Application of Google Drive in Academic Library: A Practical Approach

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Abstract

Application of Information and Communication Technology (ICT) in Library and Information Centre (LIC) brings significant changes in its systems and services. The LIC always tries to apply various ICT tools to make the systems and services more user-friendly. Cloud computing is the recent one in this row. This paper shows how the Google's cloud based service, i.e., Google Drive can be used in a college library. In college library, for purchasing the library books, the faculty members usually submit their requisite list of books in plain paper or in a prescribed form containing different columns for bibliographic information and number of copies required. In this process, a librarian faces different obstacles. Google Drive is one of the to solutions to overcome from this issue. This study is completely based on a practical approach followed in Pub Kamrup College Library and it is in initial stage/trial stage.

Keywords: Academic Libraries, Cloud Computing, Google Drive

1. Introduction

In an academic library, especially in a college library, for the book selection process, the faculty members play a major role. The librarian circulates a notice from time to time among the various teaching departments requesting to submit their requisite list of books; and the departments submit the same in black and white accordingly. In some libraries, a prescribed form containing different columns for bibliographic information (like title, author, publishers' name, and publication year), ISBN and number of copies required, along with the signature of the Head is used for this purpose.

In this process, the librarian faces different practical problems and some core problems are:

❖ Incomplete list

❖ Illegible hand writings

❖ Late submission of list/form

❖ Typing of the list for preparing the order copy, which is time consuming

❖ File maintenance

Besides these, in some cases, teachers include maximum number of books in the list, selecting some costly books not related to the course but to their personal research level work which seems to be a problem for budget constraints in a college library.

These problems may vary from library to library. But these are some of the common problems, the librarians face in this process. To overcome these problems, a model is being developed using Google's cloud service, i.e., Google Drive.

2. Literature Review

Leah Kulikowski (2012) in the paper 'Using Google Drive for library communication and collaboration'

explained how the Google Drive can be used in the various activities and functioning of a library. He showed the step-wise process of using Google Drive with some screen shoot. Regarding the Google Drive, the author says, "It is a program that allows you to create and store documents in the cloud for free. With an Internet connection, you can access your documents and files from any computer. Additionally, individuals can work on a shared document together in real time."

In another paper 'Cloud epoch: storage as a service', Gurpreet Singh, et al (2012) defined as, "Google Drive is a freemium cloud storage service that is integrated with the company's other services and systems including Google Docs, Gmail, Android, Chrome, YouTube, Picassa, Google Video, Google Analytics and Google+. Google Drive, which enables a seamless browser-based interface between the user's files and applications…"

In the paper 'An Empirical Study of Implications of Cloud Computing Applications in Libraries using Diffusion of Innovation Theory: Determining Factors of Adoption', Mayank Yuvaraj (2013) mentioned the various applications of cloud computing in libraries as "There are various cloud-based tools for reference service needs of the libraries such as 'cloud-based video services' (e.g., YouTube, TeacherTube), 'information collection services' (e.g., Google forms) and 'file sharing services' (e.g., Dropbox)." In another paper 'Examining librarians' behavioural intention to use cloud computing applications in Indian central universities', the same author stated, "Adoption of cloud computing will check the staff redundancies and increase the library efficiency."

3. Google Drive: A Cloud Based Service From Google

Google, basically a search engine provides different services and application tools that can be used by a user with User ID (and password) free of cost. The Google account ID can be used for different ID-Password based Google services. The popular services/applications of Google are mainly the Gmail, Orkut, Web, Scholar, Image, Picasa, etc. The cloud based service of Google, i.e., Google Drive was released on April 24, 2012.

Google Drive is a log-in based platform which enables user to step into cloud storage they allows to use file sharing and collaborative editing on web. The Google Drive is integrated with other Google services/products, which gives the provision to upload files and folders of videos, docs, spreadsheets, presentations, etc. This is a safe place for keeping the files. Regarding the security aspect, the Google itself mentions as, 'Using Google Drive is a great way to store your files safely in secure data centers, where your files won't go missing. Even if your computer, phone or tablet break, the files you store in Google Drive are safe.' Last but not the least, the Google Drive gives the memory space of 15 GB free of cost.

4. Using Google Drive In An Academic Library: A Model For Book Indent Form

Pub Kamrup College Library (PKCL) is an academic library serving the Pub Kamrup College (1972), which is affiliated to Gauhati University and approved by the UGC, situated at Baihata Chariali, the eastern part of Kamrup District of Assam.

