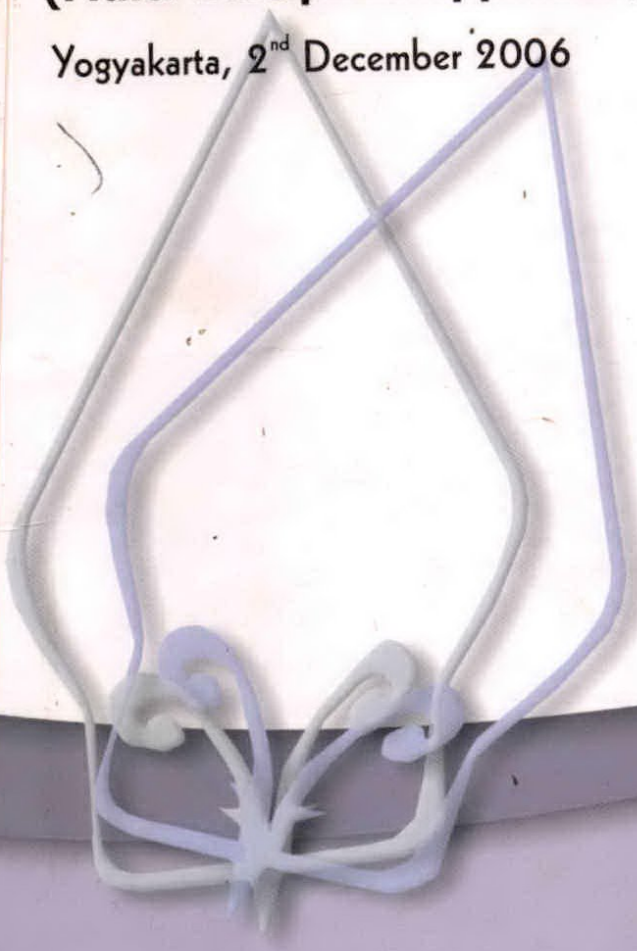


Proceeding

International Joint Seminar

**Muslim Countries and Development :
Achievements, Constraints and Alternative Solutions
(Multi-Discipline Approach)**

Yogyakarta, 2nd December 2006



Organized by:



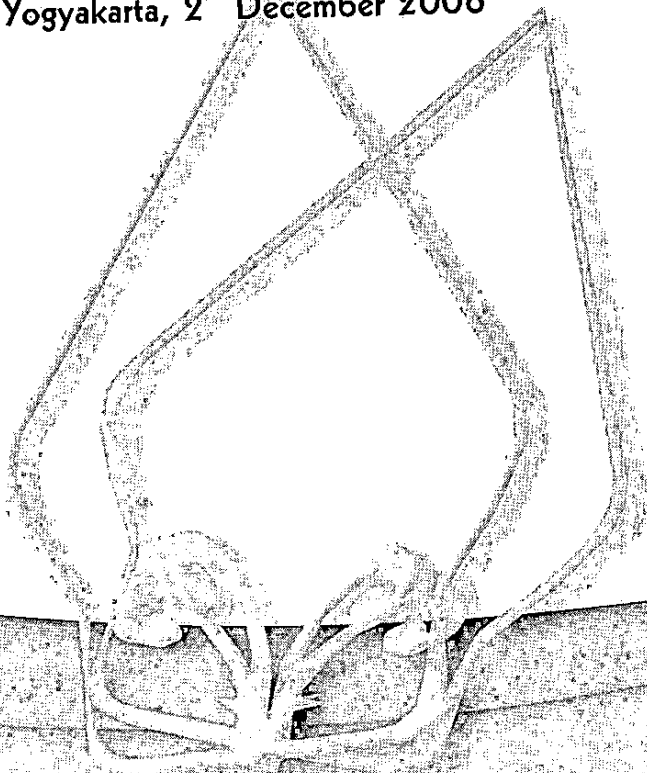
ISBN 979-3700-10-6

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Universitas
Muhammadiyah
Yogyakarta



International
Islamic
University
Malaysia



Education and
Cultural Attache
Embassy of The Republic
Indonesia in Malaysia

**MESSAGE FROM THE RECTOR OF
UNIVERSITAS MUHAMMADIYAH YOGYAKARTA (UMY)**

Assalamu'alaikum warahmatullahi wabarakatuh

All praise be to Allah SWT, Lord of the world. Peace and blessings on Muhammad SAW, His Servants and Messenger.

First of all, as the rector of Universitas Muhammadiyah Yogyakarta (UMY), I would like to welcome to the honourable guests, Rector, Dean of Postgraduate Studies (CPS), Dean of ISTAC, Dean of IRKHS, Deputy Deans and Head Departments from various Kulliyah, lecturers, postgraduate students of International Islamic University Malaysia (IIUM), and all participants in this joint seminar.

