



## **EVALUATION CRITERIA FOR A SYSTEM TO MANAGE APPLICATIONS AND LETTERS/DOCUMENTS FOR UJ**

### **A. Company profile:**

1. A supplier must be an established business with an excellent record for dependability.
2. Must be a supplier to large companies using extensive workflow and letter/document management processes.
3. Suppliers must be able to provide references.
4. A supplier must be able to render a comprehensive service that includes technical and integration support.
5. The University reserves the right to conduct site visits of the suppliers.

### **B. Specifications of the current system:**

The current system, hereafter referred to as “the system” receives applications into the system via a SFTP or import process whereafter it automatically creates a folder using a record created from ITS on the application information for all applicants that applied online or whose application was scanned in manually. The system uses the student number as the unique identifier to determine where to add any supporting documents submitted as part of the application or that was sent in afterwards.

Supporting documentation submitted as part of the application, or sent in after the application, is received into a central queue where it is then divided into several different queues. These queues are allocated to different staff members responsible for indexing the documents according to specific and pre-approved document types and updating key custom properties e.g., the student number. Once a document is indexed it is sent forward where the system uses the unique identifier to automatically join the document up with the existing folder within the system. In the event of applicants not submitting the supporting documentation as individual documents, these documents need to be separated into individual documents prior to the indexing.

Supporting documentation is received within the system by either a specific system-related email address or by users capturing the documents into the system via a specific capture profile created and linked to the application process.

Any staff member wanting to process any applications within the system must be granted access to the system, and depending on the responsibility of the staff member, certain access/restrictions will be linked to the relevant staff member profile. Staff members can therefore only view applications via queues towards which they have been granted access. User access can also be limited to e.g. printing and exporting rights. If a staff member does not have access to a specific queue within the system, such a staff member won't be able to process applications within such a queue. The staff member will however have access to view the application lying within a specific queue towards which they do have access.

The system allows staff members to make decisions based on the documents within the applicants' folder, and then note those decisions in a custom properties field that is linked to the application folder. Staff members are then able to, based on their decision, route the folder of the application either backwards or forwards for review/further processing. Each queue within the system is allocated specific routing options. Applications/folders within a specific queue can therefore only be routed backwards/forwards depending on the pre-determined routing rights that has been allocated to that specific queue. For superusers or specifically identified staff members, the privilege to route applications anywhere within the system are given. This enables routing of applications between queues that doesn't exist in the pre-determined routing structure. Within queues, the system notifies staff members via email of new or unprocessed applications that need to be processed.

The system's search function does allow for searching of documents for a specific applicant, or for a group of applicants. The table in which the search results are displayed is customisable and staff members can also build their own search function within a specific queue. These results can be exported from the system into various formats as required (pdf, xls, etc.) or as an alternative specific reports can be built to run indicating the type of information required from the system whether queue lists, time in queue lists, user lists, etc.

The system has some integration with the University student information system (SIS) called the Integrated Tertiary Software (ITS) system from AdaptIT. This integration allows for the update of certain custom properties in the system for example the indexing process and/or updating of statuses during certain steps throughout the applicants processing on the system.

The system allows for certain rules to be built into specific queues for automated processing. Folders/applications can therefore automatically move between certain queues based on specific rules e.g. automatically moving an application/folder from one queue to another based on a specific application status or time that an application has been in a specific queue.

The system also keeps a logfile of each document and folder that has been created. The system also keeps a history of the application/folder as it is routed throughout the system and these histories can be viewed for audit purposes.

From a technical aspect the system has a management functionality whereby the system administrators have the privilege and rights to create new user profiles, new queues, new document types, public views, reports, amend existing queues, terminate users, etc.

## **C. Functional Specifications required:**

### **1. Volumes and capacity**

The system must be able to deal with large volumes of applications received. During peak times, UJ can receive as many as 10 000 applications a day. In total, over the past five years, UJ received on average 290 000 applicants (Headcount) which equates to about 500 000 applications (choices). During the 2021/22 application cycle UJ received over 400 000 applicants (Headcount), and a total of 700 000 applications (choices).

