

# **The Other Side of the E-Government Coin: Monitor from the People: Building a New Double-Sided E-Government Conceptual Model**

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## **ABSTRACT**

*Traditionally, E-Government was about providing information and services to citizens online such as paying bills, fine, traffic tickets, voter information, complaint tracking and birth& death certificates. E-Government also expanded to conduct transactions with business partners such as suppliers, vendors and contractors. However, the other side of the E-government coin was not obvious, which is the monitoring from people to all government agencies while conducting transactions, monetary expenditure, recruitment, promotions and all other official business and activities. This paper introduces a new conceptual model that enables the public (citizens and people) to monitor their government activities through entering and storing all official and government activities and transactions in a public data warehouse that is connected to the e-government web site. This web site is accessible by all citizens to guarantee fairness, subectivity and social equity in all government transactions.*

## **INTRODUCTION**

Traditional e-government is concerned with providing electronic services to citizens such as paying bills and violations online, applying for licenses and permits, road maps and geographical information systems, and some organized government information services. With what the world witnesses recently in the middle east revolutions, and the many accusations for government officials of corruptions, collection billions of dollars illegally, and mistreatment of citizens in many aspects of life, it has became the time that the concept of e-government expand to monitor and system all aspects related to government, its agencies and all its officials and workers. (Elmorshidy 2011). This papers is concerned with introducing an automated information technology (IT) infrastructure that guarantee that all essential aspects of government is systemized and monitored to prevent illegal and constitutional violations in relation to misconduct with all citizens' rights and to provide a clear public window for all government expenditure and monetary transactions that people can easily look through.

## **TRADITIONAL APPROACH TO E-GOVERNMENT**

E-Government (short for electronic government, also known as e-gov, digital government, online government, or connected government) is digital interactions between a government and citizens (G2C), government and businesses/Commerce (G2B), government and employees, and also between government and governments agencies (G2G). (<http://en.wikipedia.org/wiki/E-Government>)

“E-Government” refers to the use by government agencies of information technologies (such as Wide Area Networks, the Internet, and mobile computing) that have the ability to transform relations with citizens, businesses, and other arms of government. These technologies can serve a variety of different ends: better delivery of government services to citizens, improved interactions with business and industry, citizen empowerment through access to information, or more efficient government management. The resulting benefits can be less corruption,

increased transparency, greater convenience, revenue growth, and/or cost reductions. (Poku 2010)

By definition, e-government is simply the use of information and communications technology, such as the Internet, to improve the processes of government. Thus, e-government is in principle nothing new. Governments were among the first users of computers. But the global proliferation of the Internet, which effectively integrates information and communications technology on the basis of open standards, combined with the movement to reform public administration known as New Public Management, has for good reason generated a new wave of interest in the topic. E-government promises to make government more efficient, responsive, transparent and legitimate and is also creating a rapidly growing market of goods and services, with a variety of new business opportunities. (Gordon, F Thomas 2002)

Electronic government (e-government), the ability for government to provide access to services and information twenty-four hours a day, seven days a week, is an emerging force today. In the aftermath of a successful Y2K rollover, government is turning attention and resources to providing information and services on-line, exploring digital democracy, and using technology for economic development. As a result, government service will be revolutionized as we progress into the Digital Age. In this new age, good government is accessible government. Good government correlates to immediate access to pertinent information. Good government is faster, cheaper and more efficient. (Lowery, Liza M (2007)

E-government is more commonly related to the information and communication technology to exchange information and services with citizens, businesses, and other arms of government. E-Government may be applied by legislature, judiciary, or administration, in order to improve internal efficiency, the delivery of public services, or processes of democratic governance.

