E-GOVERNMENT AND INNOVATION POLICIES IN UNIVERSITIES, CASE OF DEVELOPING COUNTRIES

Seyed Kamal Vaezi*

Abstract: Currently SMEs have been accepted as the main engine for establishment of electronic government structure based on innovation systems. This paper discusses this concept in developing countries and also the necessity to shift from SMEs orientation method to universities orientation method in developing countries as a paradigm of domestic management of e-government. So the study analyzes the innovation policy in universities based on a review of development program in an e-government structure. In an indirect process for determining the eligibility of higher education institutions to participate and create policy innovations in state e-government programs it has directed that institutions are eligible for participation if they meet two fundamental conditions:

1-Be able to evaluate, monitor, analyze and predict fundamental changes in science and technology in order to keep abreast of the global fundamental changes in science and technology.

2-Be able to develop priorities plan to organize technological activities of the country to reengineer nationwide development of science and technology and to provide a

This issues and circumstances are surrounding the initial development of evaluation and monitoring and major changes in procedure and standards. Also attention is given to some of the challenges that presently are posing for evaluation procedures as growing complexity, globalization and advances in instructional uses of electronic technology allow new forms of higher education provision to emerge.

The exiting policies need to be re-examined, and new policies developed. While higher education innovations must be recognized, it is also true that monitoring agencies have greatly assisted their career. In this process monitoring agencies serve as a public brain system to advocate changes that will improve higher education practice.

1. INTRODUCTION
Universities can be defined as the first steps towards to knowledge based organization. Today developed countries try to establish a knowledge based society of workers and citizens to deal with new challenges and opportunities to achieve knowledge economy (Lisbon European council, 2000) For example European Union strategy by 2010 is to be a knowledge based and able to guarantee sustainable growth, with more jobs and greater social cohesion. In this strategy SMEs play an important role as a major source of job creation and entrepreneurial (European Commission, 2002a, p.118)

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In this regard we can consider the SMEs as the main holding factors in this regard in developing countries but in this paper I want to present my idea to shift from SMEs as the major engine in developed countries to universities as the major engine for creation innovation in developing countries based on a knowledge based system. On the other hand these strategies must establish based on e-government concepts both in developing and developed countries.

The application of innovation as a policy instrument in e-government process has been associated with the value of efficiency and the language of performance measurement and quality. In some cases it has been focused on quality assurance systems. In other words it has strong affiliations with the concepts and methods of private sector management and with concepts that in themselves represent no substantive values on management itself. (14)

Sustainable development & improvement of every country is due training, preserving & maintaining its technological, educational, research & scientific assets, researches improvement, promotion scientific technological, higher education development of country

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* Seyed Kamal Vaezi, Phd, Ministry of science, Research and Technology, Iran Email:vaezi_ka@yahoo.com
and finally its widespread sustainable development. (11) Therefore identifying making contact and supporting this powerful stratum of the society in order to make use of their scientific cooperation and participation in various fields to produce science and technology is a strategic trend for sustainable development based on a national research development program. (13) To achieve this objective in line with the state national development program, the monitoring and evaluation program approved to provide and direct higher education and appropriate organizations for producing science and technology through directing educational activities to achieve sustainable development of the country. (20)

Through the development programs, research centers, universities and governmental research agencies have raised new questions about the quality and relevance of their systems and approach for program evaluation of higher education development program. (26)

This trend can be seen as a response to the increased size, complexity and diversity of the universities and higher education centers in terms of human resource capacity, administrative, financial, employment and organizational affairs.

This paper reviews several new developments in higher education development program with special attention to the issues that accrediting state long term innovation program for monitoring and evaluation policy and practice.

In the case of effectiveness the following policies can be consider: (Nauwelaers, 2008)

Balancing combination of 3 capacities:

- Creation of knowledge
- Diffusion of knowledge
- Absorption of knowledge

2. E-GOVERNMENT AND KNOWLEDGE

Improving knowledge governance in firms and clusters of firms becomes a key issue.

Policies need to "open borders": between:

- traditional fields of policy intervention, industries traditionally defined, various forms of knowledge production and diffusion, More efficiency through “Policy packages” rather than isolated instruments – Consider Policy Mix , and finally demand oriented innovation policies: a “set of public measures to induce innovations and / or speed up diffusion of innovations through increasing the demand for innovations, defining new functional requirement for products and services or better articulating demand.” (Edler 2007) containing:
  - Public procurement.
  - Growing importance of framework conditions
  - entrepreneurhsip
  - competition rules
  - labour market conditions
  - financial market
  - social capital, ...

Government’s role shifts from investor to facilitator - promotion of public/private partnerships and interface management

Measures stimulating the articulation of needs, preferences, ideas and fears of potential users
Shaping of regulations and norms

3. E-GOVERNMENT AND INNOVATION POLICIES

E-government is a knowledge management based system. In this system the primary goal is promotion the use of the built in knowledge through an organization. So the main abilities of a KM system are to gather knowledge, organize knowledge, distribute knowledge, convert knowledge into action, train ourselves continuously and repeat the cycle.(Zahner,2002). Based on the above definition we can come to this conclusion that in an e-government system the organization must be able to create capture, share and distribute the knowledge in the public services processing.