Academic cooperation between UMY and IIUM started several years ago. The cooperation between us is based on a solid foundation; both us are Islamic universities having same missions to develop Islamic society, to prepare future generations of Islamic intellectuals, and to cultivate Islamic civilization. In fact, improving academic quality and strengthening our position as the producers of knowledge and wisdom will offer a meaningful contribution to the development of Islamic civilization. This responsibility is particularly significant especially with the emergence of the information and knowledge society where value adding is mainly generated by the production and the dissemination of knowledge.

Today's joint seminar signifies our attempts to shoulder this responsibility. I am confident to say that this joint program will be a giant step for both of us to open other pathways of cooperation. I am also convinced that through strengthening our collaboration we can learn from each other and continue learning, as far as I am concerned, is a valuable ingredient to develop our universities.

I sincerely wish you good luck and success in joining this program

Wassalamu'alaikum Wr, Wb.

Dr. Khoiruddin Bashori

Rector, UMY

**MESSAGE FROM THE RECTOR OF
INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA (IIUM)**

Assalamu'alaikum warahmatullahi wabarakatuh

In the name of Allah, the most Gracious and the most Merciful. Peace and blessings be upon our Prophet Muhammad (S.A.W).

First and foremost, I felt honoured, on behalf of the university to be warmly welcomed and to be given the opportunity to work hand in hand, organizing a respectable conference. Indeed, this is a great achievement towards a warmer bilateral tie between the International Islamic University Malaysia (IIUM) and Universitas Muhammadiyah Yogyakarta (UMY) after the MoU Phase.

I would also like to express my heartfelt thanks to Centre for Postgraduate Studies (CPS), Postgraduate Students Society (PGSS), contributors, paper presenters, participants and our Indonesian counterpart for making this program a prestigious event of the year.

This educational and cultural visit is not only an avenue to foster good relationship between organizations and individuals and to learn as much from one another but a step forward in promoting quality graduates who practices their ability outdoor and master his or her studies through first hand experience. The Islamic platform inculcated throughout the educational system namely the Islamization of knowledge, both theoretical and practical, will add value to our graduates. This comprehensive excellent we strived for must always be encouraged through conferences, seminars and intellectual-based activities in line with our lullaby: The journey of a thousand miles begin by a single step, the vision of centuries ahead must start from now.

My utmost support is with you always. Looking forward to a fruitful meeting.

Ma'assalamah

Wassalamu'alaikum Wr, Wb.

Prof. Dato' Dr. Syed Arabi Iddid

Rector, IIUM

**MESSAGE FROM EDUCATION AND CULTURAL ATTACHE
EMBASSY OF THE REPUBLIC OF INDONESIA
KUALA LUMPUR**

Assalamu 'alaikum warahmatullahi wabarakatuh

All praise be to Allah SWT. This is the moment where implementation of MoU between Universitas Muhammadiyah Yogyakarta (UMY) and International Islamic University Malaysia (IIUM) comes in the form of action by organizing this Joint Seminar. The efforts of both sides to implement the MoU are highly appreciated, especially, in the context of which both universities effort to enhance the quality of education.

Substantially, I believe that this Joint Seminar will bring many benefits. In term of the development of knowledge, it is a means for developing academic quality, for exchanging of information on academic development, as well as for constructing intellectual atmosphere at both universities. In term of international relations, both universities have taken part in increasing close relationship between Malaysia and Indonesia. RUM and UNY as well are using 'soft power' to increase bilateral relations among citizens which brings a lot of benefits for both nations.

Therefore, I hope that both RUM and UMY can make use of this program as a 'kick-off' for other programs in the future, especially in using UMY's vast networks with other Muhammadiyah Universities in various cities in Indonesia as well as IIUM's network. The support of IIUM for UMY also means a progress for IIUM and UMY. I hope such joint program will continue in future for betterment of both Indonesia and Malaysia. Embassy of the Republic of Indonesia in Kuala Lumpur will always support these efforts.

To our honorable guests, Rector, Dean of Postgraduate Studies (CPS), Dean of ISTAC, Dean of IRKHS, Deputy Deans and Head Departments from various Kulliyah, lecturers and students of IIUM, I warmly welcome you to Yogyakarta. I hope you enjoy your stay in the cultural city of Yogyakarta.

Finally, as the Attache of Education and Cultural, Embassy of the Republic of Indonesia, Kuala Lumpur, I sincerely wish you good luck *and a successful program with unforgettable memories.*

*Wabillahit Taufiq Wal Hidayah
Wassalamu 'alaikum warahmatullahi wabarakatuh.*

M.Imran Hanafi

Education and Cultural Attache, Embassy of the Republic of Indonesia

MESSAGE FROM DEAN CENTRE FOR POSTGRADUATE STUDIES

Assalamu'alaikum warahmatullahi wabarakatuh

Praise be to Allah. May the peace and blessings of Allah be on the last prophet and messenger, our master Muhammad and on his household and companions. It is a great privilege for me to foreword this message to this wonderful event that is jointly organized by the Universitas Muhammadiyah Yogyakarta (UMY) and International Islamic University (IIUM).

