

Proposal of Activities of the SAME Program at University of La Rochelle France

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Abstract

This is the proposal of my academic mobility and exchange activities (SAME) at University of La Rochelle, that will be conducted in September to November 2018. This proposal showed the designed targets and their planned implementation results relating to the targets. Analysis and evaluation of the program has been conducted to perceive the relationship between targets and implementation. The results are presented on the tables and figures. At the end of this paper, an overall performance of the SAME program is presented.

1 Introduction

The SAME program is created by Indonesia government to promote the development of high quality lecturers in Indonesia's higher education system and to better form lasting partnerships between partner universities and Indonesian higher education institutions. The program is technically maintained and run by Directorate Of Career And Competency Of Human Resources, Directorate General Of Resources Of Science, Technology And Higher Education, Ministry Of Research, Technology And Higher Education.

The SAME program is designed to encourage foreign exchange for permanent lecturers, who have a doctorate degree, of state and private universities in Indonesia. This program aims to give lecturers the chance to travel abroad, to feel the academic atmosphere in the partner university and to discuss collaboration in education and research with the partner university. Those activities will become a useful experience for improving the quality of the institution.

2 Designed of Tasks, Outputs and Outcomes (Targets)

The tasks, outputs and outcomes of the SAME program has been described completely in the proposal [?]. All are summarized as follows:

Tasks

1. to discuss research topics in the area of ancient manuscripts digitization and indexation,
2. to develop collaborative research between the Universitas Padjadjaran and the L3i University of La Rochelle France,
3. to discuss possibilities of joint publications on ancient manuscripts digitization and indexation, especially for Sundanese Ancient manuscript
4. to discuss possibilities for academic exchange and mobility of lecturers and graduate students of the Faculty of Mathematics and Natural Sciences, Universitas Padjadjaran, Indonesia, and the University of La Rochelle,

5. to undertake a comparative study on undergraduate and graduate programs at the University of La Rochelle and the Universitas Padjadjaran.

Outputs

1. Draft of joint publication published in reputed journal
2. Draft of paper and/or book chapter
3. Draft of teaching and learning material
4. Activity report/overview report, experiences, including curriculum design and exchange and mobility scheme

Outcomes

1. Research quality improvement
2. Publication quality improvement
3. Teaching/learning quality improvement
4. Cooperation quality improvement

3 Research Topic

In many countries in South Asia and Southeast Asia, palm leaves have been used as writing materials dating back in the 5th century BCE, and possibly much earlier. Initially knowledge was passed down orally, but after the diffusion of Indian (Pallava) scripts throughout Asia, people eventually began to write it down in dried and smoke treated palm leaves of Palmyra palm (Lontar). These palm leaves have been used to record actual and mythical narratives but also the knowledge in medicine, history, science, literature, and so on. Some of them also contains drawings in black or white or even in colors. With the spreading of Indian culture to Southeast Asia countries such as Indonesia, Cambodia, Thailand, and Philippines, these nations became home to collections of documents in palm leaf.

Nowadays in Southeast Asia, some program to collect, preserve, and digitize documents are underway, but only few have been completed especially in Indonesia. The main objective of these efforts is to preserve cultural heritage, because the manuscripts are written on fragile materials such as: Lontar (palm leaves), or paper, bound in accordion like books. These manuscripts are scanned empirically, sometimes with poor resolution, inadequate light, etc. It done by different stakeholders in diverse institutions (public or private). Moreover, the storage of the files is not always safe, lacking backup/mirror storage.

