

Application of Online Administration System for Practical Work(PW) in the Petroleum Engineering Department, Universitas Pembangunan Nasional “Veteran” Yogyakarta

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Abstract

Practical Work (PW) is one of the compulsory courses for students in the Petroleum Engineering Department, UPN Veteran Yogyakarta. Previously, the administrative system that was implemented used a manual system. This system has several weaknesses, including the ineffectiveness of drafting course letters, an activity reporting system, and an activity assessment. The ineffectiveness of the Practical Work (PW) administration system can also be seen from the results of the satisfaction survey of the existing administrative system. The survey results stated that 34.6% of 81 respondents stated that the administrative system implemented was less effective. This study creates an online administration system using an online form (google forms) to simplify the system for making course letters, reporting, and assessing Practical Work (PW) activities. The steps were carried out, among others, satisfaction surveys, making online forms, making online SOPs, manuals book, and socializing the application of the online administration system. The application of the online administration system went as expected without any significant obstacles. From this research, it is hoped that the administration system will be more effective and can be paperless. In the future, the system is expected to become a pioneer in the online administration system in the Petroleum Engineering Department.

Keywords: Online System, Practical Work (PW), Administration



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I. INTRODUCTION

Practical Work (PW) is an act of a student in a professional field to gain a supervised practical experience activity in the form of observing work. Practical Work (PW) is carried out with the aim of helping students to convey, use, and apply the knowledge into an integrated system for the development of the undergraduate program knowledge.

Based on the 2019 Petroleum Engineering Department curriculum, as stated in the academic guidebook, the Practical Work (PW) activity is one of the compulsory subjects in the curriculum, which is planned to be completed within one semester. However, in its implementation, many obstacles occur, both from the inefficient administration system in the Petroleum Engineering

Department to the long waiting period for the Job Training. The effectiveness of the Practical Work (PW) administration system can also be seen from the results of a survey that was conducted from 81 respondents, 34.6% of whom stated that the Practical Work (PW) administration system in the Petroleum Engineering Department was inefficient.

The Practical Work (PW) administration system implemented by far, is done offline. This means that the internet has to come to campus to fill in forms and submit them to complete the administration. This causes an unorganized accumulation of files and databases.

This research will implement an online Practical Work (PW) administration system using Google Form. The aim is to make the administration system more effective, efficient, and paperless.

II. LITERATURE REVIEW

Practical Work (PW) is an activity in the form of observing work practices in industries, companies, or laboratories that apply the theories that have been obtained. Practical Work (PW) is carried out with the aim of helping students convey, use, apply the knowledge and knowledge obtained in the field into an integrated system for the development of the undergraduate program knowledge practical Work (PW) administration system starts from constructs Practical Work (PW) Permit, activities report and assessment of Practical Work (PW) activities. All administrative steps will be made online with a google form. Google form is an innovation from Google Docs for creating questions in the form of a questionnaire or registration form for an online event or activity by using Google. Google form serves to make it easier to make and collecting data at the same time. Google forms will collect data properly in real-time. So there is no need to spend a lot of time asking the respondents one by one and print the questions on paper. Recently, technology has made it all easier. All that needs to be done is to share a link from the google form that has been created, then let the respondent fill out the questionnaire online.

It is paperless, and more important things are submitted. Questionnaire data will be guaranteed safely because Google Form data will be store in Google Drive automatically. Another advantage of Google's platform is that the data management that has been inputted can later be managed into a diagram. So that the user of the form can manage the results of the data that has been obtained very easily. How to create a google form is as follows:

1. Determine the purpose of creating a google form.
2. Fill in the title and description of the form.
3. Create a list of questions.
4. Make optional entries in the answer, whether with multiple choices, checkboxes, short answers, or descriptions.
Send a questionnaire.

Another application used in this research is bit.ly. This application customizes the long google form links into simpler words according to our wishes. The benefits of using bit.ly include:1. Easy and Short.

Long Web URLs can be shortened by using bit.ly. Many people use this URL shorten service instead of adf.ly because it is safer even though it can't generate profits like adf.ly.

2. Easy tracking of record URLs

Bit.ly provides tracking URL records and statistics. This feature will make it easier for users to track the links that have been shared in various media to obtain the extent of their development and which links are most visited by consumers.

The statistical display is quite easy to understand, complete with the site referrer link and the approximate location of the visitor. For details, the time can be selected up to a period of 30 days. The rest will only have a summary.

3. Hide the affiliate link.

This is the most and the best reason why you choose to use Bit.ly. Many bloggers and internet marketers use Bit.ly to direct their affiliate links. For example, like this, when you advertise and you share your domain with Bisniskulinerku.id, for example, the tendency for consumers to not be more interested, compared to the domain that has been shortening before, will make you curious.