As the book selection in indent form is being followed in Pub Kamrup College Library, the above mentioned problems or difficulties are also common

more or less. To overcome these problems, library has requested the faculty members to submit or mail the same in the library e-mail id. But in this process also, some above mentioned problems like incomplete list, submission after last date, (e) File maintenance, etc. have no solution.

Therefore, now Library has uploaded an online form which is accessible from the library website. This is an electronic indent form which has been designed using the Google's cloud based service/system, i.e., Google Drive. The step wise process for preparing the form is mentioned below.

Step 1

Open Google Homepage and click on **Drive** in the MENU bar.

The following page will appear.
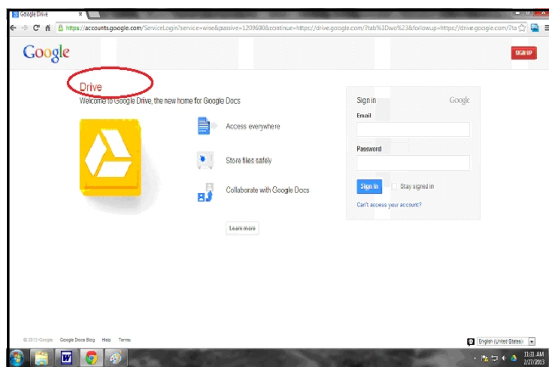
Image 1: Google Drive

To '**Sign in**' the Google Drive, the user must have a Google account. With the specific Google User ID and Password, one can use all the applications of the Google.

Step 2

After 'Sign in' with the Google Account ID and Password, the following screen will appear.
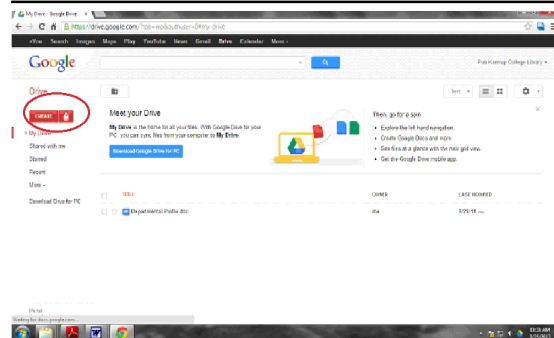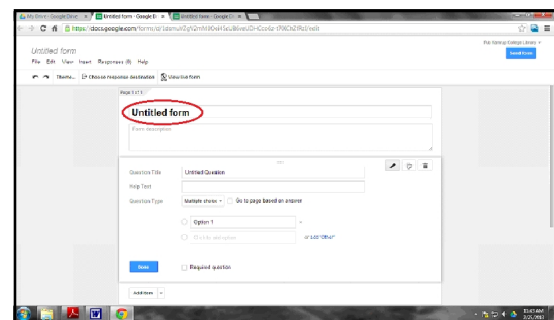

Image 2: 'Create' button in Google Drive

Here click on **'Create'** and choose one from the drop down menu where the following option will appear.
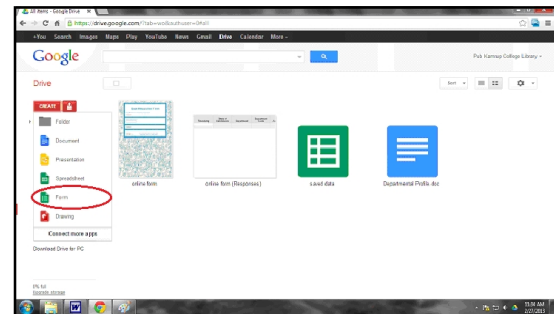
Image 3: 'Form' button in Google Drive

Step 3

Now click on "Form." The following page will appear.

Image 4: 'Form' in Google Drive

Step 4

Now design the Form according the need of the Library. Here a sample form is designed.

First name the form and in the next box give the **Form description.**

Next, Type the Question in the **Question title**; the Help Text option is there to describe the question. In this Form, one can put six types of questions like text, Multiple choice, Checkboxes, Choose from a list, scale, grid along with text and paragraph text.
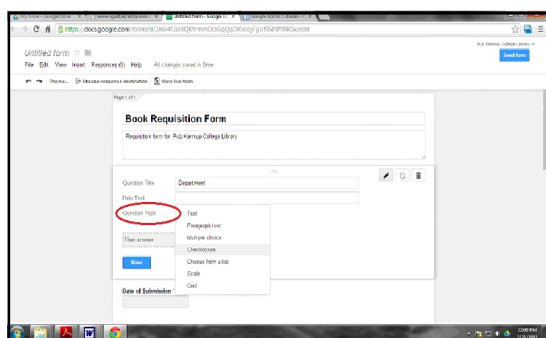

Image 5: The designed 'Form' in Google Drive

Here the sample form is designed only using the text, multiple choice, and Checkboxes options.

