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**Student Relation Department System**

# **Executive Summary:**

The Student Relations Department Unit at Apollo International College is the first point of contact for the students. They deal with documents related to admission inquiry, process, credit transfer, and other similar items. They are responsible for receiving, classifying, indexing, and distributing mails and letters from and to the College. 5 employees are working in this department with 5 administrative offices and 5 educational departments. College is practicing a paper form process to receive and send the documents. So, the company is trying to go with the paperless concept. This practice will offer various benefits to the College. The major benefit is that it decreases expenses, save time, improve efficiency, and enhance security. This will increase return on investment which will be covered later in the paper.

The current practice of Student Relation Department System is listed below:

1. It receives all documents, emails, and circulars in paper form. They must make a track of this mail by registering them and directing them to the concerned departments within the college.

* Each mail is tracked with a unique number.
* Incoming mail folder is used for archiving mail.

1. Reply of each mail is done to the competent authority which is located outside of the college. This response is tracked through:

* This mail gets a unique number and a bar code.
* One copy of each response is saved for future reference.

1. They send internal or external circulars to the departments.

* Save a copy of the circular in the file of circulars.

All documents have the clear name of the sender and receiver outside of the envelope. The date and the subject, number of its attachments, and its classification on terms of confidentiality are included inside in the document. Once they are received at the university, they are stored physically in the cabinets in their respected departments where they belong to.

# **Business Opportunity:**

Student Relation Department System wants to change the work environment by making minimal use of physical paper and its cabinet storage. They also want to adopt an electronic system that substitutes a manual system with the digital transfer system.

**Definition**

**“A paperless office, also called a paper-free office, is a work environment which uses minimal physical paper and instead uses primarily digital documents.” (Benefits of Transforming Into a Paperless Office with Paperless Employees,2020)**

**The Scope**

The new system will be used to store in a digital filing cabinet. It will compile digital documents using scanners and it will be further used for saving, classifying, and indexing all paper mail. Department will use the electronic method which will be made secure by implementing Virtual LAN. This all transfer will be done using standard encrypted TLS. A server will be launched to host the system. Users will be able to access EDRMS remotely.

**Project Objectives**

The transformation of the Department from paper-based to paperless will hugely bring changes in the department. This will offer many benefits out of it. Some of the important ones to mention are explained below:

1. Firstly, this method will save the cost incurred. “This cost may be related to paper, ink, and various other printing supplies. Ink cartridges and paper are usually considered to be the highest office supplies.” (Gruenberg,2020) This adaption will reduce such costs.
2. Another important objective is to have less physical storage in the office. "Digitizing your files and using other measures to cut down on paper means that you can free up space that would need to be used for file cabinets and storage. In a home office, space is often limited. This will allow you to create a better workstation and improve the look of your office.” (Gruenberg.2020)
3. Achieving a clean and organized workplace is another major objective for the College. "Working in a clean, pleasant, organized office will improve the productivity and mood of the employee. Taking steps to diminish the amount of paper you're using means that you'll have less clutter to contend with.” (Gruenberg.2020)
4. A fourth important objective for the company is to improve the efficiency of people at work. It is identified that the employee tends to spend more time looking at the papers. "Moving to a digital or cloud format will help you find the documentation you need in a fraction of the time.” (Gruenberg.2020)

**Assumptions for cost and requirements**

* Document Management Software: IT automates the process of managing documents from creation to storage to distribution throughout an enterprise. (In-house developed software)
* The software will be accessible to up to 150 users.
* It can be accessed remotely.
* It will offer features like:
* Convert paper files into digital documents. (up to 3000 pages monthly)
* Digital hardcopy document storage
* Data transfer with a secure chain of custody
* Data management, retrieval and/or extraction
* Regulatory compliance
* Workflow process management
* Advanced computers with high processors: Some of this computer will be used by users and one or two of them will be used to host the document management software and database storage.
* Operating Cost: This includes costs like providing training to the users.

Cost for the above needs are shown in the table below:

|  |  |  |  |
| --- | --- | --- | --- |
| **Requirements** | **Cost per user ($)** | **Number of Units** | **Total Cost** |
| **Document Management Software** | **No cost** | **1** | **$ 0** |
| **New Computers** | **$1000** | **6** | **$6000** |
| **Training User** | **$200** | **5** | **$1000** |
| **Scanner** | **$650** | **5** | **$3250** |
|  |  | **Total Cost** | **$10,250** |

**Document Conversion or Migration Strategy**

Moving from paper-based concept to paperless can be a challenging decision for any organization. To make this concept more systematic and organized Laserfiche has identified five vital steps that I am suggesting Apollo International College implement as a migration strategy. This strategy or steps are shown in the figure below:

**Metadata Requirement**

The type of documents that the Student Relation Department System is handling is an inquiry letter of students or other colleges. This letter contains information about the sender, subject matter, types of classification in context to the level of confidentiality, date, and other general information. Information we get in this inquiry letter will not have any personal health-related information in it. In case of its presence, it will be forwarded in a sealed envelope and it will remain unscanned in the system and gets classified as a confidential document. This will be delivered with special caution to the concerned department. Thus, the system does not fall under HIPPA or FERPA.