The system should therefore be able to store all the data received (keep historical data and documents for a certain period as determined by the electronic document retention policy of UJ) and be able to process any data requests from users seamlessly. This might equate to several million records (with supporting documents linked to these individual records/folders) being stored and kept on record on the system. In addition, the system must be able to transfer all supporting documents received within an application cycle to the official UJ document management system (Perceptive Content). All metadata and other record related information must also be transferred.

The system must also be able to deal with large volumes of records/folders being called up simultaneously. This might either be required for application processing or for audit purposes.

## **2. Customisation**

The system must allow day to day users to customise certain functions/pages without necessarily calling in the help of a system specialist (either internal or external). Users must be able to e.g., change table layouts easily, compile letters (more detail in communication section below) themselves, change rules to alert the user of specific properties within a folder, programme some basic automation, build specific reports (more in reporting section below) etc.

The system must allow administrators to allocate access rights to certain customisation levels (as per examples above) per user profile.

For more complicated customisation, UJ would require the company to provide sufficient training to identified UJ staff member(s), so that more complicated changes to the system, for example more complicated workflow changes or automation, can be dealt with internally by a UJ staff member(s).

Should there be more complicated customisation required, the company should also be able to provide UJ with the option to get assistance from a system specialist (details of external specialist and developments to be finalised in an official Agreement and Service Level Agreement between UJ and the company).

## **3. ICS specifications and requirements**

The system must be able to communicate effectively and seamlessly with other existing systems at UJ. The most important of these would be the ability to communicate with the existing UJ student information system – Integrated Tertiary Software (ITS), updating certain information for example the applicant's/student's application status or notes made on the system into ITS. The relevant status will be determined by predetermined rules calculated by ITS. A staff member will therefore only indicate a major status grouping e.g. admitted/declined/provisional/conditional/cancelled. From there ITS will calculate the exact status based on other values linked to each individual applicant.

The system should be able to communicate with an existing restful API on ITSIntegrator using an Authentication Key when updating data on ITSIntegrator. Support should be available should the API not work or when an enhancement is needed on the API in use. A development service should also be available should new API's be needed/implemented.

## **4. Documents**

### **4.1 Manual indexing**

The system must be able to receive documents via email, other portals and the online application system (ITS online application system), split the number of documents received equally across different workflows, and link specific staff members to those workflows. Staff members must then be able to open the document, index the document based on the document type and update the relevant custom properties accordingly.

If there are several documents sent in as one document, then the staff member must be able to split the document into separate documents (one for each document type).

For ease of indexing purposes, the system must be able to store a list of document types as a list of values. The list of values must be able to be updated by the relevant staff member given access rights for updating and maintaining the document catalogue once due process has been followed involving the Records Management Unit.

Staff members must also be able to delete documents that do not adhere to certain criteria (e.g., quality not good enough or document not certified). Deleted documents must be stored temporarily until the transfer of all documents at the end of the application cycle, whereafter the deleted documents can be purged.

Each document must contain certain custom properties which UJ staff members can update (e.g., student number, ID/Passport number, document type). These custom properties must be customisable, and the Supervisor: Biographics must be able to determine all the relevant custom properties, keeping in mind the custom properties required within Perceptive Content when documents are transferred from the new system to Perceptive Content.

Once a document is indexed and custom properties are updated, the document must be marked as complete and then saved by the UJ staff member. The system must then automatically join the document up with the existing folder/record using the student number as the unique identifies. If a folder/record does not already exist, the document must be stored, and the system must automatically join the document to the folder as soon as the folder/record is created.

## **4.2 Document recognition and automated indexing**

The system must have built in document recognition software or be able to add such software as an add-on at a later stage. The document recognition software must be able to:

**4.2.1** be “trained” to identify specific documents. The training must allow for several types of examples to be included as part of the document training process including aspects such as whether a document is certified or not.