The most important anticipated benefits of e-government include improved efficiency, convenience, and better accessibility of public services. Often e-government is said to be online government or internet based government. Many non internet based electronic government technologies include telephone, fax, PDA, SMS text messaging, MMS, and 3G, GPRS, WiFi, WiMAX and Bluetooth. (Ligature 2011)

## **BENEFITS ANALYSIS OF E-GOVERNMENT**

The most obvious benefit of e-government is improving the service to people. E-government also saves customers money in the form of faster, easier and more convenient service, better quality and reduced turnaround times, and in some cases a reduction in the direct cost for the service. There are also many social benefits valued by citizens including increased community skill and knowledge, and new business and work opportunities. Not all the benefits of e-government are to the users. It can also deliver cost savings to agencies in the form of speedier transactions and lower staff costs. (Alston 2003).

As public programs and services grow more complex and interdependent, knowledge and information sharing across the boundaries of government agencies, levels of government, and public, non-profit, and private sector are essential elements for developing electronic government applications. Sharing knowledge and information through information technology (IT) enablers provides strategic advantages for government to improve decision-making and enhance the quality of services and programs. Such sharing is the foundation for development of integrative applications, resources sharing, effective adaptation to new environments, and the enhancement of organizational learning. (Zhang, Jing et al. 2005)

Electronic government (e-government) is a key strand of the European Union's strategy to transform the continent into a competitive, dynamic, knowledge-based economy. The aim is to exploit the functionality and interoperability of the web to reduce waste, improve service quality and improve relations between citizens, businesses and the state. The imperative of improved relations is noted in the i2010 eGovernment Action Plan which states: "better decision-making and more extensive involvement of citizens in all phases of democratic decision-making, including at European level, are critical for the cohesion of European society. (Ailsa et al 2008)

According to (E-Government – Kenya 2010), the adoption and use of the e-government strategy has significant benefits for government in the delivery of more effective and efficient information and services to the customers of the Kenyan Government. The key benefits of e-government include:

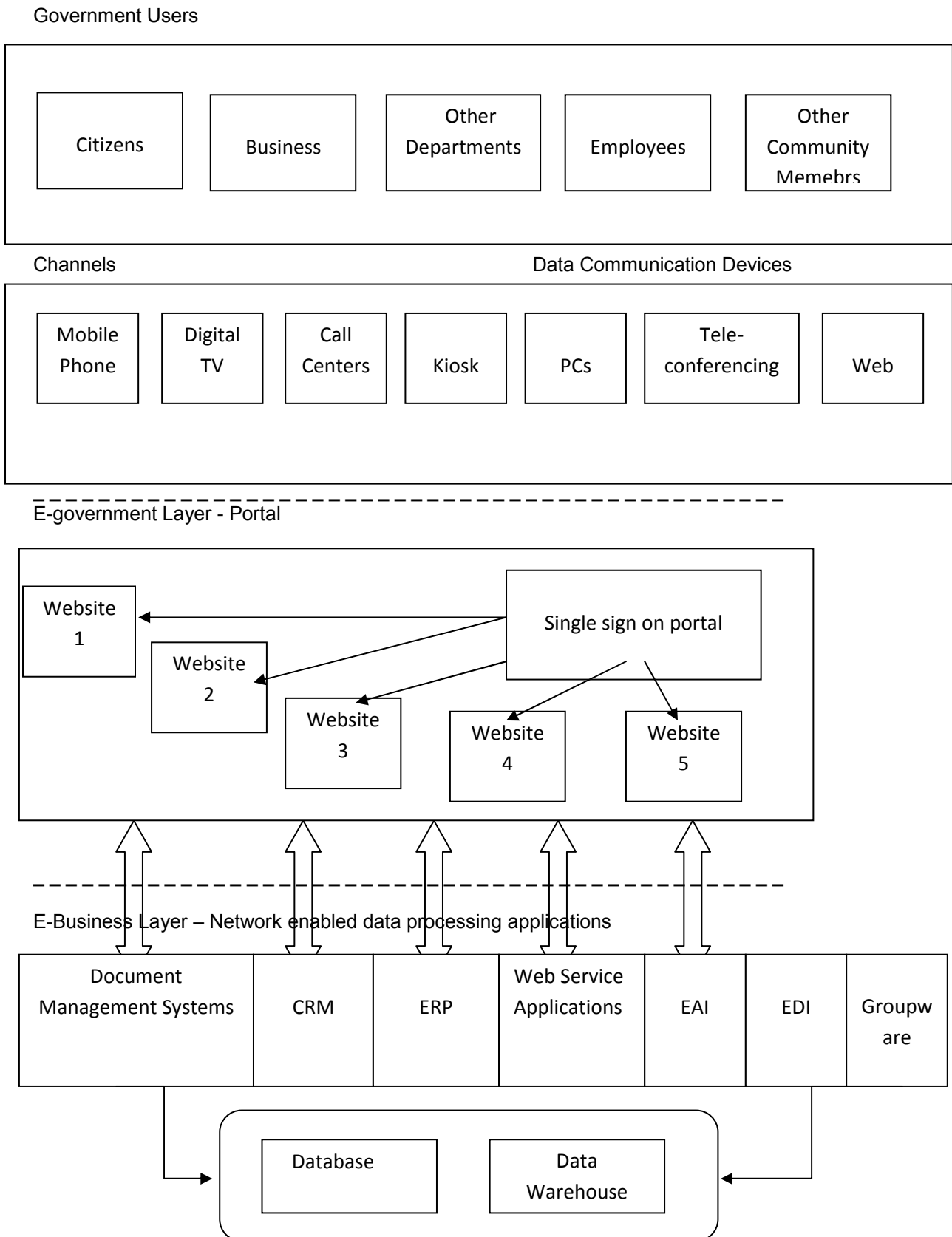
- Simplifying delivery of services to citizens
- Minimizing the government bureaucracy
- Improved interactions among government units and with business, industry and citizens
- Increased empowerment of citizens and businesses through access to information, knowledge and services

