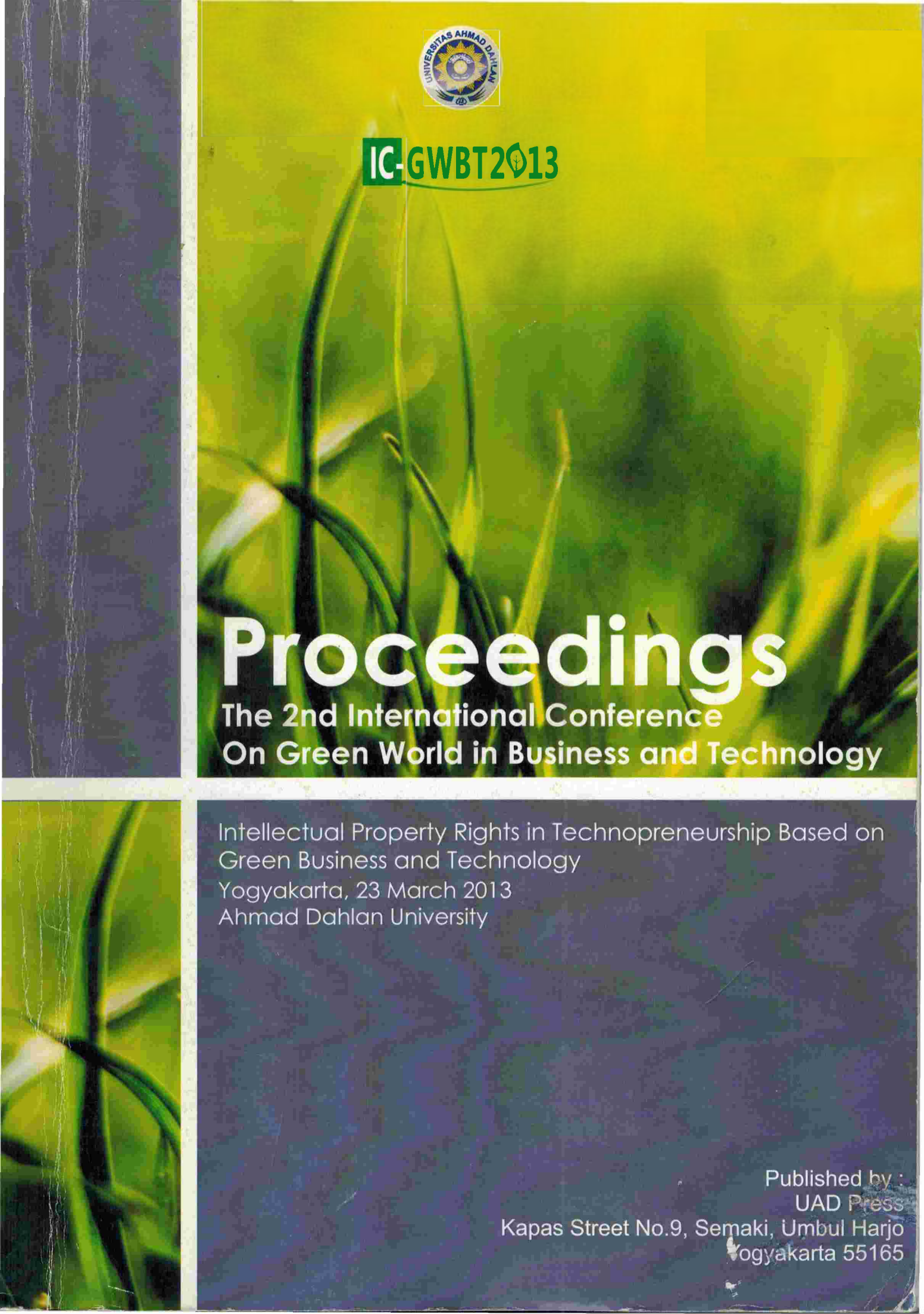

IC-GWBT2013

Proceedings

The 2nd International Conference On Green World in Business and Technology

Intellectual Property Rights in Technopreneurship Based on Green Business and Technology

Yogyakarta, 23 March 2013

Ahmad Dahlan University

Published by :
UAD Press
Kapas Street No.9, Semaki, Umbul Harjo
Yogyakarta 55165

PROCEEDING OF
THE 2nd INTERNATIONAL CONFERENCE ON GREEN WORLD IN BUSINESS AND TECHNOLOGY

"Intellectual Property Rights in Technopreneurship based on Green Bussiness and Technology"

Author and Speaker

Prof. Dr. Margareth Gfrerer, et. al.