First and foremost I would like to record my special gratitude to management of Universitas Muhammadiyah Yogyakarta for their co-operation.

In order to obtain comprehensive excellence, the Centre for Postgraduate studies has always facilitates postgraduate students of the university to achieve the highest quality in their academic work. This seminar is one of the many programs that Centre for postgraduate studies has to ensure quality graduates.

I would therefore like to thank all the participants and programme coordinators who have worked hard to realize this event.

May Allah SWT shower His blessing upon us.

Wassalamu'alaikum Wr, Wb.

Prof. Dato' Dr. Wan Rafei Abdul Rahman
Dean, Centre For Postgraduate Studies

**MESSAGE FROM THE ACTIVE
PRESIDENT OF POSTGRADUATE STUDENTS'**

Assalamu'alaikum warahmatullahi wabarakatuh

On behalf of Postgraduate Students' Society (PGSS), my gratitude and appreciation to our beloved Dean of Studies, the Embassy of Indonesia in Kuala Lumpur, Muhammadiyah Yogyakarta and the organizing committee of IIUM and the Universitas Muhammadiyah Yogyakarta for their huge success. Postgraduate Students' Society (PGSS) under the supervision of the Center for Postgraduate Studies (CPG) for this event.

As I strongly believe that the initial stages of unity are for and building the new generation, who will represent the future more, such programs, not only achieve the mission of the universities but to achieve the global mission and vision. Therefore, I believe today, we have to have understanding and then only we can appreciate our diverse cultures and acknowledge the different strengths and weaknesses through knowledge in this age of information. I am sure this joint seminar will initiate unity among the future along with integrating them.

Thank you,

Mohd Nabi Habibi

Active President Postgraduate Students' Society (PGSS)

MESSAGE FROM PROGRAM DIRECTOR

Assalamu'alaikum warahmatullahi wabarakatuh.

Praise be to Allah. May the peace and blessings of Allah be on the last Prophet and Messenger, our master Muhammad and on his household and companions.

Honestly speaking, we are pleased to be trusted by Postgraduate Students' Society (PGSS) and Centre for Postgraduate Studies (CPS) to organize the programme named Educational and Cultural Visit to Yogyakarta, Indonesia. For this, We express our gratitude to the management of both PGSS and CPS. This programme is of immense value. It has the potentials to promote intellectual endeavor, develop leadership capabilities and enrich cross-cultural understandings. We sincerely believe and hope that program of this kind will be organized in a regular fashion in future.

It is a great privilege for us to play twofold role in organizing this event: *as a host* and *as guest*. In fact, this is a fascinating experience to manage this event. Since our inception here, we have found meaningful interaction of students in an interweaving of cultures into complicated, yet beautiful, embroidery of social fabric. We are proud to say that this dearly loved university has produced graduates of high quality, who are distinct from those of the local universities.

Finally, we wish to express our special thanks to Bapak M.Imran Hanafi, Education and Cultural Attache of Indonesian Embassy, Bapak Herdaus, S.H., Assistant of Immigration Attache of Indonesian Embassy, Bapak Tharian Taharuddin for their immensely valuable assistance and co-operation in making this program a success. I sincerely appreciate all local committees at Yogyakarta, the colleagues and program coordinators and committee members who worked diligently to materialize this event. We wish to pass on good wishes to the PGSS for their valuable efforts it expended for this event.

May Allah s.w.t shower His blessing upon us.