- More efficient government management
- Improved productivity (and efficiency) of government agencies
- More effectively, cheaper and more convenient delivery of information, knowledge and services
- Making it possible for citizens, businesses, other levels of government and government employees to easily find information and get service from the government and government agencies
- Strengthened legal system and law enforcement
- Improved quality of life for disadvantaged communities
- Broadened public participation

## **REVIEW OF CURRENT CONCEPTUAL MODELS / THEORITICAL FRAMEWORKS OF E-GOVERNMENT**

The first conceptual model is provided we reviewed is the one proposed by Perumal, Norwawi & Muniandy (2006). The model decomposed government users to citizens, business, other departments, employees and community members. The data communication devices between these entities can be mobile phones, digital TVs, call centers, kiosks, PCs, teleconferencing and the web. The e-government web site integrates government services, suppliers, and other agency service providers. There is a single sign on portal in for e-government that is connected to several information and services web sites. These web sites are connected to an e-business layers that contains important applications like CRM (Customer Relationship Management) systems, ERP (Enterprise Resource Planning), document management system, web services applications, EDI (Electronic Data Exchange), and groupware. The system in further connected to database and a data warehouse to save government data. The conceptual model is depicted in figure 1 below (Architecture Framework of E-Government)

**FIGURE 1: ARCHITECTURE FRAMEWORK OF E-GOVERNMENT (PERUMAL AND MUNIANDY 2006)**



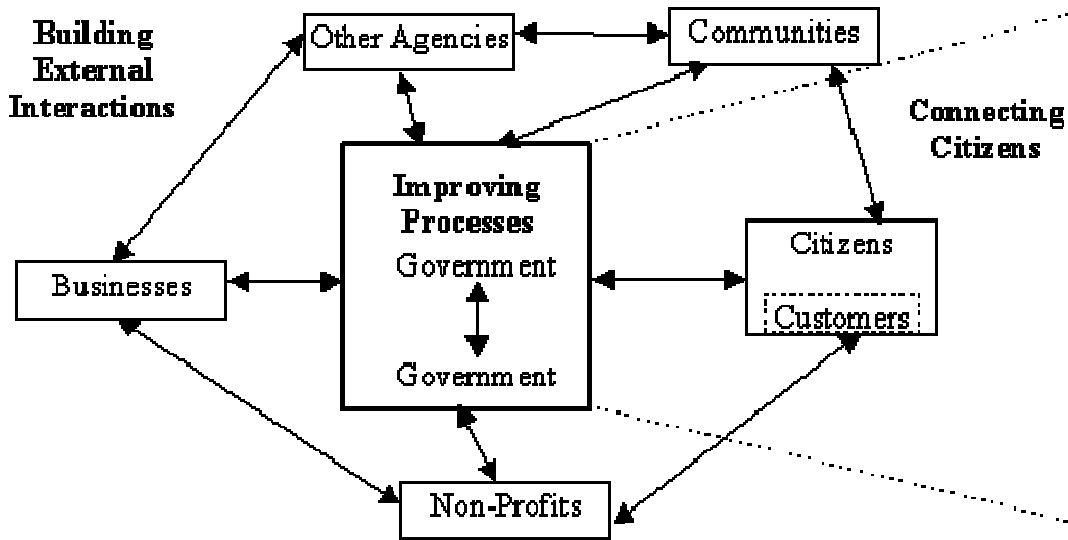
The second conceptual model reviewed is the Focal Domains for eGovernment Initiatives (Ntiro, S. 2000). According to this model, there are three main domains of e-government, illustrated in Figure 2 below. These domains are: Improving government processes: eAdministration; Connecting citizens: eCitizens and eServices and Building external interactions: eSociety . Respectively, these particularly address the problems that government is too costly, too inefficient and too ineffective (e-administration); too self-serving and too inconvenient (e-citizens and e-services); and too insular (e-society).

As far as improving government processes (eAdministration), eGovernment initiatives within this domain deal particularly with improving the internal workings of the public sector. They include: cutting process costs: improving the input:output ratio by cutting financial costs and/or time costs. They also managing process performance: planning, monitoring and controlling the performance of process resources (human, financial and other). E-administration further includes making strategic connections in government: connecting arms, agencies, levels and data stores of government to strengthen capacity to investigate, develop and implement the strategy and policy that guides government processes. Finally, improving government process includes creating empowerment: transferring power, authority and resources for processes from their existing locus to new locations.

As far as connecting citizens (eCitizens and eServices), such initiatives deal particularly with the relationship between government and citizens: either as voters/stakeholders from whom the public sector should derive its legitimacy, or as customers who consume public services. Connecting citizens also pertains to talking to citizens: providing citizens with details of public sector activities. This mainly relates to certain types of accountability: making public servants more accountable for their decisions and actions. eCitizens and eServices also pertain to listening to citizens: increasing the input of citizens into public sector decisions and actions. This could be flagged as either democratisation or participation. Finally, eCitizens and eServices include improving public services: improving the services delivered to members of the public along dimensions such as quality, convenience and cost.