Reviewer

Prof. Dr. Margareth Gfrerer

Prof. Mustafa bin Mat Deris

Prof. Achmad Mursyidi, M.Sc, Apt.

Dr.rer.nat. Endang Darmawan, Apt.

Dr. Abdul Fadlil, MT.

Editor

Ali Tarmuji, M.Cs.

Herman Yuliansyah, M.Eng.

Edwin Daru Anggara, S.Farm.

Publisher

UADPress

Jln. Kapas No. 9 Semaki, Yogyakarta 55166

Tel. 0274-563515, Fax. 0274-564604

Honorary Chairman

Rector of Ahmad Dahlan University

Dean of Faculty of Industrial Technology

Chief of Center of Intellectual Property Rights

Streering Committe

Prof. Dr. Achmad Mursyidi, M.Sc., Apt., Prof. Aris Ananta, M.Sc., Ph.D., Prof. Mustofa bin Mat Deris, Prof. Drs. Sarbiran, M.Ed., Ph.D., Dr. Abdul Fadlil , M.T., Dr. Ir. Dwi Sulisworo, M.T., Dr.rar.net Endang Darmawan, Dr. Widodo, M.Si, Dra. Endang Semiarti, M.S., M.Sc., D.Sc

Organizing Committee

Dr. Hj. Dwi Suhartanti, M.Si.(Chairman)

Ulaya Ahdiani, S.S., M.Hum. (Vice Chairman)

Norma Sari, S.H., M.Hum., M.Pd., Herman Yuliansyah, M.Eng., Ali Tarmuji, S.T., M.Cs., Utik Bidayati, S.E., M.Si., Heri Setiawan, S.Si., M.Si., drh. Asep Rustiawan, MS., Kartika Firdausy, S.T., M.T., Endah Sulistiawati, S.T, M.T., Edwin Daru Anggara., S.Farm., Fradika Indrawan, S.T., Sang Atmaja Edy Kusuma, S.Pd.I., Nailil Huda, S.IP., Wahyudin, S.Pd., Faza Lutfian, A.Md, Nadia Husna, Mei Lestari, Jamil Annashri

Table of Contents

Plenary Speaker

Reduce –Reuse –Refuse: The Way to Sustainable Innovation
Margareth Gfrerer 1

Biotechnology of Indonesian Natural Orchids
Endang Semiarti 16

Education

The Effectiveness Of Mathematics Learning With Quiz Seen From The Point Of View Of Learning Time In The Achievement Of Student Study Performance Grade Viii Semester Of Ii Smp Negeri 2 Kasihan Regency Of Bantul Year 2009/2010
Abdul Taram, Mariyani A-1

Implementation Of Waste Pins Interactions To Improve Students Tk Pkk 27 Jambean Bantul Training Approach Behavior And Healthy In Academic Year 2012/2013
Febritesna Nuraini A-11

Health

Antibacterial Activity Of Soyghurt With Sugar Corn Addition Againts Bacterium Of Aeromonas hydrophila
Ameilia Indi Nur Ramadhani, Dwi Suhartanti B-1

The Association Between Desirable Diatery Pettern Score Of Family's Consumption With Nutritional Status Of Children Under Five Years In Shelter Gondang 1 Sleman, Yogyakarta
Asep Rustiawan, Widodo Hariyono, Sunarti, Abdul Rohim Mansur B-15

Review: Curcumin Activities on Prostate Cancer
Edwin Daru Anggara, Wima Anggitasari B-21

Breastfeeding, Demographic Transition, And Employment (A Review)
Lina Handayani, Azlina Md. Kosnin, Yeo Kee Jiar, Solikhah B-28

Geographic Information System for Climate Change Impact Assessment
Sulistyawati B-34

Effects of the Addition of Vitamin C to Fe and Vitamin A Supplementations on the elevation of Feritin Level of Malnourished Infants Aged 2-5 years
Sunarti B-40

