

E-GOVERNMENT: E-STATE WITHIN A STATE

HAMEED ULLAH KHAN¹

¹Associate Prof., Department of Information Systems
College of Computer and Information Sciences
King Saud University, Riyadh
Kingdom of Saudi Arabia
hukhanafri57@yahoo.com, hkhan@ksu.edu.sa

ABSTRACT

A state holds the function of a caretaker for the people by having enormous resources and abilities of taking care of its citizens' needs. Within a state there are also shadow organizations and groups that do not adhere to the constitution of the state which impair the progress of growth and society. As a result the society enters state of slow declines opposed to pushing forward in its development. The only or one of the major solutions to the problem of corruption is to introduce automation and negate the need for manual interaction. However, the state alone cannot be held liable for the disproportionate expenditure of national resources as ultimately it is the duty of the citizens to see through the proper disposal of the resources. This research article aims to target the establish a transparent relationship between the citizen and the government and in addition yield the best of the worst from the government machinery so as to avoid communal panic that might lead to anarchy and disorder.

Keywords: *Disturbed Systems, Software Agents, Database Management, E-Government, E-State*

1. INTRODUCTION

Currently there are four governmental systems in the world including; *democracy*: that sees the application of democratic norms, *dictatorship*: whereby one ruler exercises full authority including the use of military, *monarchy*: an individual who as a member of the royal family exercises dominion, and *communism*: by applying communist norms to working under the government owned system. Two main types of system; open system and shadow system. Progress is comparable in both the open and shadow systems with negatives and positives in both systems. In progress; all the basic facilities are provided by the government to maintain living standards and looked after all the basic needs, such as, health, food, shelter, education, etc. In non-progress; situation leads to corruption, disasters, down fall, non-trust, joblessness, social unrest and countries' down fall [1].

Systems are governed by judiciary, bureaucrats, politicians and armed forces, they are all considered as the main pillars for the country. These four actors can establish problems among themselves and with others. On the other hand people have communities, such as, the business community, community of skilled people, land-lords (feudal-lords) and the working class. There always exists some instability inside communities

on small and large scales. The main issue is there are no defined boundaries for each community and everyone looks into others creating divisions in society. The struggle for existence starts in societies in order to achieve what is required for the sole purpose of survival and a comfortable lifestyle, with this giving birth to evil such as monopolies and nepotisms, bribes, social unrest, etc. Therefore, the question that comes to mind is how to eliminate this cancer from our societies? [2].

Humans are governed by three innate mechanisms that include spiritual, emotional and physical. These behaviors must be clearly understood by the ruling party or government on the basis of human psychology and human wishes. If they are not treated properly, it may create a state of imbalance and unrest in the society and social disorder may emerge in the masses. This unrest also gives birth to other internal complications such as ghost institutions, ghost beneficiaries, etc [3]. This puts extra burden on the government treasury without any return. The question that rises again is what are solutions for such problems?

E-government will bring many other impacts on human, like changing the present system of how to recruit, evaluate, promote, and develop. Also bring changes in the ways of training and education; companies spend 50 percent or more on training by applying e-learning systems for learning



purpose. This is possible by two-way video interaction and sharing knowledge which will cut the cost of companies drastically.

The aim of this research is based on three main issues to address: first to stop corruption and secondly everyone gets position/earning on merit and thirdly human must be treated on equal grounds. How this can be achieved, by changing the present systems to e-government, which is the gate way for the information revolution to improve the lives of citizens and businesses and to improve the efficiency of government. It aims at a citizen centered vision of a government that provides effective governance, increased transparency, better management, effective processes and efficient services through the use of the Internet, information and communication technologies and reduces the human intervention in systems to maximum [4] – [8].

The rest of this paper is organized as follows: Section 2 presents the background study in detail. In section 3, the proposed system is presented. Methodology and discussion is given in section 4. E-Government is presented in section 5 and finally, conclusion in section 6.

2. BACKGROUND STUDY

The indicators for state growth are based on progress; welfare state having high progress/growth rate as compared with security/surviving state. The reason for growth is based on; the implementation of information and communications technologies (ICT) to provide access to government information and delivery of public services to citizens and business partners, secondly to open hand for opportunity to improve the efficiency and effectiveness of the functions of government and to make governments more transparent to citizens and businesses by providing access to more of the information generated by government. This gives birth to new avenues for progress, such as, government to employee reforms plus government to citizen that includes all the interactions between a government and its citizens. In government to citizen many areas can be address including recreation, research, education, health, security, shelter, employment and above all awareness/solving problems related to constituent level and related to citizen constitutional rights [9] – [11].