**4.2.2** identify documents that it has been trained to recognise and give a percentage accuracy score. The accuracy score per document type must ~~be able to~~ be determined by UJ. If the accuracy score is above a certain percentage, then the system must be able to use the document recognition software to index the document according to document type and auto populate specific fields in the custom properties of the document (based on the fields it was trained to recognise for that specific document). If all the custom properties are not updated (therefore not marked as complete), then the document must be sent to the relevant indexing folder for manual indexing by the UJ staff member to complete the rest of the custom properties manually before marking it as complete. The complete document must then use the student number to automatically form part of an existing folder/record.

If the accuracy score is below a certain percentage, then the document must be sent to the indexing folder for a staff member to manually index the document. If all the fields cannot be automatically populated, then the document must also be sent to the relevant folder for a staff member to manually update the outstanding custom properties.

**4.2.3** The document recognition software must also be able to identify whether there are already existing duplicate documents in the system. If the accuracy score for the document is for example 100% the same as for an existing document, the system must then automatically delete the second document received and store it temporarily until the transfer of all documents after the application cycle.

## **5. Automation**

### **5.1 Folder/record management based on documentation rules**

The system must be programmed to link specific document types to specific applicant/application types. An external undergraduate applicant must for example be able to have an academic record linked to the record as a required document type.

The system must be able to automate:

the update of document completeness (a property created to indicate whether all documents have been received or not) in the custom properties of a specific folder/record based on specific rules linked to documents and applicant type combination (as per example in 5.1 above). If there are for example certain documents outstanding, the system must indicate the document completeness in the custom properties of the folder/record as “incomplete”. In the example used above, the system must then be able to “chase” or follow up on the academic record of the applicant if it is outstanding. The system must be able to follow up on documents by emailing an applicant requesting them to submit documents identified as still outstanding. The system must be able to execute this email notification function on predetermined intervals. After chasing a document for a determined number of times and still not received, the system must automatically allocate a declined due to non-compliance status to the relevant applications made by an applicant. The system must keep a logfile of all attempts of following up on the document(s) via email.

## **6. Architecture**

### **6.1 Centralised using query/search function to call up folders**

The system must not work from the basis of moving folders/records of an application from one person to the next in a very rigid document workflow system. The system must create a folder/record with all the applicants’ details (as specific custom properties) and list corresponding documentation linked to the applicants record by means of a unique identifier (student number) per application choice.

The folder/record then lies at a central point where it can be called up by any staff member at any given time. The folder/record can be called up by using any, or a combination of the custom properties that is linked to the application folder/record. The results of the

search must then be displayed to the UJ staff member in a table format. The columns displayed to the UJ staff member in the table must also be user definable and easy to change. The main filters for searching an application will most likely be, but not limited to:

- Student number
- Local/International
- Year
- Faculty
- Department
- Qualification code
- Offering type
- Choice

One applicant (with multiple applications possibly over multiple years) must therefore, be able to be called up simultaneously by different users.

Any changes made to the custom properties or documents of the folder/record that has been called up, must be saved and a log file must be kept indicating:

- date and time changes were made;
- User (name) that made changes;
- description of changes made.

The system therefore works mainly on a pull (search and query) basis, and not on a push (folders lying in a specific queue waiting to be processed) basis. It is therefore the responsibility of the UJ staff member to ensure that all applications for which they are responsible for are being processed by means of querying, for example, incomplete folders/records.

The system must be able to allow the UJ staff member to create a search/query with a predetermined set of values and create a separate view where folders/records matching those search criteria are populated. This view will allow UJ staff members quick access to the set of folders/records they need to process.