Wassalam,

Nasrullah

Programme Director

Todi Kurniawan

Co-Programme Director

Contents

SCIENCES, TECHNOLOGY AND EDUCATION HUMAN RESOURCES DEVELOPMENT ISSUES

- Surface Waves Technology in Civil Engineering Applications**
Sri Atmaja P. Rosyidi 1-13
- Development of Earthquake Disaster Management
System in Bantul: Study on Housing and Infrastructures
Damages for Their Reconstruction**
Sri Atmaja P. Rosyidi, Surya Budi Lesmana, Chu-Chieh Jay Lin 14-25
- Cardiovascular Reactivity in Normotensive Young Adults
with Family History of Hypertension.**
Noriah M. Noor, Ikhlas M. Jenie, Tariq A. Razak 26-37
- Prevention of HIV/AIDS in Malaysia in The Light of
Qur'anic Solutions: The Role of Iqbal Students of
International Islamic University Malaysia**
Asmawati Muhamad, Israr Ahmad Khan 38-54
- Fluorescence Detection of Human Premalignant and
Malignant Lesions**
Torla Hasan 55-70
- The Roles of Urban Architectural Landscape on
Shallow Groundwater, Case Study Jakarta Indonesia**
Muhammad Koeswadi 71-83
- The Islamicization of Architecture and Environmental
Design Education: Case Study of Kulliyah
of Architecture and Environmental Design (Kaed),
International Islamic University Malaysia**
Mansor Ibrahim, Maheran Yaman 84-97
- Moringa Oleifera Seeds for Use in Water Treatment**
Eman N. Ali, Suleyman A. Muyibi, Hamzah M. Salleh 98-103

Nursing and Its Contribution to The Health of Ummah

ECONOMICS AND DEVELOPMENT ISSUES

- The Role and Pitfalls of E-Government in Indonesia**
Punang Amaripuja 115-126
- Market Integration and Dynamic Linkages Between Shariah-Compliance Stocks and Interest Rate: Empirical Evidence on The Kuala Lumpur Syariah Index (Klsi) Malaysia**
Muchamad Imam Bintoro 127-134
- The Emerging Issues on The Objectives and Characteristics if Islamic Accounting for Islamic Business Organizations and Its Impact in Indonesia Islamic Accounting Development**
Rizal Yaya 135-150
- Relationship Between Organizational Justice in Performance Appraisal Context and Outcomes; Study on Islamic University in Yogyakarta**
Heru Kurnianto Tjahjono 151-164
- Making The Development More Sustainable and The Role of Women in Islam**
Masyhudi Muqorobin 165-185
- The Analysis of Exchange Rate Fluctuations and Its Implications on Indonesian Economy Empirical Evidence and Islamic Economic Perspective**
Imamudin Yuliadi 186-202
- Value for Money: For The Nigerian Construction Clients**
Olanrewaju Abdul Lateef, Kharuddin Bdul Rashid 203-215
- Environment Related Trade Barriers (Etbs): The Impact on Muslim Countries**
Noor Aini Bt. Zakaria, Rokiah Alavi 216-225
- Toward An Ideal Balance of Islamic Banking Products Portfolio The Case of Sharia Bank Industry in Indonesia**
Muhammad Akhyar Adnan 226-236
- On The Unique Mindset of A Muslim Business Entrepreneur: A Micro Developmental View**
Sabri Osman, Abu Sa'im Md. Shohabuddin 237-255

Inter-Regional Economic Cooperation Among The Oic Member States: Iternative Solution Towards Poverty Alleviation <i>Muhammad Ghali Ahmed</i>	256-263
The Impact of Rising Oil Prices on The Malaysian and Indonesian Economy <i>Mohd Edil Abd. Sukor</i>	264-277
Ways to Improve Economic Growth in The Third World Nation: Nigeria <i>Sherif Abdul Raheem Ajiteru, El-Fatih Abdel Salam</i>	278-292
Synthesising A Corporate Paradox, Profit Maximisation Versus Social Responsibility: Based on The Quran <i>Siti Maimon Haji Kamso</i>	293-305
POLITICS AND LEGAL ENFORCEMENT ISSUES	
Legal Analysis on The Concept and The Practice of Impeachment: A Comparative Study Between Abdurrahman Wahid Case and William Jefferson Clinton Case <i>Iwan Satriawan</i>	307-339
Perda Syariah' V.S. Constitution: The Study of The Implementation of Perda Syariah (Sharia Byelaw) in Indonesia <i>M. Endriyo Susila, Yordan Gunawan</i>	340-349
State and Islamic Human Development (A Political Perspective) <i>Tulus Warsito</i>	350-365
The Perplexed Issues of Morality and Law: The Case of Ooi Kean Thong <i>Mohd Iqbal Bin Abdul Wahab, Ahmad Ibrahim</i>	366-375
The Ruling on Refusal to Take An Oath in Islamic Jurisprudence and Its Application in The Shari'Ah Courts in Malaysia and Philippines <i>Badruddin Paguimanan Ahmad, Arif Ali Arif Fiqh, Usul Al-Fiqh</i>	376-396
Constraints and Political Developments in Afghanistan, 2001-2006: A Critical Appraisal <i>Mohd Nabi Habibi, El-Fateh Abdul Salam</i>	397-406
Why Does Islamization of Political Science Matter? <i>Ali Muhammad, Wahabuddin Ra'ees</i>	407-413

**The Struggle for Regional Dominance in The Horn of Africa;
Its Historical Roots and Future Scenarios**
Ahmed Omar Abdalleh@fahad, N.M. Yassin Ahmed Ibrahim 414-421

**The New Roles The Muslim Plays in Competitive and Relatively
Repressive International Relations.**
Dr. Bambang Cipto 422-427