Isolation And Identification Of Bacteria In Lindi Derived Fromcompost And Garbage As Inisiation Of Processing And Developmentfertilizer Product And Composting Bio-Starter
Surahma Asti Mulasari B-49

Resistance Status Of Aedes Aegypti L.Dengue Vector Towards Malathion, Sipermetrin, A-Sipermetrin And Temefos Effectivness In District Of Mertoyudan, Regency Of Magelang
Tri Wahyuni Sukes B-57

The Implementation of Save Green Programs to Realize A Green Hospital at PKU Muhammadiyah Gamping Hospital Yogyakarta
Triyani Marwati, Edwin Daru Anggara, Asep Rustiawan B-64

Science

The Gastropods Diversity in Intertidal Zone at Sundak Beach District Gunungkidul
Agung Budiantoro, Andri Firmansyah Persada C-1

The Influence Of LongIncubation To pH Of Durian (Durio zibethinus, Murr.)Seeds Yogurt (Yobidur)
Anna Atiqa Priyadi, Dwi Suhartanti C-8

Organoleptic test yoghurt-based seed Durio zibethinus (Yobidur)
Aprilia Pangestika, Dwi Suhartanti C-15

Propagation Metarhizium Anisopliae In Rice Bran Media, Waste Tofu Flour Media, Rice Husk Flour Media
Dwi Suhartanti, Tri Puryani C-23

The Availability of Soil Nitrate Concentrationaround Kawah Sikidang, Dieng Plateau, Central Java
Hendro Kusumo Eko Prasetyo Moro C-29

Production and Kinetic Study of Oleic Acid Ethyl Ester Synthesis Using Lipase From Germinated Jatropha Seeds (Jatropha curcas.L)
Indro Prastowo, Chusnul Hidayat Pudji Hastuti C-37

Consumer Acceptance of Innovative Waterproof Pineapple Fiber Papers
Jarinya Wuttitien, Kawee Srikulkij C-47

Yogurt Of Tempe Extract Aroma "Ringo (Strawberry and Mango)" on Incubation Temperature 42°C
Leni Apriliana Sari, Dwi Suhartanti C-55

Fermentation of Crabs (Paratelphusa) As Material Energy Oil Produced from Waste Coconut Membrane
Nellis Eka Risnita C-60

Insecticidal Activity Of Celery (Apium Graveolens, L) Root Against Aedes Aegypti's Larvae
Novi Febrianti, Yuliyandra C-68

Organoleptic Test of Tempe Extract Yogurt with "RINGO (Strawberry and Mango)" Flavor
Parni Astuti, Dwi Suhartanti C-72

Antibacterial Activity Ethanol Extract Of Euphorbia Pulcherrima Wild Flower's Against Escherichia Coli And Staphylococcus Aureus With Thin Layer Chromatography Profile
Trianik Widyaningrum C-78

The pH Changes Of The Kimchi Fermentation And The Organoleptic Of The Kimchi Fermentation
Tuti Eka Wahyuni, Dwi Suhartanti C-93

The Effect Of pH On The Acidity Tempe Extract Yogurt Aroma "RINGO (Strawberry And Mango)"
Winda Purnama Sari, Dwi Suhartanti C-106

Temperature change of the Kimchi Fermentation
Yulisna Hawarya, Dwi Suhartanti C-112

Social, Humaniora

The Psychology of Green and Islam
Ahmad M Diponegoro D-1

Analysis of Fundamental Factors on Stock Returns and Their Implication on LQ 45 Stock Investment at Indonesia Stock Exchange
Yayat Supriyatna D-8

Technology

Development of High Resolution Planting Calendar Map to Increase of Rice Productivity in Indramayu
Armi Susandi, Erizal Djamal, Irsal Las, Mamad Tamamadin,

Elza Surmaini E-1

Short Animation Film Making "Tremendous Of Charity" Based On Multimedia Utilizing The Tecnique Of 2d Hybrid Animation With The Use Of Graphic
Chabib Syafrudin, Wahyu Pujiyono.....E-8

Modelling Enterprise Architecture Shool of Postgraduates Indonesia university of Education Using Methodology of Zachman Framework
Eka Surachman, Saripudin E-22