Step 5

A simple but very important option is here in this form, i.e., **Required question**. Click on checkbox to make a question mandatory one. In designing a Book Requisition Form, this option is very essential to overcome one of the problems mentioned above.
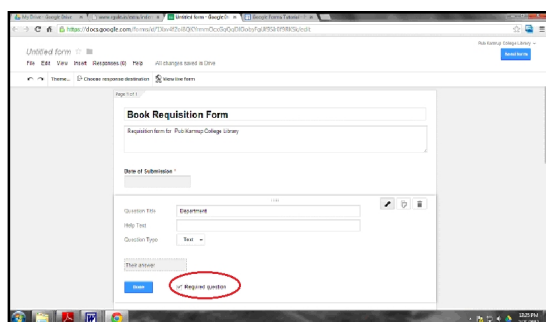
Image 6: The Required question option 'Form' in Google Drive

Thus the form can be ready for use. This form can be shared by clicking on the **Send form** button. This can be shared by sharing the link via webpage or by emails.
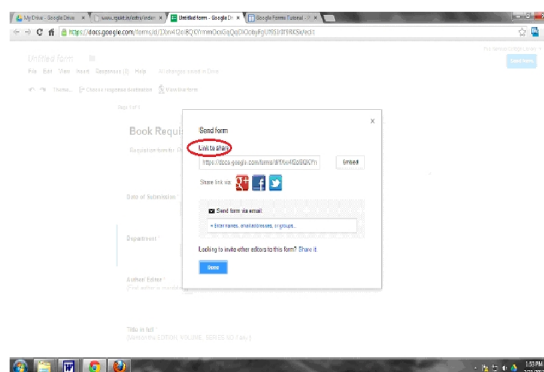

Image 7: Sharing 'Form'

As the Pub Kamrup College Library has a website, the Book Requisition Form has been published on it. For this the following steps are followed:

Step 6

For designing a Google page using Google Sites, first 'Sign in' the Google Account and then click on 'Google Sites'. There a 'Create' option is available for creating a new site. Here a screen will be appeared with a number of the pre designed templates and themes. The site description, the site name and the location should be defined here in this page. At last 'Create' option should be clicked.

Step 7

After clicking on the 'Create' option, the 'Home' page will appear automatically and in the specific content area, one can write just typing the plain text.
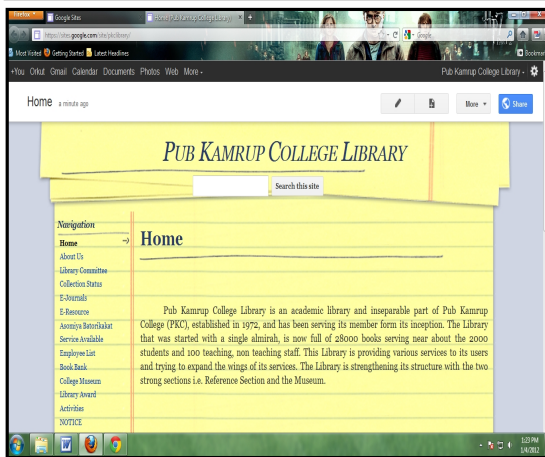
**Image 8: The Homepage with other Navigations of PKCL Website**

The above image is the Home Page of PKCL website which has been developed using Google Sites.

Step 8

There options like 'edit page', 'new page' and 'More' option are visible in the right top of each page. For editing the content of the exiting page one has to click on the 'edit page' and for developing another page, one has to click on 'new page'.