SOCIAL, RELIGIOUS AND CULTURAL ISSUES

**An Instrument to Measure Work Values Among
Malaysian Workers**
Wan Rafaei Abdul Rahman, Che Su Binti Mustaffa 429-434

**Islamic Education for All: An Overview of Approaches
Taken Towards Systematizing Inclusive Islamic Education
in Singapore**
Sharifah Thuraiya Su'ad Ahmad Alhabshi, Mohyani Razikin 435-442

**Muslim Education in The Autonomous Region
in Southern Philippines: Problems and Solutions**
Jeehan Daisy Jane C. Orcullo, Ismaiel Hassanein Ahmed 443-448

**The Role of Concordance in Education:
A Case Study of The Meaning of If and Whether**
Suryanto 449-480

**Poverty, Muslim Activism, and Social Welfare The Philanthropic
Vision of Charitable Institutions in Indonesian Islam
(The Case Study of Muhammadiyah)**
Hilman Latief 481-492

**Persuasive Communication in Preaching
(Case Study Abdullah Gymnastiar and Ja'far Umar Thalib)**
Twediana Budi Hapsari, M.Si 493-505

**School Cost Escalation : Critical Ideas for Financial Reform
in Indonesia**
Nurwanto 506-515

**Empowering The Ummah Through Non Governmental
Organization: The Role of Muslim Intellectuals**
Ariff Bin Osman 516-522

**Muslim Countries and Development "Barriers to Development:
How to Address Illiteracy and Poverty in Comoro Islands"**

The Role and Pitfalls of E-Government in Indonesia*

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Abstract

E-government was previously perceived as the domain of technologically advanced countries. Due to the advancement of Information and Communications Technologies and the plummeting price of these technologies, more and more third world countries has recently adopted the use of e-government. Indonesia is not an exception. However, Indonesia is such a vast and complex country, and no single e-government model should be expected to succeed in all its regions.

Textually speaking, e-government is the use of information technologies by government agencies to transform relationships with citizens, businesses, and other branches of government (Salkever & Kharif, 2002). In this sense, *transformation* is the key word to measure the success of an e-government initiative. Unfortunately, most regional governments consider the development of an official website as a sufficient equivalent of an e-government. Such efforts would do little to change the region. The abundance of such cases indicate that most e-government efforts in Indonesia would fail to launch a transformation.

This paper shows that e-government holds a very potential role to provide services for citizens, businesses, and government agencies throughout Indonesia. The pitfalls that may hinder its development include a complex local government structure, the introduction of decentralization, a misguided government mindset, an early stage of information technology culture, the absence of a good e-leadership, the lack of information technology infrastructure, an inadequate regulatory infrastructure, minimum allocated budget, and the lack of human resources. Furthermore, development should start from an integration services followed by an integration of regions

E-Government: Definitions and Roles

The definition of e-government varies in accordance to the institution that defines the term. This definition is inseparable from institutional goals and also depends on the level of e-government maturity. The UNDP (United Nations Development Program) in 2002 defines e-government as the application of Information and Communication

* Presented in the International Seminar on Muslim Countries and Multisector Development: Achievements, Constraints, and Alternative Solutions, December 2, 2006.

Technology (ICT) by government agencies. This is a broad spectrum definition which may include the simple use of a website or maybe even a facsimile. This may be due to the universal stature of the UNDP which consists of a diverse range of countries with different technological infrastructure.

A more advanced definition is proposed by the Government of Western Australia (2004) which states that e-government must focus on the use of Information and Communications Technology (ICT) to assist in the transformation of government structures and operations for cooperative and integrated service delivery. The emphasis of this definition is not on technology but rather on the strategic function of e-government as an agent of change. In this case, technology enables previously scattered government agencies to emerge as one unanimous super-body which could provide a single point of access for all services needed by its citizens as well as other stakeholders. It should be noted that this definition surfaces from a technologically advanced community.

Another interesting perspective is to view e-government in terms of the relationships between governments and other institutions. This is evident in Salkever & Kharif's (2002) point of view that e-government is the use of information technologies by government agencies to transform relationships with citizens, businesses, and other branches of government. Thus technology does not only aim to transform the government but also aims to transform citizens and businesses alike. These three definitions indicate an evolution of technology's role from a mere tool into an agent of government change, and finally as an agent of the social change.