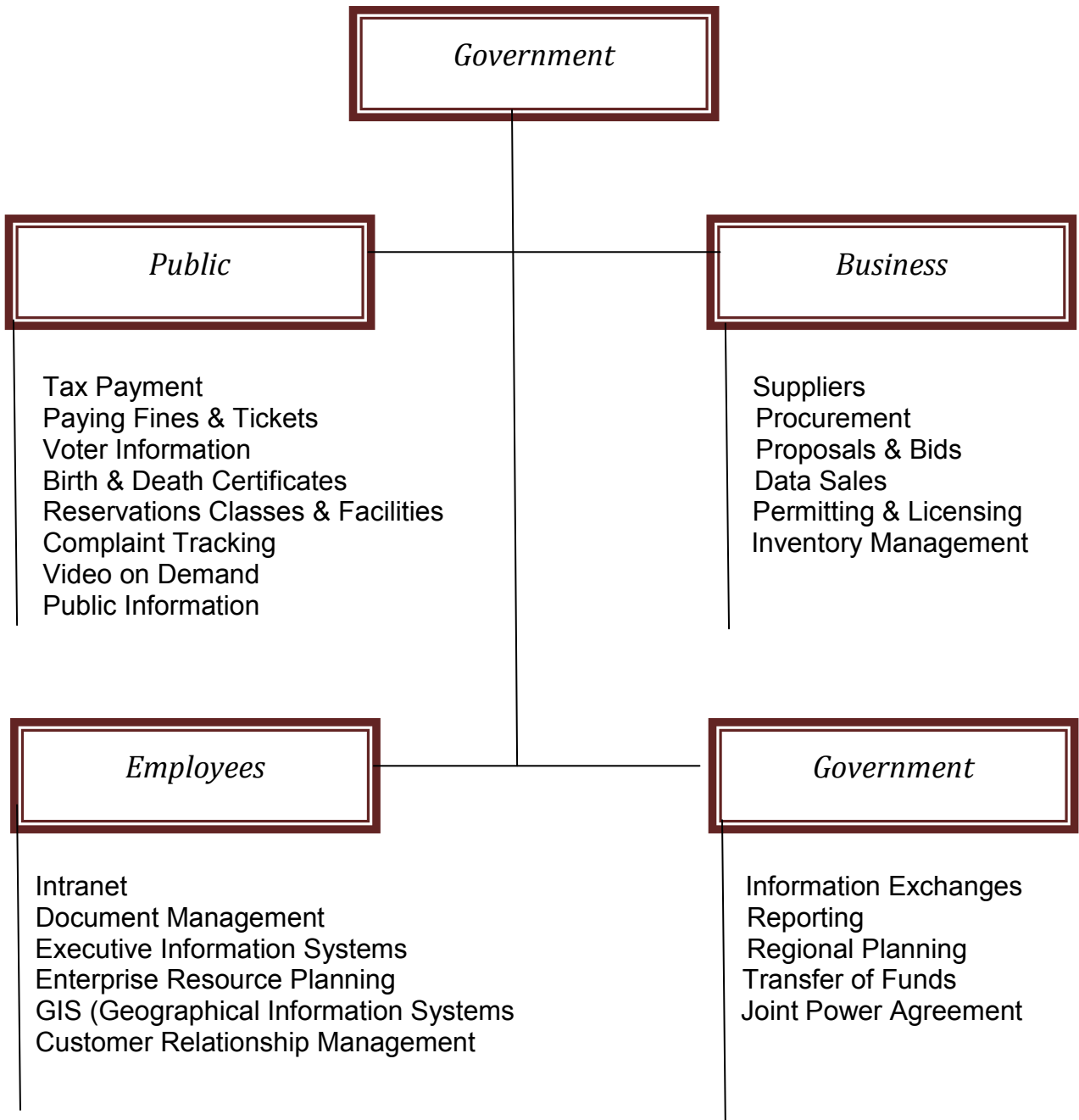
As far as building external interactions (eSociety), such initiatives deal particularly with the relationship between public agencies and other institutions - other public agencies, private sector companies, non-profit and community organizations. Building external interactions, working better with business means improving the interaction between government and business. This includes digitizing regulation of, procurement from, and services to, business to improve quality, convenience and cost. It also means developing communities: building the social and economic capacities and capital of local communities. eSociety also means building partnerships and creating organizational groupings to achieve economic and social objectives. The public sector is almost always one of the partners, though occasionally it acts only as a facilitator for others.