Step 9

In 'new page' option, the name and the type of page from the pre-defined types (i.e., web page, announcements, file cabinet, dashboard and list) can be selected. The location of the page, i.e., under the 'Home' page or other page or as an individual page should also be defined here. Again, click on 'Create' option and a new page will appear. In this new webpage, the Attachment and Comment option will show, which is optional.
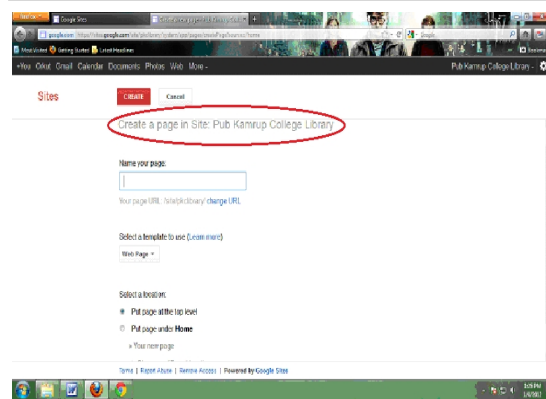
Image 9: New page creation for PKCL Website

Thus for the PKCL website, other 20 separate pages have been developed according to the need of the Library, where all information regarding the PKCL is trying to be included. For this online form a separate page is created.
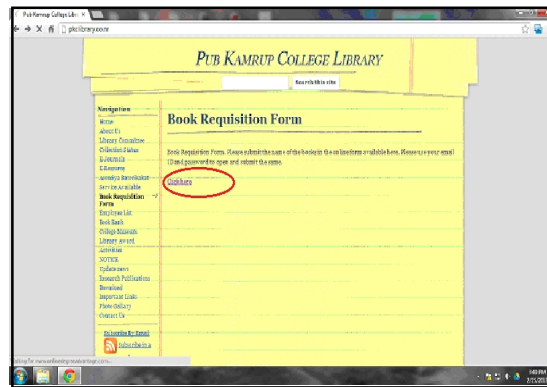
Image 10: Book Requisition Form on PKCL Website

Here the link form from Google Drive is pasted and thus the process of designing and publishing the **Online Book Requisition Form** is completed.

Image 11: Online Book Requisition Form on web

After completion of book submission process on this online form, the data will be automatically stored in a spreadsheet in Google Drive.

Step 10

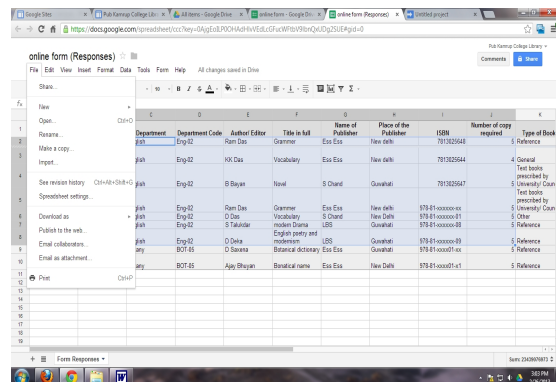Click on **View responses**, the following sheet will appear.

Image 12: Data of Book Requisition Form saved in Google Drive

Step 11

To prepare the list of book department- wise, select the required column and row from the spreadsheet, and click on File of the menu bar.

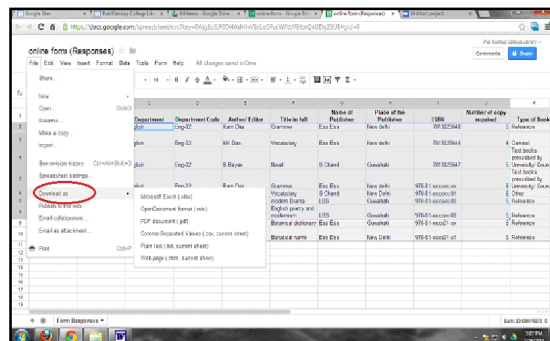**Image 13: Processing of data of Book Requisition Form saved in Google Drive**

Step 12

Click on **Download as;** it shows different option for saving the file using different format.

Image 14: Different format for saving the data of Book Requisition Form

Step 13

Click on **PDF document** to save the file as PDF file.

Image 15: PDF option for saving the data of Book Requisition Form

5. Conclusion

The step-wise process of designing and uploading an online form is shown here. The Google Drive is a combination of cloud storage and cloud computing

which can be applied in libraries in different aspects. The online book indent form is one of the areas where the Google Drive can be used. Besides using as storage media, this Drive can be used for taking user's feedback, conducting library user surveys, etc. Thus this cloud based service can help in capacity building of an academic library.

This study is completely based on a practical practice followed in Pub Kamrup College Library which it is in initial stage and in trial stage. Adoption of this type of technology at large scale may make the path barrier free in creating a digital environment in the college libraries of Assam in near future. The Google Drive is a new cloud-based service, more sophistication can be hoped in coming days as ICT grows faster every day globally.

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