In order to demonstrate the roles fulfilled by e-government, it is best to explore the four types of relationships between government and other components of society mediated by e-government: 1) G2C (Government to Citizens), 2) G2B (Government to Business), 3) G2G (Government to Government), and 4) G2E (Government to Employees) (GSA Federal Technology Service, in Indrajit, 2002). G2B could be viewed as the traditional sense of e-government in which citizens are regarded as the main customers of governments. Citizens should be able to access such services as Taxes, Regulations, Motor Vehicles, Tourism, etc. In our economy-based world, businesses must also be regarded as customers as well as strong allies of governments and thus should also benefit by consuming services through G2B e-government, including for

Taxes, Contracts, Supplier offerings, etc. On the other hand, G2G is not less important. In a supply chain, one part of a process becomes the customer of another part. In this sense, e-government also mediates intra-government as well as inter-government relations. Shared services, Fund transfers, Contracted Services, etc. Last but not least, G2E services should enable employees to access Benefits, Records, Opportunities, etc.

The Stages of an E-Government Implementation

The previous definitions and roles in the previous section provides a conceptual foundation for the development of an e-government system. In its implementation, a more practical guideline should be agreed upon. For this purpose, it is suitable to highlight Wescott's (in Indrajit, 2002) analysis on the benefits of e-government. According to Wescott an e-government system should utilize information and communication technology (ICT) to promote more efficient and cost-effective government, facilitate more efficient government services, allow greater public access to information, and make government more accountable to citizens. These goals indicate a need to focus on the bottom-line: economic efficiency.

With this in mind, it is possible to break down the use of modern ICT in the modernization of government administration into three steps:

1. Computerization designed to enhance operational efficiency within individual departments and agencies;
2. Computerization of services to citizens and firms, often implying integration among the services of different departments and agencies;
3. Provision of ICT access to final users of government services and information. (Government of Italy, in Indrajit, 2002)

It seems that these steps mainly involves the development of the ICT infrastructure. Further along the line, Gartner (in Baum and Di Mao, 2000) proposes four phases in the development of an E-Government Model.

1. *Web Presence Phase*. In this phase, websites are increasingly used to deliver information to the public.
2. *Interaction Phase*. Delivery of services is frequently established through the internet, and has reached a level which transforms the interaction between citizens and the government.

3. *Transaction Phase*. While in the previous stage online service might still be scattered, in this phase services from different government agencies could be accessed integratively and seamlessly.
4. *Transformation Phase*. Transformation has been achieved in two forms: internal government operations, and the relationships between government and citizens as well as businesses.

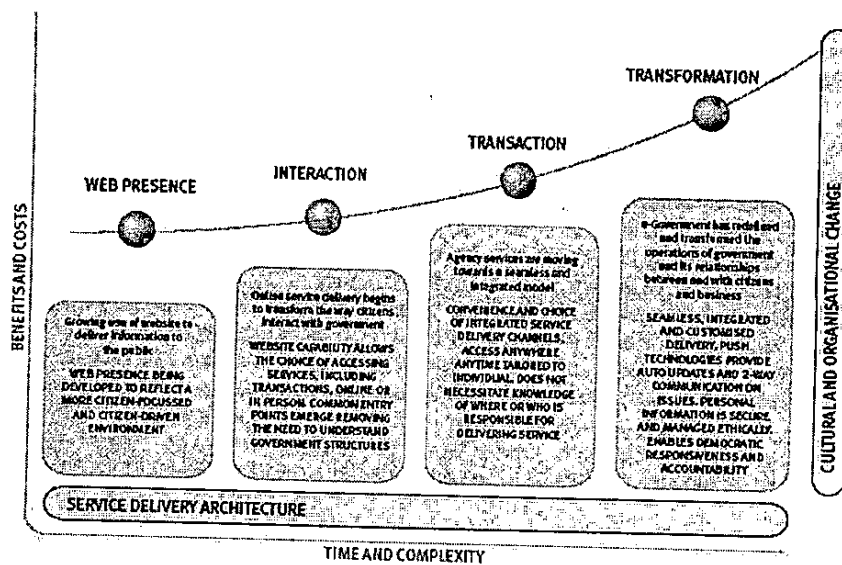


Figure 1. Gartner's four phases of e-government model (Gartner, in Baum and Di Maio, 2000).

Gartner's four stages in Figure 1 provide us with a solid guideline to develop an e-government initiative. The further along the stage the complexity of the system, the cost, and the time needed to achieve the stated goals increases, but these hard comings are handsomely rewarded by the reaped benefits.

E-Government Policy in Indonesia

The national ICT and e-government strategy of Indonesia is as follows:

Government utilizing ICT as the basis for reengineering government administration at central, provincial and local levels and in the delivery of government services, seeking to build modern ict enabled administration throughout indonesia that will deliver world class information and services to all (Gunadi, 2004).

