Draft Utilization Google Calendar, for Management Agenda and Invitation to Event Administration in Universitas Ahmad Dahlan to support Paperless Office.

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Abstract. Office activities in a university which includes administrative and learning will inevitably use paper, but most can be replaced with an alternative medium of paper. Continuous paper usage will lead to various effects, especially the more depleted the supply of wood used as raw material for paper making. If the paper needs to increase the cutting of trees will increase as well. With the increasing number of felled trees (especially not offset by replanting) will cause the supply of oxygen in the Earth is getting thinner. More than that other effects would arise, for example, global warming, floods, landslides, etc.. Paperless office program is the best way to overcome the above. Universitas Ahmad Dahlan already has an idea to achieve it. Therefore it is necessary to prove the real action so that it comes to pass. One of the activities that involve the use of paper is a lot of activity in the office of the management agenda (scheduling) and invitations. One effort that can be done is to use technology Google Calendar (GCal). Gcal is able to be used for replacement feature in terms of paper and invitation management agenda with many advantages over paper. This paper will discuss the design of the use GCal to reduce paper usage, especially in the agenda and invitation management activities in Universitas Ahmad Dahlan.

Keywords: google calendar, agenda, scheduling, invitations, paperless office.

1 Introduction

Based on the observations made, that the use of paper in the University Ahmad Dahlan is still quite high [1]. Efforts for the reduction of paper usage can be done in various ways, one of them with the use of social media has used the familiar community [2]. But until now it was noted that the use of paper still remains still high, this is due to several factors inhibiting. Inhibiting factors, among others, the lack of policy leadership to set the paper savings, the lack of policy to go to a paperless office, and a lack of awareness of the academic community in the use of Information Technology Universitas Ahmad Dahlan and communication for heading towards a paperless office.

Continuous paper usage will lead to various effects, especially the more depleted the supply of wood used as raw material for paper making. Wood obtained from forest felling of trees in both legal and illegal. If the paper needs to increase the cutting of trees will increase as well. With the increasing number of felled trees (especially not offset by replanting) will result in the supply of oxygen in the Earth is getting thinner. More than that other effects would arise, for example, global warming, floods, landslides, etc.

Academic and administrative activities in Universitas Ahmad Dahlan pretty much involving faculty, staff, students and stakeholders. The use of most existing papers on office administration activities both in the university level and at the level of faculty to study programs and other work units. There are 10 faculty, one graduate, 10 work units that have multiple offices.

Concrete steps have been done Universitas Ahmad Dahlan is the cooperation with Google Apps for Education (GAFE) to be deployed in the campus. Various features of GAFE can be utilized to support the academic and administrative activities aimed at saving office paper use. In order to achieve the purpose of the use of paper savings it needs a thorough application of the mechanism is designed so that it runs smoothly.

The implementation of the paperless office will be more focused and success can be ensured if carefully designed and structured. The first step that needs to be done is to identify the problems and also analyze it so as to get a clear picture to the next step. Following is a summary analysis of the initial conditions as a foundation for the implementation of GAFE use in an office environment Universitas Ahmad Dahlan in terms of some aspects, among others, technological readiness, readiness of human resources, and regulatory readiness .

Implementation of a paperless office takes a pretty high tech. Related technologies which include hardware and software. Hardware technologies include server and client needs. Server and client software needs to support the sustainability of the program .

Currently the hardware requirements at the University of Ahmad Dahlan has become a major requirement because most activities related to learning and the office has been utilizing information and communication technologies. In other words, spending on information and communication technology has become routine costs. To be able to connect a client to another client requires a server that is now fulfilled from the routine expenditure. This includes operational and maintenance costs.

The software required to support this activity include facilities such as e-mail correspondence, document management, agenda management, media sharing together, etc.. Prior to working with the GAFE, Universitas Ahmad Dahlan has implemented a management system based Zimbra email. This email management system facilities management supports the agenda and documents but still felt some shortcomings, among others, the availability of storage space that is owned is still lacking which can only provide 100mb per account. Accounts managed include the entire academic community Universitas Ahmad Dahlan of employees, faculty, and students, as well as an account of work units. Based on the number of

community members who served the entire account reached 20,000 and will increase with increasing community especially new students each year some 4000 people. If the calculated capacity provided by $20,000 \times 100 = 2,000,000$ mb mb, equivalent to 2 terabytes. The capacity for an email account with 100mb per account. Paperless is needed to support larger storage again, given the need to store documents in digital form .