III. RESEARCH METHODOLOGY

The steps taken in this study include:

1. Coordinate meetings between Department Managers. This meeting is to discuss the shortcomings of practical work administration systems and changes to the administrative system that will be carried out.
2. Conduct a survey about the satisfaction of the existing administrative system. This Survey is to see the responses from students, examiners, and administrative staff about the running administrative system.
3. Construct online forms for the Practical Work (PW) administration. Administration of Practical Work (PW) activities can be divided into three, namely travel documents, Practical Work (PW) activity report, and assessment.
4. Construct SOP for the online Practical Work (PW) administration system. This step is to legalize the online administration system that will be run.
5. Construct Practical Work (PW) Handbook with an online system.
6. Socialize Practical Work (PW) online administration system.

IV. FINDING AND DISCUSSION

IV.1. Coordinate Meetings Between Department Managers

This meeting discussed the online system that will be prepared and used. Consideration in this system is the ease of use, especially for the faculty staff. Therefore it was decided that the online system would use the Google Forms application.

IV.2. Conduct Survey about Satisfaction of the Existing Administrative System

The Survey was conducted online using Google Form. Respondents for this Survey were all civitas in the Petroleum Engineering Department, which are:

1. A student who will or already did the Practical Work (PW) within the occurring semester. There were 81 students who participated in the Survey in order to have an understanding of reality amongst the student.
2. Practical Work (PW) Examination Committee. Respondents are lecturers who have been involved in Practical Work (PW) activities, lecturers who already understand the administrative flow of Practical Work (PW) assessment. There were nine lecturers as responders.

3. Faculty Staff who administrate the Practical Work (PW). There were two faculty staffs participating in this Survey.

The survey link is made separately between lecturers and students, namely <http://bit.ly/surveyDsn1> for Practical Work (PW) Examination Committee and <http://bit.ly/surveyMhs1> for students. No forms are used to gain information from the faculty staff. Instead, direct interviews were conducted. The Survey of satisfaction is shown in table 1. Where score one as the least effective and five as the most effective.

Table 1. Result of Satisfaction Survey Against the Existing Administration

No	Respondent	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)
1	Lecturer	25	50	25	0	0
2	Student	34.6	29.6	24.7	4.9	6.2

IV.3. Construct Online Forms for Practical Work (PW) Administration

The link that created for this online administration system consists of 3 (three) links, namely:

1. Practical Work (PW) Permit <http://bit.ly/SrtJalanKP>.
This link will be filled in by the student after gets approval of the Practical Work (PW) activity proposal from the Practical Work (PW) Coordinator. The data that must be filled in this form are Full Name, Student ID Number, Handphone Number, Place of Birth, Date of Birth, Adress, Number of credits that have been taken, date of submission of Practical Work (PW) activities, Company Name, Company Adress, and Aspects that are reviewed. In addition, students are also required to upload proposals that have been approved by the Practical Work (PW) Coordinator. After filling in the link, students will receive a Practical Work (PW) permit from the campus that will be will be sent to the Company where the Practical Work (PW) is held, together with a proposal that has been approved by the Practical Work (PW) coordinator.
2. Link for the presentation requirements form <http://bit.ly/SyaratPresentasiKP>
This link will be filled in by students after they complete Practical Work (PW) activities at the Company. The data that must be filled in this form are Full Name, Student ID Number, Practical Work (PW) Input Semester, Title of Practical Work (PW) Report, Company Name, Company Address, Date of Implementation, Field Supervisor Name, Certificate of KLGK, KLMP and Practical Work (PW) itself, Final Reports and Slides, and also Students Arrange a Schedule to make a presentation on Practical Work (PW) activities. Entries from the field supervisor are used to create a database that aims to be able to provide company link information and practical job advisors.
3. Link for assessment form <https://bit.ly/PenilaianKPTM>
This form is filled by the Practical Work (PW) Examination Committee. Entries in this form are using by the Practical Work (PW) Coordinator to provide Practical Work (PW) activity values to students. The data that must be filled in this form are Practical Work (PW) Examination Committee, full Student name, Student ID, and final score.

IV.4. Construct SOP for online Practical Work (PW) administration system

This SOP describes the steps that students must do, from the start of creating Practical Work (PW) proposal to assessment. SOP for online Practical Work (PW) administration is shown in Figure 1.