The basic step for progress must be based on road map and deliverance for short term, medium

term and long term-policies to achieve the targets. The vision, mission and objectives defined in the fiscal year SNE (schedule new expenditures) must be achieved in time. Besides, the resource mobilization must be made effective by using latest technology, resource distribution and industrial production. To achieve good results the government must change to ICT; develop databases, report generation, and links to other sites, so that a complete network is established throughout the country and abroad. This network must be accessible to all the citizen in different categories, such as, G2C (government-to-citizen) category including all the interactions between a government and its citizens in any respect, G2E (government-to-employees) category that includes activities and services between government units and their employees, G2B (government-to-business) category that encompasses interactions between governments and businesses, G2G (government-to-government) category that has activities within government units and those between governments, as illustrated in Figure 1.

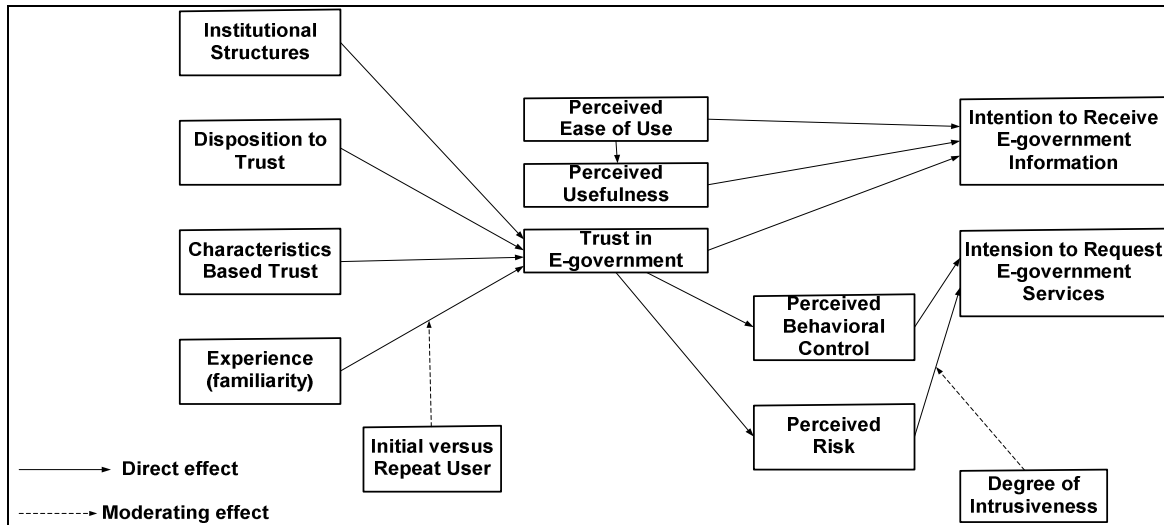


Figure 1: E-Government Adoption

Figure 1 is adopted in many countries to facilitate their citizen. But it's the time to implement on a global scale and in all areas. The changes must come according to the modern needs and requirements and to bring these changes in the world [12] – [17].

3. PROPOSED SYSTEM

Proposed system starts with a context diagram, as shown in Figure 2. The objects include citizen and ministry with many attributes. The object describes methods which are referred to operation. For specific instances a class is used which is arranged in a hierarchy of different types of classes.

As mentioned the citizen is the main actor in this system, which sends his/her request to the government and the request once entered is communicated for processing to the concern ministry.

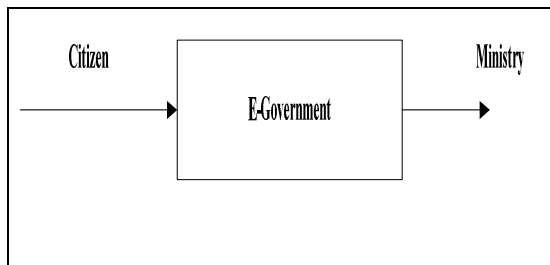


Figure 2: The context diagram

4. METHODOLOGY

Due to huge data entries it was suggested to handle the database on day to day bases for each city separately which combines to yield a country database by using the concept of system boundary and association and also combines to yield archives. The complete implementation of e-government involves transformation process; starting from information spreading, the official two-way transactions with each department, multipurpose portals, clusters of common services, integration and enterprise transformation with IT services support, as shown in Figure 3.