In addition, Gunadi (2004) also explains the five priority programs endorsed as key programs of a national ICT development:

1. *e-Government*
2. *e-infrastructure*
3. *e-industry*
4. *e-Learning*
5. *e-Commerce*

The achievement of these programs should be in line with the stages of e-government implementation in Indonesian government agencies as stated in the Presidential Decree No. 3 / 2003 and elaborated in the Guideline for the Development of an e-government Grand Design from the Ministry of Communication and Information of the Republic of Indonesia. This decree states that these stages should be:

1. Preparation Stage

In this stage, an official website of each government agency is made. The website is followed by education and training of the people involved in its operation. Public Access Facilities are then installed to guarantee access to the general public. Subsequently, measures should be taken to ensure the utilization of the system. This includes the promotion of public as well as internal awareness towards the provided electronic information services, the development of e-leadership motivation and awareness of e-government benefits, and the building of a supporting law infrastucture. All the above a vital prerequisites for the next stages of e-government development.

2. Maturation Stage

This stage mandates the development of interactive websites equipped with search engines and FAQ's (Frequently Asked Questions) pages. In addition, these websites

should embed hyperlinks with other information sites.

3. Standardization Stage

The next stage of development involves the use of online transactions, such as online forms and online payment. An even higher goal that should be achieved is to ensure the interoperability of application and data between agencies.

4. Usage Stage

The milestones for this stage includes the development of an integrated G2G (Government to Government), G2B (Government to Business), and G2C (Government to Corporation) applications; the development of an effective and efficient e-government service processes, as well as other enhancements to achieve best practice standards.

The Role of E-Government in Indonesia

Indonesia is a vast country with 473 local governments and main districts or cities (Soendjojo, 2005). There are 283 Government websites available, 69 at central government and 214 at local government (Gunadi, 2004). These websites used 564 registered *.go.id* domain names. In addition, 186 of 468 Local Governments had delivered their public services through the internet. However, Utoyo (2004) notes that the 214 local governments with websites are in the first phase of e-government development. From those 214 sites, 186 are accessible, the rest 28 are inaccessible. Not surprisingly, most of the available websites come from the more urbanized regions.

Potential Pitfalls of E-Government in Indonesia

The development of e-government in Indonesia is still in its early development stages. Several pitfalls will appear over the horizon, some of them will be presented below:

Local Government Structure

The sheer size of the Indonesian archipelago itself would be daunting for the most experienced IT developer. Every potential problem would thus be multiplied manifold.

For instance, let us examine the typical Indonesian local government organization presented by Harijadi (2005) in Figure 2. The structure is a simplified one; in reality each of the 473 local governments has at least 10 internal units. In addition, it also oversees several smaller regions called the “kecamatan”, which in turn oversees smaller called the “kelurahan”.

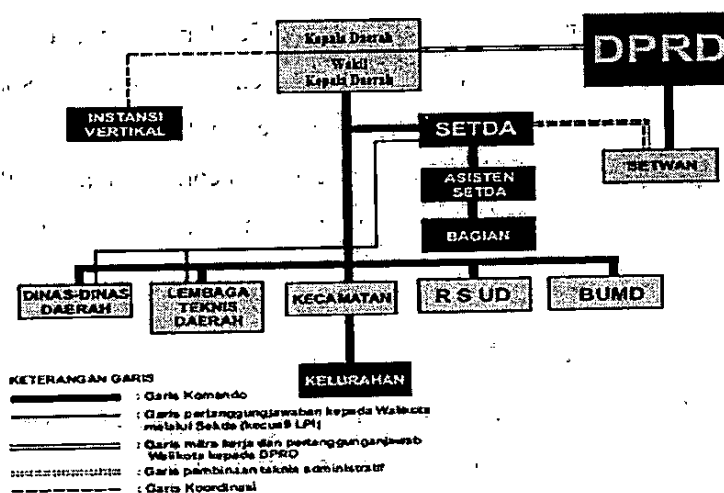


Figure 2. A typical local government organization (Harijadi, 2005).

The structure of the local government greatly mimics the central government. The existing units are mostly built on function rather than services. Citizens and businesses are often required to deal with several different units to access a single service. Currently, some local governments have set up a single roof administration unit to bypass bureaucracy, but not all of them has been successful due too the rigid walls separating governmental units.

Decentralization

Not until recently has Indonesia enjoyed a decentralized government system. Such a system was initially designed to increase regional participation in governance, but instead smaller “kingdoms” emerged. In a state of euphoria, each local government

sought to benefit on its own and neglected the need for collaboration between neighbouring governments. This resulted in a web of conflicting legislation between regions, which made inter-region business investment a challenging task. A solution should be found for this problem, in order to develop a conducive atmosphere for an integrated e-government system.

Government Mindset

The traditional notion of being a government official and a civil servant was that of an aristocrat. They were more willing to be served than to serve. Some people cynically refer to this attitude by saying that "If services could be made hard to access, why should it be made simple?". Add this with widespread corruption and collusion plus a band of middlemen eager to "help" citizens to bypass bureaucracy, no wonder e-government has not gained the momentum it deserves.