“The Family Educational Rights and Privacy Act (FERPA) is a Federal law that protects the privacy of student education records. The law applies to all schools that receive funds under an applicable program of the U.S Department of Education. It gives parents certain rights concerning their children's education records. These rights transfer to the student when he or she reaches the age of 18 or attends a school beyond the high school level” (Family Educational Rights and Privacy Act (FERPA), 2018). “The Health Insurance Portability and Accountability Act ("HIPAA") protects personal health information held by covered entities. A covered entity under HIPAA is either: (1) a health plan, (2) a healthcare clearinghouse, or a (3) healthcare provider that transmits health information electronically in connection with certain administrative and financial transactions.” (Dinsmore & Shohl, 2011).

|  |  |  |  |
| --- | --- | --- | --- |
| **Attributes** | **Description** | **Data Type** | **Length** |
| **ID number** | A unique number to the letter | Number | 9 |
| **Sender Name** | Name of external sender (Student or Colleges) | String | 20 |
| **Subject** | Reason for writing the letter | String | 200 |
| **Date** | Date when the letter sent. | Date | 10 |
| **User ID** | Identification number for the user | Number | 10 |
| **Receiver Department** | Internal Department where the letter is supposed to reach. | String | 20 |

These are the metadata of the information, that will be collected through the new digitizing system to store. This information will have access to only those authorized users who are provided permission through an access control list based on their role. They will use their credential to gain access to this information. The system of audit trial would like to add, update, or delete the record.

“Data retention is the continued storage if an organization’s data for compliance or business reasons. The organization retains data for many reasons. Minimum records retention requirements regulations vary by state and by data type, but typically they range from three years to permanent.” (Wilson, 2014) There will be retention policies that improve archiving processes in the EDRMS. This was not possible in the traditional system.

**Alternatives**

There are two alternatives that the company can adapt in place of house-made software and that is choosing the right document management system.

1. On-premises Document Management System:

This option best suites big companies or organizations that can spend a good amount of money on its development and maintenance. This system will require the organization to use own servers and storage. For security concerns, they need to have a good backup of their documents. “Technical support and software updates from the vendor are usually contingent on whether you continuously renew an annual subscription package.” (Uzialko.A, 2019) Its benefit is that the control on the system is in the hand of the company. Even in the absence of the internet, one can have access to their document. However, its downside is that it requires high maintenance costs.

1. Cloud-Based Document Management System:

“Cloud-based software is hosted by your provider and made accessible to your organization online.”(Uzialko,A.2019) The main reason behind any company moving to the cloud is that its cost is comparatively low in comparison to hosting on the premise. The cost of using this service is incurred either monthly or yearly and it depends upon the type of service they use, and the amount of time used in using that service. "The biggest benefits are that you don't need an IT team to install the software and keep it running properly and that there aren't any large upfront costs." (Uzialko,A.2019) Its cons is that the system needs to have internet available all the time to get access to those documents. In case, any problems arise with the cloud provider data center, this will directly affect the workflow of the organization.

In my analysis, even going with the cloud can be a good idea. This is an online college. All activities are hosted online so, they need to provide a prompt response to their student or other entities. I thought cloud service could be a good option but in case anything goes wrong with the data center of the service provider; this can hamper the workflow. After evaluating both alternatives, I will recommend in-house build software as a better option to go with. This will help them in the long run and save those subscription fees. Since it is hosted at home, it is will not be dependent on the internet to get access to the documents. However, they must keep maintaining their software in a timely fashion.

**Conclusion with Benefit and Challenges**

In conclusion, converting the paper-based system to digitization is an amazingly effective idea to increase work performance and organize the management. Updating the traditional system to EDRMS will save time, money, increase efficiency, prompt service, and enhance the standard of the college. Five employees are working in this department and their monthly salary is $5000 at present. This number can be decreased to 3 which can save the $10,000 labor cost overall. Likewise, this will save lots of official supplies cost (e.g: papers, ink, staples pins, and many more) in huge amount.

Despite all this positive side from EDRMS implementation, it will bring some challenges with it. The employee may resist the change. They should be encouraged and motivated to learn a new skill. The trainer should be able to engage them in the new system. Implementing an Effective management strategy can save the department from this issue. Another common issue is that despite having good EDRMS available, the employee may continue to keep those letters and mail as a backup.

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# **References:**

1. PDFelement.(2020,April14).Retrieved April 22,2020,from <https://pdf.wondershare.com/business/paperless-filing-system.html>
2. Gruenberg, A. (2020, March 24). How to Go Paperless. Retrieved April 22, 2020, from <https://www.jotform.com/how-to-go-paperless/>
3. Uzialko, A. C. (2019b, February 21). Document Management Systems: A Buyer’s Guide. Retrieved April 22, 2020, from <https://www.businessnewsdaily.com/8026-choosing-a-document-management-system.html>
4. Document Imaging Systems. (n.d.). Retrieved April 22, 2020, from <https://www.360connect.com/document-imaging-systems/>
5. 4 Big Mistakes Organizations Make When Going Paperless. (n.d.). Retrieved April 22, 2020, from <https://www.laserfiche.com/ecmblog/4-big-mistakes-organizations-make-when-going-paperless/>
6. D, & LLP, S. (2011, January 7). Understanding the Privacy Rights of HIPAA & FERPA in Schools. Retrieved April 22, 2020, from <https://www.natlawreview.com/article/understanding-privacy-rights-hipaa-ferpa-schools>
7. US Department of Education (ED). (2018, January 3). Family Educational Rights and Privacy Act (FERPA). Retrieved April 22, 2020, from <https://www2.ed.gov/policy/gen/guid/fpco/ferpa/index.html>
8. Williams, E. (2020, April 14). PDFelement. Retrieved April 22, 2020, from <https://pdf.wondershare.com/business/paperless-filing-system.html>
9. Rouse, M. (2014, February 24). data retention. Retrieved April 22, 2020, from <https://searchstorage.techtarget.com/definition/data-retention>

# **Appendices**

LAN: Local Area Network

TLS: Transport Layer Security