A system of every country is running by the ministers of that country, therefore the process of sorting and linking of request to concerned ministry started at the entrance by allotting to every request with a unique number at database as illustrated in Figure 4.

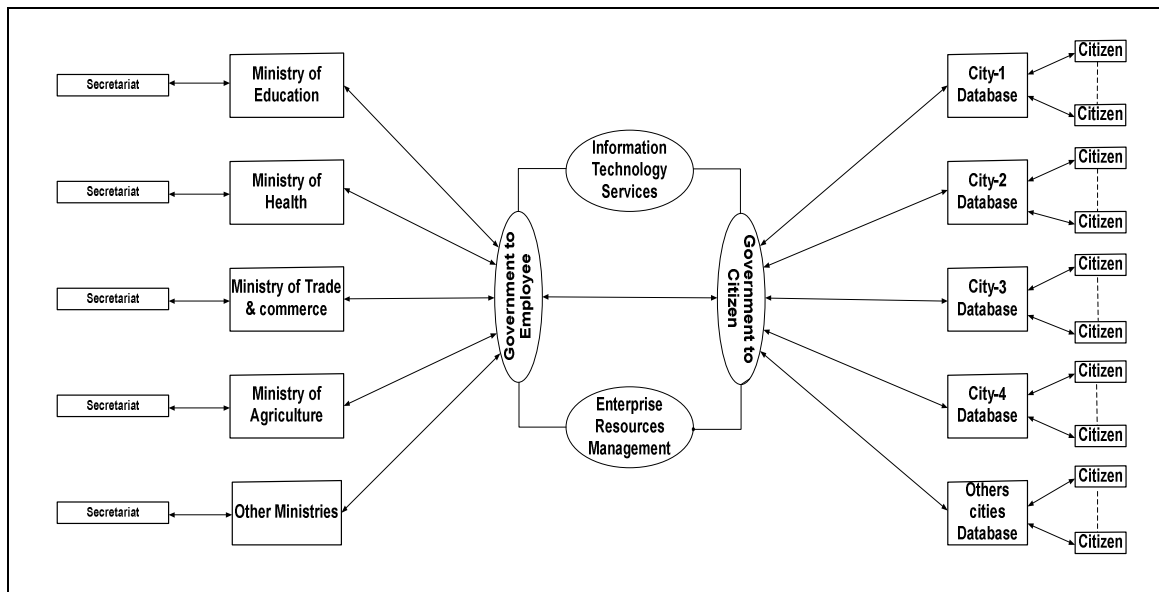


Figure 3: The ERP & IT interactive application between government and citizen

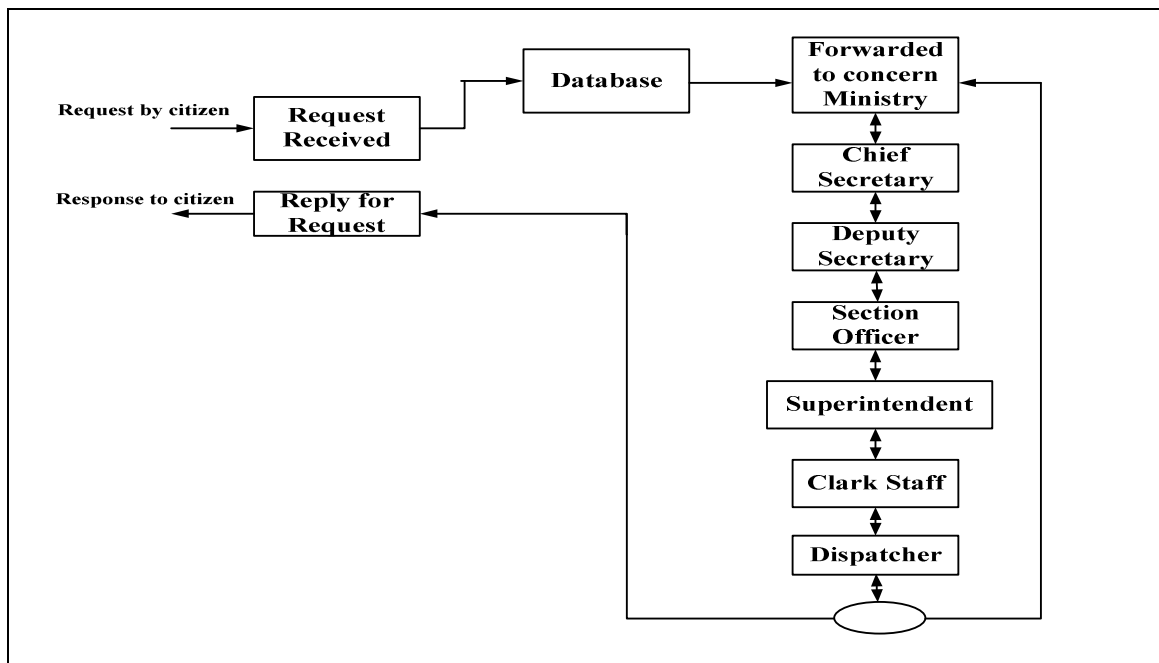


Figure 4: Secretariat for e-Government

4.1 DISCUSSION ON FIGURE 3 & 4

Figure 3 describe the complete interaction between the citizen and the government ministry. The nature of the model is referred to as G2C and data from G2C will connect to G2E (government to employee (ministry)). After processing the request, report will be generated to the citizen. The whole scenario in Figure 3 is controlled through IT services and the process takes the final shape of ERP (Enterprise Resource Planning) where the information flow is integrated and consistent.

In Figure 4, the request tendered by the citizen and will be sent to the city database to save it as a record for further processing by allotting with unique number. It will then forward to the concerned ministry by an intelligent software agent. In the second step it will move to the ministry secretariat through the chief secretary followed by deputy secretary and later to the section officer. There may be many deputy secretaries; there may be many section officers, so it will pass on to the concern section. The case will be finalized and the concerned superintendent to dispatch a report to the citizen and a copy to the minister secretariat for reference. All operation must complete within maximum three working days (24 hours).

5. E-GOVERNMENT IMPLEMENTATION

In an e-government system many case studies can be deployed with different approaches. Based on the aims of proposed research, only two cases are brought under discussion for changes, to contain or to eliminate corruption in the current system.