Design Of Decision Support System Of Supplier Evaluation For Determining Cooperation Using Profile Matching Method
Elfitri Dwi Rahardianti E-39

Utilization Braking System in Electric Vehicle Chassis to Recharge the Battery
Iwan Tutuka Pambudi, Ajib Rosadi, Andreas Edi Widyartono,
Elroy Fransiskus Tarigan E-52

Students' Data Mining Of Muhammadiyah Elementary School (Sd) Of Tegallayang Using Association Rule Mining To Know Data Realationship Of Gender, Elementary School Age, Pre-School Education And Perental Occupation With Grade Of Students' Graduation.
Lisna Zahrotun E-61

Right On Plant Variety Protection As An Instrument Toward National Food Security
Moch Najib Imanullah E-70

Designing Case-Based Reasoning For Disease Diagnosis On Livestock
Murien Nugraheni E-79

Characterization of Kapok Seed Oil as Feedstock to Produce an Alternative Energy of Green Diesel
Siti Salamah, Martomo Setyawan E-89

A Vibration Belt As Directional Tool For The Blind
Son Ali Akbar, Anton Yudhana E-96

Media Consultation To Diagnose Diseases On Fruits Of Phost-Harvest Using Expert System
Sri Winiarti, Reni Wijayanti..... E-102

Phosphor Recycling from Sewage Sludge Ash for Sustainable Agricultural Production
Suhendra, Christian Adam, Christian Vogel, Oliver Krueger, Karola Tetzlaff E-111

Optimization of the Use of Social Media to Support the Paperless Office
Ali Tarmuji E-121

MCLA : Categorical Data Clustering Based On Maximum Cardinality Lower Approximation
Iwan Tri Riyadi Yanto, Aris Thobirin..... E-129

Performance Index Assessment Software Lecturer (IKD) As The Basis For Academic Peer Review (APR) (Case studies at the Faculty of Industrial Technology UAD)
Fiftin Noviyanto, Murinto, Tedy Setiadi..... E-144

Proceeding of The 2nd International Conference on Green World in Bussiness and Technology.

Copyright© 2013 and published by Ahmad Dahlan University. Printed by Center of Intellectual Property Rights and Faculty of Industrial Technology in Ahmad Dahlan University. All rights reverse. No Part of this book may be reproduced in any form, or may it be stored in a retrival system or transmitter in any form, without written permission from the publisher.

ISBN 978-979-3812-32-8

Optimization of the Use of Social Media to Support the Paperless Office

Ali Tarmuji[1]

[1]Informatic Engineering Departement, Industrial Technology Faculty, Ahmad Dahlan University
alitarmuji@uad.ac.id

Abstract. The use of paper in the Office, especially in University Ahmad Dahlan (UAD) still dominates the resource requirements should be held each period features. The use of paper will result in long-term effect to global warming. Therefore the effort toward a paperless is one solution to reducing the use of paper and reach the Green Earth (go green). The optimization step effort to go paperless needs to be done, including in the UAD may be done in various ways, one of them with the use of social media applications optimization in academic activities. The results of an analysis give an idea that almost all academic activity that involves the use of paper can be replaced with the utilization of social media applications that are most widely used in the community are concerned, in this paper are a group of students and employees of the group.

Keywords: *academic process, global warning, go green, optimization, paperless, social media*

1 Introduction

Paper for Office space remains the main needs in the running of his administration. Especially in Indonesia and does not cover the possibility of Ahmad Dahlan University (UAD). The need for administrative activities in the paper environment UAD still tend to high. As the author says in the papers in ICGBWT-2012 [1] that the use of paper in the environment is still relatively high in UAD.

Paper usage will result in an lot of effects, especially will be increasingly depleted supplies of wood used as a raw material for the manufacture of paper. Wood derived from trees in the Woods logging both legal and illegal. If the paper needs increases the cutting of trees will increase anyway. With the growing number of trees that are cut down (let alone are not offset by replanting) then the oxygen supply would result in the Earth becoming increasingly thin. More than that other effects will arise, such as global warming, floods, landslides, etc.