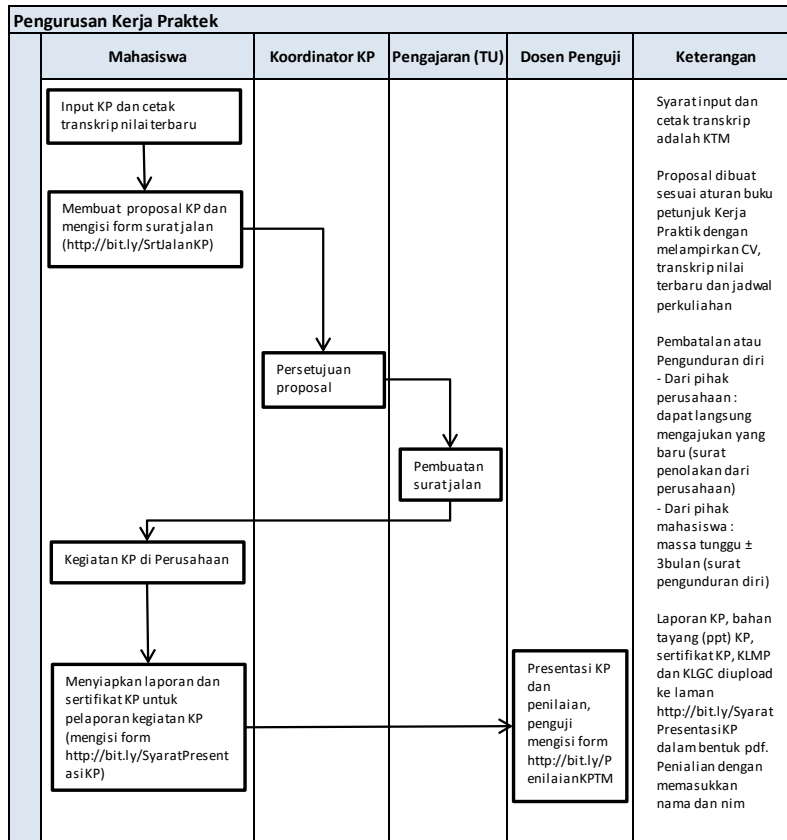


Figure 1. Workflow for Practical Work (PW) Administration in petroleum Engineering Departement

IV.4. Construct Practical Work (PW) Handbook with an online system.

Practical Work (PW) Handbook contains the definition of Practical Work (PW), purposes and objectives, requirements to have a Practical Work (PW) course, SOP for the administration of Practical Work (PW) activities, proposal writing guide, Practical Work (PW) activity report, and assessment. This handbook was made in hard and soft copy. This handbook was distributed to the Practical Work (PW) Examination Committee and students who will take the online Practical Work (PW) course.

IV.5. Socialize Practical Work (PW) online administration system.

Poster Creating

In order to facilitate the Practical Work (PW) SOP, an SOP Poster was made. It is hoped that this SOP poster will make it easier for students to find information about administration steps. The poster is shown in **Figure 2** below.

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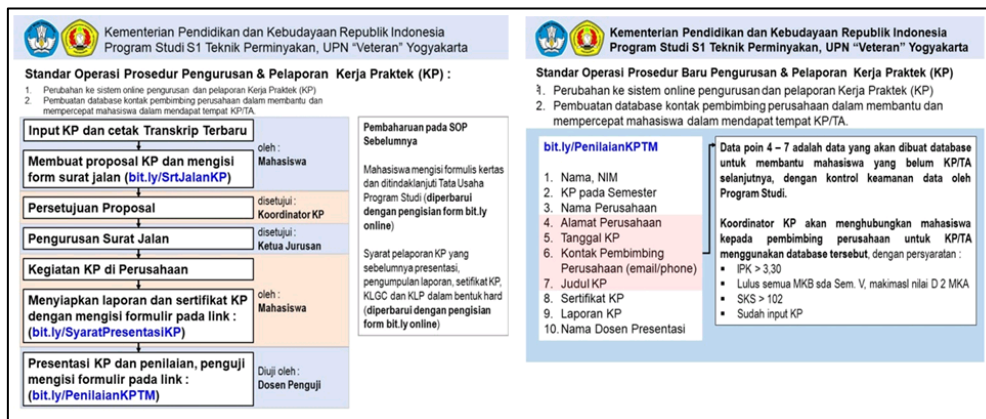


Figure 2. Standard Operating Procedure Poster

Socialization was conducted online using online posters, which will be distributed through the WhatsApp group (for students), meet the application for the Practical Work (PW) Examination Committee, and direct meetings for faculty staff. This online administration system will be implemented in October 2020. In addition to socialization using a poster, a guidebook that has been approved by the department committee is also distributed via online application (WhatsApp).

V. CONCLUSION AND FURTHER RESEARCH

In general, steps in implementing this online administration system have no significant obstacles. The enthusiasm of students, Practical Work (PW) Examination Committee, and faculty staff seemed cooperative during the socialization. They are gladly accepted and want to implement this online administration system. This online administration system is paperless, and the collected documents can be created as a database for accreditation and other purposes. In the future, the system is expected to become a pioneer in the online administration system in the Petroleum Engineering Department.

VI. REFERENCES

- Universitas Pembangunan Nasional "Veteran" Yogyakarta. 2015. Rencana Strategis UPN "Veteran" Yogyakarta 2015-2019. Yogyakarta: UPNVYK.
- Fakultas Teknologi Mineral UPN "Veteran" Yogyakarta. 2017. Borang Akreditasi Fakultas Teknologi Mineral UPN "Veteran" Yogyakarta. Yogyakarta: UPNVYK.
- Peraturan Rektor UPN "Veteran" Yogyakarta no. 2/UN62/III/2016 Tentang Pokok Peraturan Akademik UPN "Veteran" Yogyakarta
- Jurusan Teknik Perminyakan. 2019. Kurikulum Jurusan Teknik Perminyakan UPN "Veteran" Yogyakarta 2019.
- Jurusan Teknik Perminyakan. 2019. Buku Panduan Mahasiswa tahun 2019.
- Jurusan Teknik Perminyakan. 2018. Buku Panduan Kerja Praktek tahun 2018.