5.1 CASE STUDY-I

First case is relating to a national election system in a democratic setting of government. It is a norm in many countries for one participant to blame another for his loss in the election. Therefore, the best solution is to use an e-election system instead of manual and legacy system that can be full of flaws. The biggest flaw has to wait in large queues and sometimes an occult presence of violence as well as the voter having to decide either to go to work or forsake one day’s wages. In view of the above statements it would be far convenient to develop a system to pole vote from any place having computing and wireless facilities, e.g., from home/office, if travelling from another city. So the voter is not bound to go to polling station in person. Above all the ghost polling stations which are very active during Election Day will be eliminated if the election system is changed. Besides, the fake voters will not be able to pole vote due to checking in the system. The proposed system for e-election in e-government is shown in Figure 5.

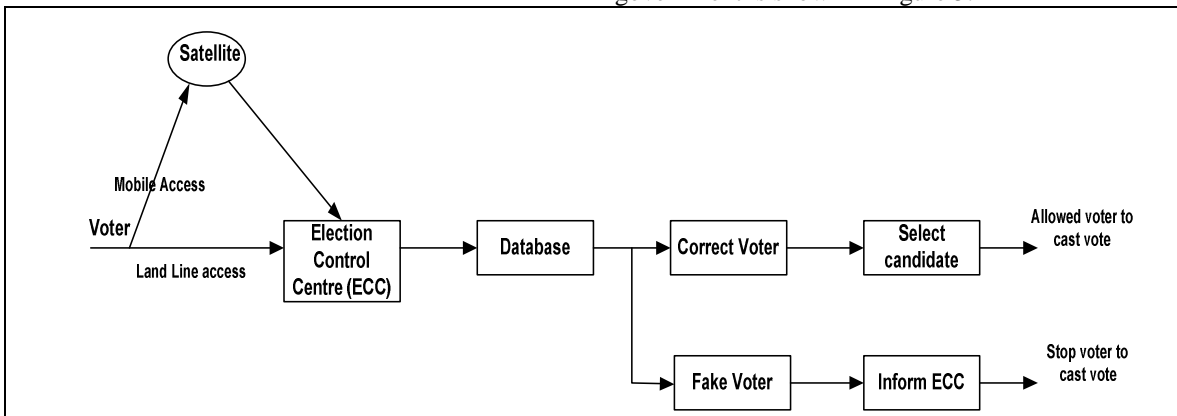


Figure 5: E-election Model

5.1.1 DISCUSSION ON FIGURE 5

Figure 5 describes the system starts from voter entry through his NIC (national identity card), SSC (social security card) or any other card number, to verify status. Before Election Day commences, the voter of any gender must contact the ECC (election control centre) for entry in the electoral list. In any case if a citizen is out of the country the embassy

should be contacted for registration in the database. If the voter is identified in the system then will be allowed by the system to pole their vote or otherwise the system will not permit any stranger to pole a vote which is the main concern of ERP to keep the system integrated.