A variety of efforts to reduce the risk of the above mentioned among other things with the paperless engineering. UAD has sought to make paperless strategies, inter alia by implementing SMS Broadcast system to spread invitations and official notification of work units to the civitas Academica UAD. In addition, some work units have also been utilizing internet applications to replace paper. Internet applications that have been used include the use of email for delivery and receipt of the invitation, use of digital files (PDF) as a written document to the academic and administrative reference the civitas, notulensi uses the file document, etc.

Optimization of the use of the media to support the paperless needs to be done, so as to obtain maximum results. This paper will convey the idea and initial analysis to maximize the use of one of the alternatives to reach the paperles office. This

paper discusses the optimization of the use of social media as an alternative to support the paperless office.

Refer to understanding social media [2]: Andreas Kaplan and Michael Haenlein define social media as "a group of internet-based applications that are built on the basis of ideology and Web 2.0 technology, and allows the creation and exchange of user-generated content". Broader understanding of the sense of Social Media is an online media, with its users could easily participate, share, and create content including blogs, social networking, wikis, forums and a virtual world. Blog, wiki and social networking is a form of social media is the most commonly used by people around the world. Other accounts say that social media is an online media that supports social interaction and social media using web-based technology that transforms communication became interactive dialogue.

2 Method

Analysis of the early stages of the survey results will be presented to the group the use of some type of internet-based social media among students and employees who work in each of the work units each. Next up will be examined application features social media that support Office process that involves communication and alternative replacement for paper. Analysis of the advantage obtained if the use of social media can replace the paper as a whole.

3 Analysis Result

3.1 Survey of student

A detailed questionnaire was carried out against all respondents in each sampling class. There are four classes as respondents in this survey. Each class has a background IT mastery. Distribution of respondents to each successive class is 59, 66, 49, and 63. Each of the respondents fill in a detailed questionnaire with questions on ownership of social media internet-based facilities. Social media applications that are rumored to be in the questionnaire are: forums, email, facebook, twitter, linkedIn, g +, and more. Of the four classes of applications that most devotees is the email service (100%), next is the facebook (96%), followed by twitter (75%), and the rest according to the data presented in the following table.

Table 1. Distribution of use of internet-based social media applications on a group of college students

Group	Forum	email	facebook	twitter	LinkedIn	g+	Other
1 (59)	59%	100%	100%	85%	25%	53%	39%
2 (66)	65%	100%	100%	86%	38%	61%	32%
3 (49)	20%	100%	82%	35%	18%	47%	10%
4 (63)	100%	100%	100%	86%	19%	71%	48%
Avg/App	64%	100%	96%	75%	26%	59%	33%
Avg	14%	22%	21%	17%	6%	13%	7%

From the table 1 can be visualized in the form of application usage distribution chart (fig. 1) as follows