**FIGURE 2: FOCAL DOMAINS FOR E-GOVERNMENT INITIATIVES (NTITO 2000)**



The third conceptual model is E-government Services (Lowery 2009), which is depicted in Figure 3 below. According to this model, government can be organized into four main entities: public services, business operations, employees, and government internal departments. As far as the public services of government, it includes tax payment, paying fine and tickets, voter information, birth & death certificates, reservations classes & facilities, compliant tracking, video on demand and public information. Business operations of government include suppliers, procurement, data sales, permits and licensing, and inventory management. As far as the employees, e-government will provide an intranet, document management capabilities, executive information systems for strategic decision, geographical information system (GIS), and customer relationship management system (CRM). As far as the government internal operations, e-government is concerned with information exchanges between departments, reporting, regional planning, transfer of funds and legal issues such as joint power agreements.

**FIGURE 3: E-GOVERNMENT SERVICES (LOWERY 2009)**



## **DEVELOPING A NEW CONCEPTUAL MODEL FOR E-GOVERNMENT: THE OTHER SIDE OF THE COIN: MONITORING FROM THE PEOPLE**

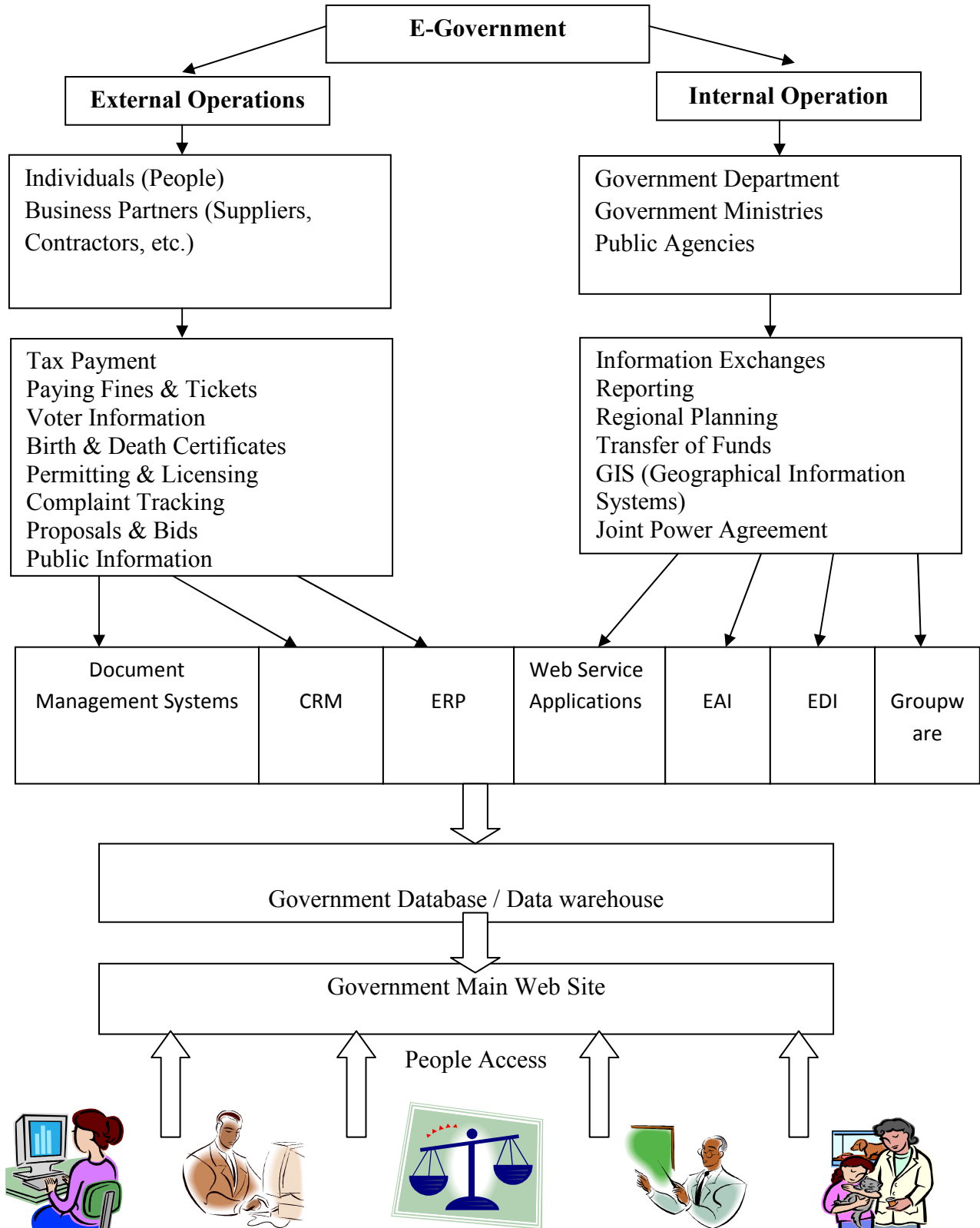
E-commerce is not at the heart of e-government. The core task of government is governance, the job of regulating society, not marketing and sales. In modern democracies, responsibility and power for regulation is divided up and shared among the legislative, executive and judicial branches of government. Simplifying somewhat, the legislature is responsible for making policy in the form of laws, the executive for implementing the policy and law enforcement, and the judiciary for resolving legal conflicts. E-government is about improving the work of all of these branches of government, not just public administration in the narrow sense.