5.2 CASE STUDY-II

The second case study is related to immigration in a state. This can be computerized by issuing e-visa. It can be safely said that candidates for deportation or otherwise can be easily identified at

the level of application for an e-visa. Such automation services can also be integrated into immigration service's making it convenient for both weary passengers and airport staff.

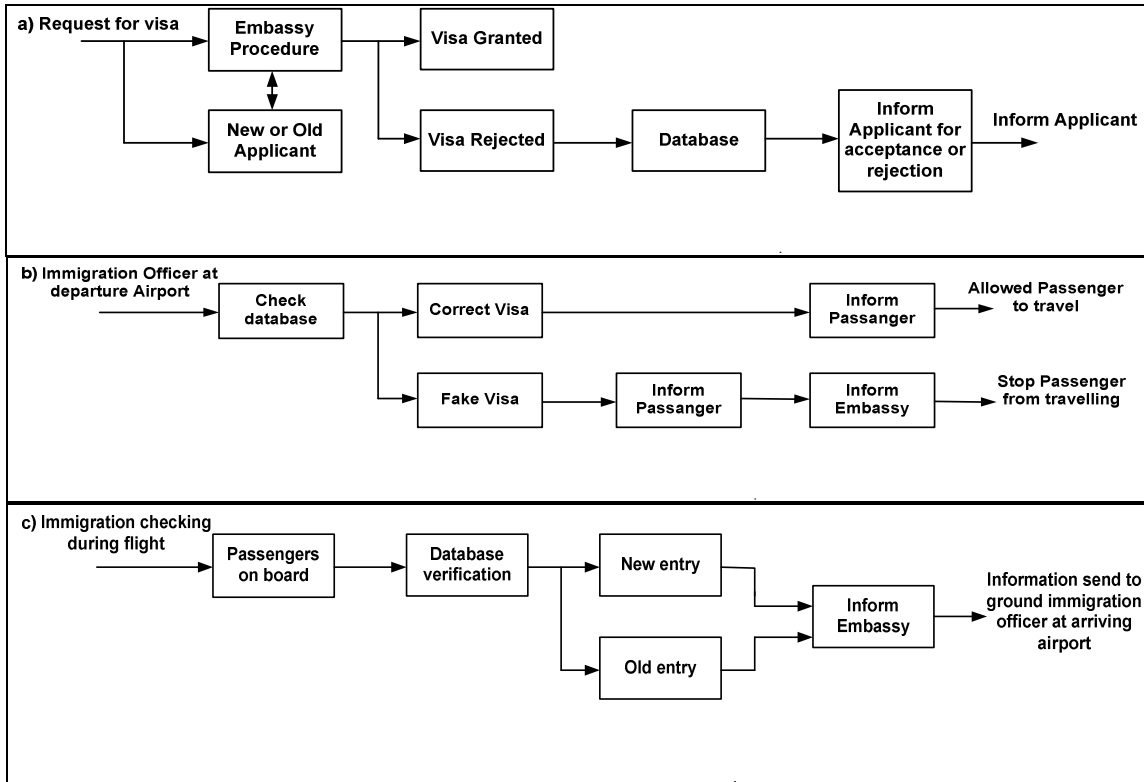


Figure 6: Proposed e-immigration Model; **a)** e-Visa processing application; **b)** e-immigration model at departure airport; **c)** e-immigration process during flight

5.2.1 DISCUSSION ON FIGURE 6

Figure 6(a) describes the normal procedure for visa application. After processing the concern embassy inform the applicant about the visa being granted/rejected visa according to the rules if the applicant cannot satisfy the requirements. In case if embassy granted visa then applicant can travel within certain period. Figure 6(b) describes that the immigration officer normally will be required to check the visa validity but not its authentication because there is no access to the visa issuance database. Figure 6(c) is an effort made to facilitate passengers after a long flight and in case of urgent situations as well as reducing the burden of formalities. A person travelling for the first time must go through such procedures but the frequent flyer does not. All the immigration work can be completed on board aircraft and information sent to the ground airport, regarding the status of passenger

so this will limit the time wastage to wait in a queue.