## **7. Integration with other systems**

### **7.1 Update custom properties from Student Information System (SIS)**

The system must be able to communicate effectively and seamlessly with other existing systems at UJ. The most important of these would be the ability to communicate with the existing UJ student information system – Integrated Tertiary Software (ITS), updating certain information for example the applicant's/student's application status or notes made on the new system into ITS.

The system must also be able to retrieve documents that is stored on ITS that was submitted by an applicant as part of the online application process – from both the online application portal or system (for first time applicants), and the iEnabler (for returning applicants).

The system must also be able to collect and update certain values from ITS into the custom properties of a folder/record on a predetermined interval (e.g. admission status every 24 hours). Logfiles must be kept of any changes made whether it was updated from ITS or made in person.

### **7.2 Communication and integration with other systems**

The system must be flexible enough to also integrate with other third party systems (e.g., ChatBot).

## **8. Access and security**

### **8.1 Customisable rights for users**

The system must allow for different levels of rights to be allocated to different UJ staff members based on their responsibilities for dealing with specific applications and/or documentation.

The rights should be allocated by the UJ staff member who has been identified as the internal system administrator.

## **8.2 Logfiles**

All transactions taking place on the new system should be logged. Log files should be easily accessible should any query arise for example who made changes to custom properties, or when a specific status was allocated. Automated changes (as per examples discussed above) should also be logged accordingly.

## **9. Communication**

### **9.1 PDF communication of application status to applicants**

The system must have a platform allowing UJ staff members to easily create letter templates for specific application statuses. The system must also allow for the creation of specific tags that can be used in the letter. If there is a field on ITS that the UJ staff member wants to use in a specific letter, the new system must allow the UJ staff member to create a tag. The tag must then be able to be inserted into the letter template to make each letter unique.

Tags must include, but not be limited to:

- Year
- Block Code
- Offering Type
- Campus
- Faculty/College
- Qualification Code
- Study Period
- Application Status
- Bulk or individual

The system must also have a test functionality for UJ staff members to test letters, to see that the letter they have created are generating correctly with all the tags they have inserted, before scheduling it to go out. When a test is done, no logfile must be created. UJ staff should be limited to sending letter as per access granted per faculty code. E.g. staff in the faculty of Education should only be able to send letter to applicants that applied for an Education qualification. This can assist in limiting errors of sending letters to a large incorrect group of applicants.

The letter must have a tag for the date the letter is generated to be displayed on the letter.

There must also be a log file that is kept for each letter sent to an applicant to make sure that an applicant does not get the same letter with the same parameters twice.

The letter sent to an applicant/student must be stored and the applicant/student/UJ staff member must be able to retrieve the letter upon querying it on the new system.

The letter(s) created by a UJ staff member must also be able to communicate/integrate with other systems – e.g. the “check your status” on the UJ website.

Alternative letter creating methodologies should also be available. For example, the system could be configured to not generate and send every letter, Alternatively a link in an email could be sent to the applicant (if the application status has changed on the system) to inform the applicant. In this email there could be a link to the letter. If the applicant accesses the link then only the system creates and displays the letter according to the letter templates configured. This means not all the letters in the final admission process are generated at once (placing huge strain on system resources), they are created on demand when the applicant needs it.

#### **10. Reporting and statistics**

The system must allow for the creation of a report based on specific data fields identified by the UJ staff member. Such reports, showing for example, the number of pending applications for a specific qualification, must be able to be scheduled (Daily, weekly, monthly intervals etc.) to be generated and emailed or displayed to the UJ Staff member on their user profile. It must be possible to export reports into either PDF or Excel format.

The system must also allow for the creation of statistics to be generated into a report, or to be exported into PDF/Excel format. Such statistics reports must also be user definable and easy to create.

#### **PRICING SCHEDULE**

Pricing to be carried out in accordance with the specification as submitted by the successful supplier.

#### **C. Disqualifying criteria:**

Non-conformance to the full requirement of specifications.