Our research model (Figure 4) below propose that the e-government environment can be decomposed to internal operations as well as external operations. The internal operations takes place when government and its different departments conduct their own business such as information exchanges, reporting regional planning, transfer of funds and joint power agreements. The external operations take place when the government deals with individuals (its people), business partners, and other governments.

For both layers, e-government will need to have a sophisticated and frequently-updated web site. Other entities dealing with government can sign on to this web site for information, services and business transactions. The web site should be connected to a database and a data warehouse that will hold the government data and facilitate daily operations. The web site and databases are further connected to an e-business layer that holds sophisticated application programs such as CRM (Customer Relationship Management System) to handle citizens' services such as tax payment, paying fine and tickets, voter information, birth & death certificates, reservations classes & facilities, compliant tracking, video on demand and public information. Other applications include ERP (Enterprise Resources Planning) that helps government organize its internal operations and professionally deals with business partners such as suppliers and vendors. Other applications that may be integrated at this layer are document management systems, EDI (Electronic Data Interchange), groupware and web services.

To prevent corruption and guarantee transparency in the government internal operations and external operations as well as fairness in treating individuals and business partners, all monetary transactions for each government agency or department has to be entered in the database that it linked to the public web site. Similarly, public services, recruitments, and promotions have also to be made clear and systematic on the e-government web site. This way, the other side of the e-government coin can be obvious and clear to public and the needed balance between the government rights and obligations can be achieved. Our proposed new e-government conceptual model is depicted in "Figure 4" below.

**FIGURE 4: A NEW DOUBLE-SIDED E-GOVERNMENT CONCEPTUAL MODEL:  
GOVERNMENT ACTIVITIES AND MONITORING FROM THE PEOPLE**



## CONTRIBUTION OF THE STUDY

This study is among the first studies that discuss the other side of the e-government coin, which is simply the responsibility for the government towards its people. Through the new proposed conceptual model introduced in this study, all government activities such as monetary expenditure, financial transactions, public service, internal recruitment and promotions can be monitored by individual and citizens. The new proposed e-government web site enables these activities to be clear and transparent though entering and storing them in the e-government database that is linked to the main government web site that is made available to public.

The study believes that all citizens have the right to monitor their government transactions and services in order to achieve fairness in the society. Fairness will lead to more efficiency in government work and a better utilization of its financial and human resources, which will with no doubt will shift a lot of many third world countries' government to a new era of prosperity, social equity an financial strength.

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