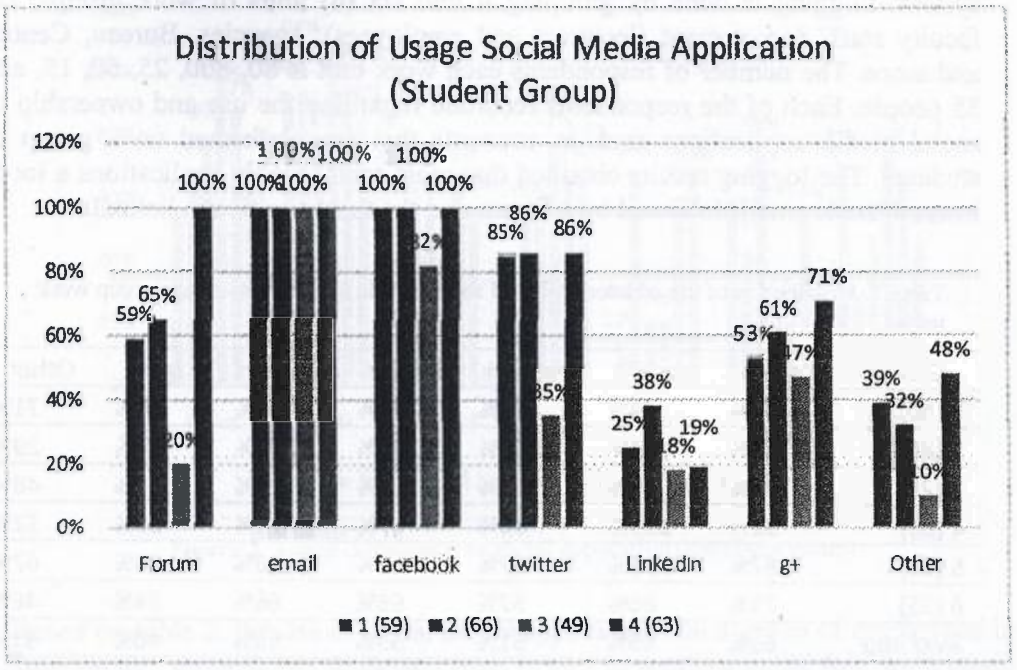

Figure 1 Distribution of Usage Social Media Application (Students Group)

Based on table 1, the use of social media applications on a group of students in General (four groups) can be ranked from largest to smallest in the following email (22%), facebook (21%), twitter (17%), forums (14%), g + (13%), others (7%), and linkedIn (7%). Visually it can be shown in the chart below (fig. 2).

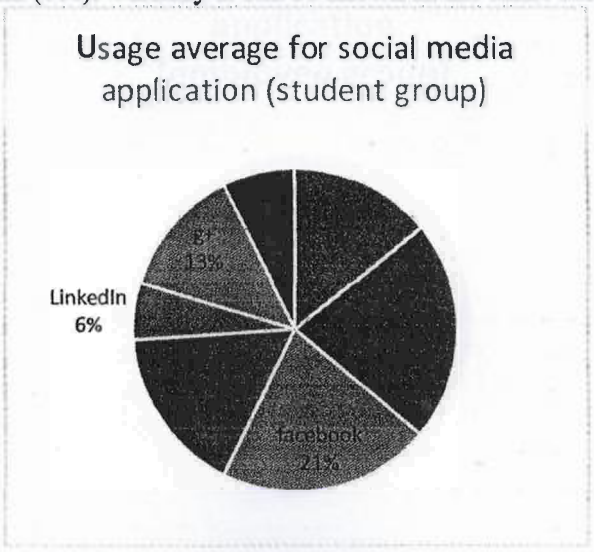

Figure 2 Usage average for social meia application (student group)

3.2 Survey of Work Unit

Social media application usage Data for a group of employees and a lecturer at the work unit are based on the most detailed questionnaire and the data in the HR system. Logging is done by grouping it into six (6) units of work groups, i.e. faculty staff, departement (lecturers and employees), agencies, Bureau, Center, and more. The number of respondents each work unit is 80, 800, 25, 60, 15, and 35 people. Each of the respondents recorded regarding the use and ownership of social media applications such as accounts that are performed on a group of students. The logging results obtained that most social media applications a lot of interest/use is email, followed by a forum and the third position is linkedIn.

Table 2. Distribution of use of internet-based social media applications on the group work units

Group	Forum	email	facebook	twitter	LinkedIn	g+	Other
1 (80)	56%	94%	19%	13%	13%	59%	71%
2 (800)	69%	94%	56%	56%	68%	44%	29%
3 (25)	80%	80%	56%	52%	20%	76%	48%
4 (60)	92%	100%	38%	77%	20%	25%	72%
5 (15)	87%	93%	67%	67%	60%	20%	67%
6 (35)	71%	86%	57%	66%	66%	54%	46%
Avg/ app	65%	86%	51%	53%	58%	40%	31%
Avg	17%	22%	13%	14%	15%	11%	8%

From the table 2 can be visualized in the form of application usage distribution chart is as follows.

