting department(s)
6. Assemble short list of deals
7. Present short list to librarian for negotiation with departments.

Check Budget (Read)

This function is used to check that a department has the required budget available in order to make a request. The request to check a budget contains:

- An identifier for the department or departments.
- A subscription request object

Behaviour:

1. Check the department(s) budget.
2. If the department(s) have the funds to accept a deal, (or even, at first, have any budget at all), the request can proceed.
3. If the department(s) do not have the required funds, the request is cancelled.

Agree Package

This function may require the department(s) to sign off the agreed package so that the order can be placed. It is assumed that this will be a human process, although it would be possible for a system to (for example) send emails which contain links to action the request to go further. The request to proceed with the order contains:

1. The selected deal to order.

Behaviour:

1. Check department budget(s).
2. Send acquisition request to Library Management System.

Order (Add)

The selected deal needs to be actioned within the Library Management System to commence a new acquisition.

Behaviour:

1. The Library Management receives the acquisition request.
2. The acquisition process (out of scope for here) is then activated.

Service Arrangement

PJN Note: Each function is delivered via a service or set of services. This section needs to show how the services work with each other, data sources and external systems to deliver the functionality required.

Make Request

Description: This function needs to validate that budget exists for a new subscription request, add or reject the subscription, and notify all humans involved.

Orchestration:

- Call Check Budgets
- Call Add
- Call Notify

Service Name: Add

Target Data Source: Requests

Target Business Object: Request

Target External Systems: none

Actions: Put the Request into the data source; do not modify the values of the Request.

Service Name: Notify

Target Data Source: None

Target Business Object: None

Target External Systems: Message Delivery (email, IM etc)

Actions:

- Send a notification message to alert the library staff that a new request has been received, including the request's status (e.g. "in process", "rejected", "fulfilled" etc)
- Send a notification message to inform the department that the request has been received, including the request's status.

Check Budgets

Description: This function needs to validate that budget exists for a new subscription request. This involves reading the budgetary value for a department and comparing it against the minimum required budget for a specific deal.

Note that this function should also be used to verify the existence of a budget. If departments with no budgets make subscription requests, those requests should be cancelled with no disruption to the library.

Orchestration:

- Given the request, identify the target department(s).
- Call Read to retrieve budget information.
- If budget is insufficient, update Request to be rejected/require attention.

Service Name: Read

Target Data Source: None

Target Business Object: Budget

Target External Systems: Departmental Finance Systems

Actions:

- Retrieve budget information from the requesting department

Clarify Request

Description: This function is required to ensure that all of the necessary request information is present. In current systems, this is typically carried out by humans. It should be conceivable to design the request business object in such a way (with mandatory and optional fields) to eliminate or reduce clarifications. From a service perspective, all clarifications do is modify the request business object.

Orchestration:

- Call Modify
- Call Notify

Service Name: Modify

Target Data Source: Requests

Target Business Object: Request

Target External Systems: None

Actions: Modify the existing values of the request.

Service Name: Notify

Target Data Source: None

Target Business Object: None

Target External Systems: Message Delivery

Actions:

- Send a notification message to inform the department that the request has been modified.

Identify Available Deals

Description: This function matches the details in the request against all known deals. Deal Sources are consulted if the e-journal in the request is new to the library. The output of this function is a list of deals which can be considered; taking into account budgets, cross department ordering etc.

Orchestration:

- Call Read (Journal Information) to determine the ISSN and Publisher Information.
- Call Read (Local Affiliations) to determine if the request can be fulfilled locally.
- Call Read (National deals) to determine if the request can be fulfilled as a result of a national deal.
- If the journal is available locally or nationally, Call Notify(Completed) cancel the request.
- Call Read (supplier deals) to determine the options for purchase.
- Call Read (requests) to determine if options exist for cross department purchasing
- Assemble initial shortlist of deals
- Call Check Budgets
- Remove any deals from shortlist which are too expensive
- Call Notify(Librarian) presenting shortlist for negotiations with departments.

Service Name: Read (Journal Information)

Target Data Source: Titles

Target Business Object: Request, Title

Target External Systems: Ulrichs, external resolver

Actions: Lookup the ISSN and Publisher for the e-Journal from the titles information. If the title does not exist, then resolve using external resolvers such as Ulrichs. Update the local titles data source with the resolved information.

Service Name: Read (Local Affiliations)

Target Data Source: Titles

Target Business Object: Request, Title

Target External Systems: None

Actions: Lookup the e-journal in local systems that the institution has access to due to affiliations or regional consortium agreements.

Service Name: Read (National deals)

Target Data Source: None

Target Business Object: Request, Title

Target External Systems: NESLi

Actions: Lookup the e-Journal in NESLI.

Service Name: Read (Supplier Deals)

Target Data Source: Deals

Target Business Object: Request, Title Availability, Multiple Deal objects

Target External Systems: Publisher e-journal systems

Actions: Retrieve all deals from the publisher for the target e-journal.

Service Name: Notify (Librarian)

Target Data Source: None

Target Business Object: Multiple Deal objects

Target External Systems: Message Delivery System

Actions:

- Send a notification message with the shortlist of deals to the librarian.

Service Name: Notify (Completed)

Target Data Source: None

Target Business Object: None

Target External Systems: Message Delivery (email, IM etc)

Actions:

- Send a notification message to inform the department that the request has been completed, along with the link to the e-Journal.

Agree Package

Description: This function represents the final negotiation where the department and library select the package that will be ordered. A final budget check takes place. In Service terms, a final modification needs to happen to the request to reflect that it is now agreed and approved.

Orchestration:

- Call Check Budgets
- Call Modify
- Call Order

Service Name: Modify

Target Data Source: Requests

Target Business Object: Request

Target External Systems: none

Actions: Update the status of the Request.

Order

Description: This function takes an agreed package deal forward into an active acquisition.

Orchestration:

- Call Add

Service Name: Add

Target Data Source: None

Target Business Object: Request

Target External Systems: Library Management System

Actions: Enter the request into the acquisition workflow of the Library Management System