6. CONCLUSIONS

Every new concept is difficult to accept in beginning but later its implementation yields better results and brings convenience to life. In the study of ethnology related to ethics it is observed that mostly ethics can be learnt through experience. Furthermore, it is known that ethics are always supported by common agreement in a society, as to what is right and wrong. The relationship between ethics and law can be controlled by using an e-government approach. In the present world order only those will survive who develop proper systems and increase skilled/technical work force. The class systems in society are going to vanish completely, whereas



those classes will survive who have skilled/technical power. As skilled people will run industries and enterprises, so the need for skilled/technical class is inevitable and it is needed to run e-government as well.

ACKNOWLEDGEMENT:

I am grateful to the Research Centre (RC), College of Computer and Information Sciences (CCIS), for extending me all categories of support and continuous assistance during this research work. I am thankful to all those who contributed in any form to make this research successful. Thanks are also due to the Dean CCIS and the Chairman Information Systems Department, for their continuous support and time to time encouragement.

REFERENCES:

- [1] J. O. McGinnis and I. Somin, "Federalism Vs. State Rights: A defense of judicial review in Federal system", *Northwestern University Law Review*, Vol. 99, No.: 1, 2005, pp. 89-130.
- [2] W. A. Niskanen, "Bureaucracy & Representative Government", Tran. Publishers, Rutgers, 2007.
- [3] D. Nettle, "Understanding of Evolution May Be Improved by Thinking about People", *Evolutionary Psychology*, Vol.: 8, No. 2, 2010, pp. 205-228.
- [4] J. Zhang, Z. Zhang, "Applying E-government Information System for Anti-corruption Strategy", *IEEE Int. Conf. on Management of e-C., & e-G.*, 2009, pp. 112-115.
- [5] G. Skielse and E. Perjons, "New Challenges for e-Government: Value Realization among Independent Actors", *IEEE*, 2010.
- [6] J. Yao, Y. Lin and P. Zhao, "E-government Evaluation based on Citizen Satisfaction and its Implementation", *IEEE Int. Conf. on Management of e-C., & e-G.*, 2010, pp. 535-538.
- [7] J. Huai, "Quality Control over E-government Outsourcing", *IEEE Int. Conf. on Management of e-C., & e-G.*, 2010, pp. 547-550.
- [8] M. A. Alanezi, A. K. Mahmood and S. Basri, "Conceptual model for measuring e-government service quality," *ICOS Malaysia*, 2011, pp. 411-416.
- [9] D. O. Stewart, "The Summer 1787: The Men Who Invented the Constitution", An analysis of the book, 2009.
- [10] H. Chourabi and S. Mellouli, "E-government: Integrated Services Framework", *International Conference on Digital Government*, ACM, 2011, pp. 36-44.
- [11] M. A. Shareef, N. Archer and S. Dutta, "E-Government Service Maturity and Development: Cultural, Organizational and Technological Perspectives", Publishers IGI, 2012.
- [12] R. Heeks and S. Bailur, "Analyzing e-government research: Perspectives, philosophies, theories, methods, and practice", *Elsevier*, Vol. 24, Iss. 2, 2007, pp. 243-265.
- [13] W. Castelnovo and M. Simonetta, "A Public value evaluation of e-Government policies", *EJISE*, Vol. 11, No. 2, 2008, pp. 61- 72.
- [14] R. Matavire, W. Chigona, D. Roode, E. Sewchurran, Z. Davids, A. Mukudu and C. Boamah-Abu, "Challenges of e-Government Project Implementation in a South African Context", *EJISE*, Vol. 13, No. 2, 2010, pp. 153-164.
- [15] B. Yang, Y. Hao, J. Wang and Z. Hu, "Flexible service architecture for maritime business promotion based on mobile technology", *NSWCTC*, 2010, pp. 490-493.
- [16] K. Loudon and C. Traver, "E-Commerce", 8th Edition, Pearson, 2012.
- [17] E. Turban, J. Lee, D. King and M. Chung, "Electronic Commerce", 7th Edition, Pearson, 2012.