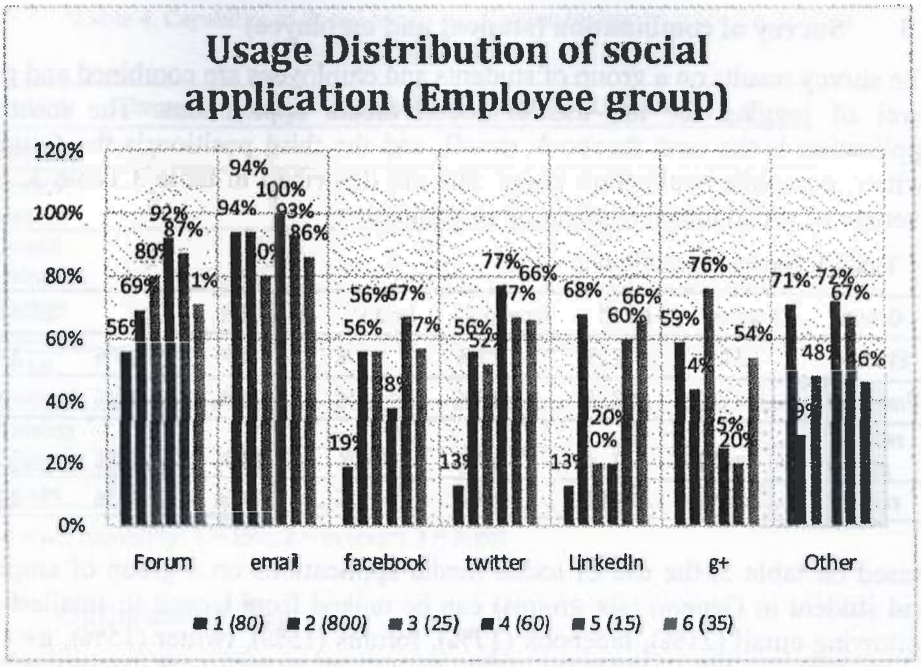

Figure 3 Usage distribution of social application (employee group)

Based on table 2, the use of social media applications on a group of employees in General (six groups) can be ranked from largest to smallest in the following email (22%), forums (17%), linkedIn (15%), twitter (14%), other (8%), and linkedIn (26%). Visually it can be shown in the chart below (fig. 3).

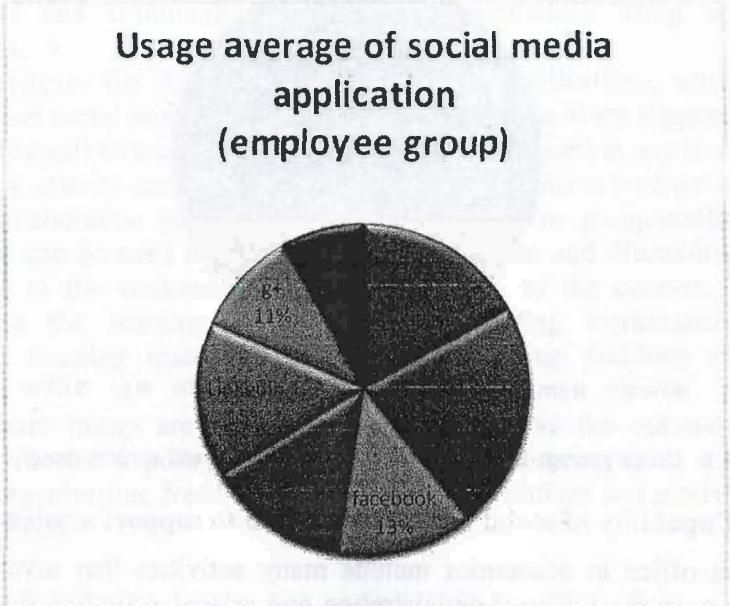

Figure 4 Usage average of social application (employee group)

3.3 Survey of combination (student and employee)

The survey results on a group of students and employees are combined and get the level of logging for the use of social media applications. The most used application is the next facebook, email, and the third position is the forum and twitter, complete application usage data are described in table 3.Table 3. Usage average of social media application (combination)

Table 3. Survey of combination

Group	Forum	email	facebook	twitter	LinkedIn	g+	lainnya
Student	14%	22%	21%	17%	6%	13%	14%
Employee	17%	22%	13%	14%	15%	10%	8%
rerata/ app	16%	22%	17%	16%	11%	12%	11%
rerata	15%	21%	17%	15%	10%	11%	11%

Based on table 3, the use of social media applications on a group of employees and student in General (six groups) can be ranked from largest to smallest in the following email (21%), facebook (17%), forums (15%), twitter (15%), g+ (11%), other (11%), and linkedIn (10%). Visually it can be shown in the chart below (fig. 5).