**D. System Evaluation criteria:**

Systems will be evaluated in two phases:

Phase 1 - Requirements/Functionality

Phase 2 - Financial and Other

Phase 1 - Requirements/Functionality

Requirements/Functionality Evaluation								
Nr	CRITERIA DESCRIPTION	%	Allocation of points	Scoring Rating				
		Weight		1	2	3	4	5
				Poor (No points scored)	Average	Good	Very Good	Excellent
1	Experience in the development and support of electronic workflow automation.	25	5 points=25% 4 points=20% 3 points =15% 2 points=10% 1 point=0%	No information provided/less than 1 year of experience	1-2 year experience (proof provided)	3-4 years' experience (proof provided)	5 years' experience (proof provided)	More than 5 years' experience (proof provided)

2	Experience in design, configuration and implementation of document workflow process Automation	15	5 points=15% 4 points=10% 3 points =8% 2 points=5% 1 point=0%	No information provided/less than 1 year of experience	1-2 year experience (proof provided)	3-4 years' experience (proof provided)	5 years' experience (proof provided)	More than 5 years' (proof provided)
3	Experience in interactive application UX capabilities and application usability standards	10	5 points=15% 4 points=10% 3 points =8% 2 points=5% 1 point=0%	No information provided/less than 1 year of experience	1-2 year experience (proof provided)	3-4 years' experience (proof provided)	5 years' experience (proof provided)	More than 5 years' (proof provided)
4	Experience working in a collaborative effort and cross-functional teams and Project Approach (Must provide Functional Specification)	5	5 points= 5% 4 points=4% 3 points =3% 2 points=2% 1 point=0%	No information provided/ less than 1 year of experience	1-2 year experience (proof provided)	3-4 years' experience (proof provided)	5 years' experience (proof provided)	More than 5 years' (proof provided)
5	Client testimonials	5	5 points=10% 4 points=8% 3 points =6% 2 point=4%, 1 point=0%	No information provided/ less than 1 year of experience	1-2 year experience (proof provided)	3-4 years' experience (proof provided)	5 years' experience (proof provided)	More than 5 years' (proof provided)

6	Submit a technical proposal.  Understanding of scope, objectives, and technical requirements. Overall concord between requirements and proposal.	40	5 points=10% 4 points=8% 3 points =6% 2 point=4%, 1 point=0%	No information provided	Technical Proposal provided with more attention to details of scope, objectives and technical requirements. Can provide 0% to 30% of required developments.	Technical Proposal provided with more attention to details of scope, objectives and technical requirements. Can provide 31% to 50% of required developments.	Technical Proposal provided with more attention to details of scope, objectives and technical requirements. Can provide 61% to 80% of required developments.	Technical Proposal provided with more attention to details of scope, objectives and technical requirements. Can provide 81% to 100% of required developments.
Total Points		100						
Minimum Points		70						

**NOTE:**

- a) **Tenderers must be scored a minimum of 70 points (70%) to progress.**
- b) **Failure to meet this threshold will lead to disqualification of the tenderer, irrespective of the competitiveness of the tender price submitted.**

**The University reserves the right to disqualify any tenderer who fails to obtain the minimum assessment score for any of the stated criteria irrespective of the competitiveness of the tender price submitted**

**A minimum of 70% is required by any supplier to be considered for Phase 2**

Phase 2 - Financial and Other

- Price (80 points)
- BBEE (20 points)

This is for information only and the job will not be awarded to anyone based on this request.

**E. The system evaluation panel:**

Dr. Tinus van Zyl (Chair)

Mr. Gert van Wyk

Ms. Frances Wessels

Mr. Gerhard Kotze

Mr. Thabang Segami

Ms. Adelaide Mphahlele

Ms. Nicolette Olivier

Ms. Julia Kemp

Ms. Lee-Anne Govender

Mr. Matete Maboko

Mr. Francois Wolmarans

Ms. Rene Genis

Mr. Maxwell Huma

Ms. Elmarie Vermeulen



Tinus van Zyl

12 July 2022