Information Technology Culture

The lack of an IT culture could be found in the government as well as in the community. In general, Indonesia has a stronger verbal culture than a reading one. Television as a medium for news and entertainment is more popular than newspapers and books. As a whole, only a small portion of the population is familiar with computers and the internet.

E-Leadership

Soendjojo (2005) notes that government officials do not have much interest in the development of e-government, and change management is needed to solve this problem. Gunadi (2004) adds e-Leadership should be introduced together with improvements in organizational structure and design.

Information Technology Infrastructure

The telecommunication infrastructure in Indonesia is a potential constraint. In large cities infrastructure is quite adequate, but the cities only represent a very small area compared to the whole nation. Gunadi (2004) also observes Low computer and internet

penetration as a constraint in the development of e-government in Indonesia.

Regulatory Infrastructure

Although the Presidential Decree No. 3./ 2003 has been published and a Ministry of Communication and Information has been established, the regulatory infrastructure of e-government is still inadequate. Soendjojo (2005) sees the need for an IT master plan, an e-government grand strategy, and a strong organization structure to support further development.

Budget and Financial Constraints

The budget allocated for e-government is still at a minimum and does not allow broad and comprehensive solutions to be built. This might be caused by the lack of understanding on the importance of ICT development in government, legislative bodies, and the general public.

Human Resources

Human resources skilled in the use of computers are still a scarcity. Soendjojo (2005) calculates the need for 23,650 IT experts to operate e-governments for all of Indonesia's districts. This is based on the assumption that each unit in a local government needs 5 experts.

The Issue of Integration

In reference to the five priority ICT programs visioned by the Indonesian government, it seems that these priorities are devised based on the ministries which will be responsible for their development. This is unfortunate, because this may become an obstacle in the formation of an integrated e-government in Indonesia. One might even suspect that the current policy does not realize the urgency of integrating a national system.

There is a need for the integration of e-government in Indonesia. Integration could be achieved through 2 paths: 1) integration of services, and 2) integration of regions.

Integration of Services

The concept of a service might differ between the government agency presenting the service and citizens consuming them. A government agency might perceive a certain service as an independent service, while citizens may perceive this service as part of a process to fulfill a particular function or goal. This is often the case in the publishing of various permits. Citizens are put through an agonizing array of requirements from different government agencies. Such a situation would be time-consuming and may lead to a high cost economy system. Interestingly, several regional governments proudly claim to provide a so called "one roof administration system" without actually streamlining internal processes. This system may just present a single door for citizens to obtain services, while throughput time remains unchanged. In effect, citizens are often required to check the flow of paperwork in each step of the process. In retrospect, without integration and process redesign, e-government may be more troublesome than it is useful. An integration of services requires strong political wills and commitments from all government agencies. Fortunately, it could be done in the secluded sphere of a single local government.

Integration of Regions

With the emergence of strong local governments, an integration of regional e-governments might be harder to achieve. Previous national policies are now in the hands of local politicians. For instance, some local governments considered legislating taxes for powerlines and trains passing their region. If such trends were sustained, the prospect for an inter-region e-government would be dim. However, it seems that the euphoria of self-government has passed away, and local governments are becoming more rational. The notion of interdependence will hopefully arise, and by that time the momentum for an inter-region e-government would be ripe. The goals set for an integration of regions should be the development of a synergy between the strength of each region to achieve a higher economic development than could be achieved by each region alone.

Compared with the benefits of an integration of services, the integration of regions has a higher economic potential. Whether an integration of services is a prerequisite for an integration of regions should be discussed in another instance. Figure

3 proposes a matrix showing the benefits and risk in the implementation of these two types of integrations:

	Integration of SERVICES	Integration of REGIONS
RISK	Low	High
BENEFITS	Medium	High

Figure 3: Risk and benefits of integration.

This diagram shows that in order to achieve an integration of services as well as regions would be a surmounting task with high risks as well as benefits. Considering the potential pitfalls faced by e-government development, it would be best to start with an integration of services, and gradually integrate these services with other local governments.

Conclusion

E-government holds a very potential role to provide services for citizens, businesses, and government agencies throughout Indonesia. The vastness of the country multiplies the benefits as well as the obstacles that will be faced. These obstacles include a complex local government structure, the introduction of decentralization, a misguided government mindset, an early stage of information technology culture, the absence of a good e-leadership, the lack of information technology infrastructure, an inadequate regulatory infrastructure, minimum allocated budget, and the lack of human resources. However long this list might be, it should not defer the nation from developing a comprehensive and integrated e-government system in Indonesia. This struggle should start from an integration of government services in a local government, followed by the integration of these services with neighbouring governments and eventually with a national e-government system.

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