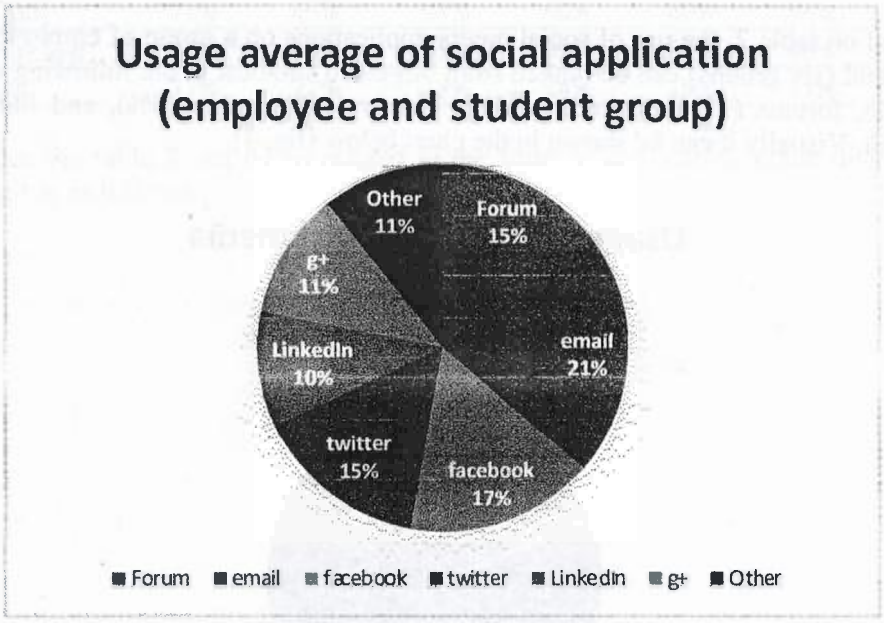

Figure 5 Usage average of social application (employee and student group)

3.4 Capability of social media application to support academic process

Paperless office in academics include many activities that involve the use of paper, e.g. in the Office Administration and related activities student activities. Here are some logging activity that involves the use of paper and alternative uses of social media applications in support of academic activities.

Table 4. Capability of Social Media Application to support academic process

Capability	Forum	email	facebook	twitter	LinkedIn	g+
Discuss	3	3	3	3	3	3
Private Message	3	3	3	3	3	3
Thread history	3	2	3	3	3	3
Storage document	3	2	2	1	3	3
View document	3	2	2	2	2	2
Grouping	3	2	3	1	3	3
SMS access	1	1	3	3	1	0

0 = not capability; 1 = low; 2 = average; 3 = hight

4 Optimization Step

The activity of the office in the faculty and administrative unit includes the study of document management, academic documents, schedule meetings, notulent printing, printing documents, and teaching others. Activities that involve students in the use of paper, among others, the printing schedule, making the report subjects, making the task of writing theses, lecture, textbook documents, lecture notes, and others.

Almost all academic activities (except for the documents such as diplomas and transcripts printing final value, as well as the decision letter) can be replaced with digital files and communication between communities using social media applications.

In the activity in the distribution of invitations, notifications, scheduling, and others can use social media applications that are most used are supported by email forum (webbased) so well-documented and can be accessed at any time.

In a learning activity can use this email as a communication medium and working in close collaboration with a discussion forum and or group/mailing list. The mailing list can be used as a medium of information and discussion as well as notification to the students in the group in each of the courses. For routine activities in the learning tasks, such as gathering workmanship quizzes, distributing learning materials can use the elearning facilities at UAD has provided.

The important things are needed in order to achieve the optimal use of the paperless office is a policy and leadership and mentoring from a clear policy within an organization. Need to be given special incentives and motivation for the civitas involved.

5 Conclusions

1. The use of social media applications it's possible to replace the use of paper
2. The use of social media applications will greatly assist resource-saving at the University
3. The use of social media applications on a group of students and employees are familiar, almost daily have been used.

6 References

[1] Tarmuji, Ali, Proceeding ICGWBT-2012; University of Ahmad Dahlan; Yogyakarta; 2012; http://conference.uad.ac.id/uadconf/index.php/icgwbt/ICGWBT2012/paper/view/44 (15 Feb 2013)

[2] Kaplan, Andreas M., Michael Haenlein; "Users of the world, unite! The challenges and opportunities of Social Media"; 2010

[3] Bozarh, Jane; *Social Media for Trainers*; Pfeiffer; San Fransisco, 2010