Beside the objective of preserving the data from the injuries of time (dirt, moisture, insects) and accidents (fire, floods), this research aim at facilitating the access to the data for researchers. Most of the scanned images are in really not accessible to the public, and sometimes not accessible to researchers from other institutions, even in the same country. However remarkable reports in providing open access to the data, along with a precise bibliometric indexing have been made in Cambodia . This excellent example of open-handed data and scientific accuracy is, unfortunately, still unique in Southeast Asia for Indian-origin scripts. Nevertheless, to data only bibliometric indexing have been offered beside the image file: identification of the manuscript origin, title, date, topic, etc., but no indexing of the content is available. Therefore in-text research by keywords is still impossible. As far as we know some work has been done to enhance the quality of the images of palm leaf manuscripts but no research to analyze and to index automatically the content of these ancient documents has been done. People such as historian or philologist wanting to study these ancient documents have to read them one by one to find the needed information, and most importantly, people have to go, most of the time, physically to the place where the documents are.

Indonesia as one of the Southeast Asia country has many ancient manuscripts that written in different traditional language such as Sundanese, Javanese, Balinese, and etc. Especially in Bandung, the ancient manuscripts were written in Sundanese. These documents diverse in many place such as Sumedang Museum, Ciburuy Garut, University, even its keep private by personal. Many of the documents are in damage condition due to traditional

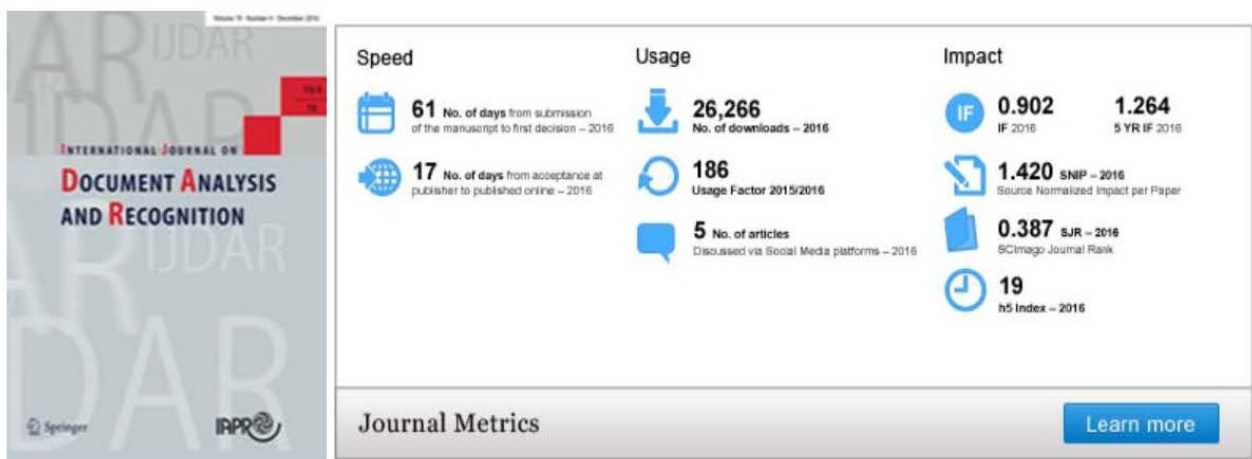
event or lack of maintenance. If the documents not preserve as fast as we can, the knowledge will be lost and also the Sundanese tradition will be lost too.

In this research collaboration, Universitas Padjadjaran that came from Robotic, Artificial Intelligence, and Digital Image (RAID) Laboratory, Informatics Engineering and Center for Sundanese Culture Studies collaborate with Laboratoire Informatique, Image, Interaction (L3i) and CRHIA Lab, La Rochelle University, France. We cooperate with Prof. Jean-Cristophe Burie to develop tools to digitize and index the Sundanese ancient manuscript. So, the documents can be analyzed, indexed, and accessed quickly and efficiently by many people.

4 Publication

The publication of this research topic will be submitted to the journal shown below:

- Paper title (draft): From Digitalization to Indexation of Sundanese Ancient Manuscripts: An Effort to Preserve Indonesian Historical Properties using Modern Technology
- Name : Internation Journal of Document Analysis and Reognition
- Publisher : Springer
- ISBN : 1433-2833 (print version) 1433-2825 (electronic version)



5 Schedule