Since the implementation of the cooperation with the GAFE largely transferred to the account management GAFE. This cooperation in the form of support for the application for the entire academic community GAFE Universitas Ahmad Dahlan. GAFE equivalent facility provided by GA for the Enterprise with a large enough capacity sotrage, 30GB per account. With the transfer of the management of this email account then Universitas Ahmad Dahlan can do a tremendous savings. The first lies in the provision of savings and server maintenance, Universitas Ahmad Dahlan is no need to do so (especially for account management GAFE). Maintenance application systems, as it directly managed by Google, and features a complete application has to support the paperless office. Universitas Ahmad Dahlan so no need to build new applications to implement it.

GAFE features that can support the paperless office is the application Calendar (Gcal) and Google Drive (GDrive). Google Calendar can be fully utilized to replace paper-based invitation so that they can save thousands of sheets of paper each year. In addition, Gcal also can be fully utilized for the management of agendas, both personal agenda or the agenda of community work unit. Gcal also fully supports collaborative agenda, in which each community can share with others so that agenda intersection schedule can be seen and strongly supports the determination of the timing. For example, meeting time, pendadaran exams, teaching schedules, and more. GDrive strongly support a digital document, a letter of invitation that has been typed using a word processor (eg MS Word) then can be saved as a document if needed at any time, or documents from scan results can also be saved. In addition GDrive can also be used to save the file to any format. With a capacity of 30GB per account was enough to save office documents and academic papers thus saving the existence of which has been used as a document. Overview of the technology already said Universitas Ahmad Dahlan ready to implement a paperless office.

The ability of employees and faculty in the use of ICT has not been evenly distributed, meaning that not all employees and faculty can use technology smoothly. Though the operation capability of this software (particularly pengggunaan GA-based email) is a major requirement to support the implementation of a paperless program. Therefore Universitas Ahmad Dahlan has made every effort in order technology is quite good and can be used for resource savings in the Universitas Ahmad Dahlan. A few weeks after the implementation of such cooperation, Universitas Ahmad Dahlan had socialized and mentoring GAFE use for faculty and staff of 10 faculty in Universitas Ahmad Dahlan. The response from faculty and staff at the 10 faculties quite high, considering the

number of participants in each faculty average above 70 percent, the majority who did not participate because it was used with similar applications and there is activity which can not be abandoned. With the amount of capital and habituation of the community participants to use the email management software then it can support for the implementation of the paperless office.

Universitas Ahmad Dahlan has launched a program to a paperless office since 2010 ago, and has yet to clear its implementation. it is associated with a lack of formal rules in the implementation of the paperless office clearly. So that the implementation is still partial in some units depending on the wishes of the individual in the particular work unit.

2 Methodology

Methodology that will be used in this activity include several things, in the hope of reaching the right target and can support the paperless office. The stages to be carried out, among others.

2.1 Identification of Initial Conditions

At this stage is necessary to identify the various issues related to the implementation of activities. Initial conditions that interest to be identified include: the availability of infrastructures, the availability and capability of human resources, the availability of regulation, as well as some other things related.

2.2 Initial Measurement

Ideal conditions are expected across the board reduction of paper, so that the efficiency estimates can be made. Initial measurement of this activity involves a few things that can be implemented and measured its success story could run the final goal to be achieved. Some of the factors that will be measured, among others, the level of consumption / production of paper per unit of measurement period, the ability of the staff in the operation of GCal, and other matters related.

2.3 The use of mentoring Gcal in each unit

Corresponding exposure in the introduction section that is Obtained assuming that the usage is not evenly GAFE although its use had been made of socialization. To be more purposeful goal Attainment will require intensive assistance and mentoring methods are right on target. This stage is the initial stage for Increased awareness Participate in saving paper usage by finding a way better alternative is to use GCal.

2.4 Implementation-Based Management Agenda and Invitation GCal

In order to achieve savings of paper, it can be immediately implemented based management agenda and invitation Gcal in unit as well as a pilot and the next measurement. Implementation of the Gcal will be done by several methods including by way of a competition and some of the other activities that can it's motivate. To obtain a significant improvement will require long time for implementation.

2.5 Final Measurement

Final measurement is done by considering the factors measurements performed in the first measurement so that result can be monitored the progress of improvement.

2.6 Evaluation

After the final measurement it is necessary to analyze the success rate thus obtained can be evaluated towards the improvement of the system. One way to evaluate this is by comparing the final and initial measurements carried out an analysis of the existing gap.

2.7 Recomendation

After the success rate can be measured and the results obtained, it can be submitted several recommendations for the implementation of a similar program in the next year.

3 Objectives and Expected Results

The end result of this activity is the realization of efficient use of paper so that it can save the budget each year. Given the efficiency savings that can be obtained diverted to improving the welfare of employees.

4 References

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