E-government services are not just for gaining financial profit (Syed-Ikhsan and Rowland, 2004). Although making profit is not a primary purpose of the government sector, income still needs to be generated to continue financing the much needed services. Therefore, the government would have to learn to adapt according to the needs of the general public. Through this, the authorities would be able to monitor the knowledge available within the organization to cater to the services offered. In this process, KM practitioners maintain that knowledge must be shared and serve as the foundation for collaboration (Danskin et al., 2005). Managing an organization’s knowledge is a process for ability making for organization seeking competitive advantage. It means that electronic government is a smart organization that manages knowledge for a better understanding in public activities. The interest in knowledge management has developed during the last few years, with a growing number of research publications, conferences and investment in knowledge management initiatives. (Skyrme, 2000)

In this regard the area of governance covers three areas: governance of the organization by the board of directors, governance of intercompany alliance and governance of intercompany entities. (Phillips,2001)

4. A COMPARATIVE PERSPECTIVES

The research key finding involving strategic innovation policies and roles stipulated in the e-government development plan:

- Updating higher education matter subject in conformity with the diverse national needs and authorizing universities and research centers to develop their carrier and innovate approaches in order to train more skillful, innovative and independent human resources to obtain a sustainable government structure.

- Developing and strengthening the Centers of Excellence in the pioneer universities and research centers.

- Expanding international collaborations to make more efficient use of global higher education achievements and to have easy access to the international scientific achievements.

- Making a more efficacious internal and external assessment system.

- Modifying the structure of national higher education system via authorizing higher education centers in order to provide a more dynamic, flexible, and competitive and integrated system.

- Providing secure financial resources for national higher education.

- Developing and strengthening the spirit of research and scientific thinking in the society.

- Making regular and continues effort in order to respond to the present and future
needs.

- Increasing the national sovereignty through the process of higher education and technological development.
- Organizing the higher education and development facilities in order to make connection between university skills, sources and research and also industrial centers.
- Giving effective orientation to the scientific society of the country toward the research in needed majors.
- Planning and creating the suitable ground in order to make the results of training applicable and commercial.
- Creating suitable research and scientific environment for absorbing domestic and foreigner scientists and specialist.
- Promote the technical knowledge of specialists. In order that creativities and innovations in technology emerge.
- Getting access to the latest information and technical knowledge in order to acquire and create superior technology in the area of international competition.
- Disseminating culture and organizing the collective research activities making use of the facilities.
- Giving suggestions about the suitable strategies for absorbing and transferring technical knowledge.

Creating balance between the higher education development program plan and that of the nation's, paying attention to societal needs, development ratio and higher education quality enhancement both in public and nonpublic center.

- Multiplying the ways and fostering public cooperation to offer new paradigm national research to be responsive to the ever increasing research demand for higher education promotion.

**Figure**: Innovation policy in developing and developed countries
The recommendations in this paper have been compiled from the monitoring protocols, policies and procedures submitted by governmental monitoring organizations based on the concept of discovering core competencies in developing countries providing smart systems in the structure of domestic e-government. (fig 1)

These recommendations focus on project level monitoring. Organization should consider reviewing their governance arrangements in wider systems context to ensure that the organization is able to achieve higher education governance based on a hierarchy of policy making to stipulate standards of roles, practice, higher education manual to assign responsibilities and finally standing operation procedure to achieve uniformity of the performance of a specific function. (15)

Thus monitoring organization should consider reviewing policies and procedures as well as governance practice, and also ensure that research governance and research monitoring align closely and practically with other appropriate and procedures such human resource policies, finance policies, health and safety policies and complaints etc. (13)

All research activity should be monitored routinely. In addition, a project might be audited if there is any suspicion of reduced research governance standards in a project. Monitoring and auditing should link together within an organization and both provide vital research governance information and safeguards.

By using a systems analysis approach based on role definitions, the problems of development and utilization of national research development program can be monitor in logical perspective. This perspective fall into two major categories:

- Those relating to effectiveness oriented approach.
- Those relating to efficiency oriented approach.

The first set of roles can be verify by making some changes in the design and performance of agencies providing various kinds of researches and also research monitoring actions and also to provide effective bridge between the functional elements. (16)

In this process monitoring and evolution of research development program should be better balanced and more effectively geared to the national needs for national development.

Based on the state national development program a large proportion of resources are devoting to the research section and it could be served best by improving the efficiency of the exiting evaluating system.

The second set of categories can be alleviated by a major change in national development
objectives which would give very high priority to a research development program of rural transformation.

5. OPERATIONAL ASPECTS
This paper emphasizes the choices made by SMEs or universities to conduct evaluations and what standards they would use.

This issues and circumstances surrounding the initial development of e-government and monitoring and major changes in procedure and standards, respectively. Also attention is given to some of the challenges that presently are posing for evaluation procedures as growing complexity, globalization and advances in instructional uses of electronic technology allow new forms of research provision to emerge.(17)

The exiting policies need to be re-examined, and new policies developed. While research innovations must be recognized, it is also true that monitoring agencies have greatly assisted their career. In this process monitoring agencies serve as a public brain system to advocate changes that will improve research practice.(20)

For national research development program e-government agencies need necessary process of innovation and ability of response to changing circumstances to move forward in a national oriented way. These centers may experiment with new approaches but must submit their plans to an outside review by other public or non-public evaluation agencies.

CONCLUSION
Based on the state national development program in developing countries a large proportion of resources are devoting to the higher education section and it could be served best by improving the efficiency of the exiting evaluating system so we can use them as the main engine for creating innovation in e-government structure.

The second set of categories can be alleviated by a major change in national development objectives which would give very high priority to a higher education development program of rural transformation.

It emphasizes the choices made by monitoring and evaluation agencies at different times as how they would conduct evaluations and what standards they would use.

This issues and circumstances are surrounding the initial development of evaluation and monitoring and major changes in procedure and standards. Also attention is given to some of the challenges that presently are posing for evaluation procedures as growing complexity, globalization and advances in instructional uses of electronic technology allow new forms of provision to emerge.

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The recommended items for monitoring should be assessed alongside an organization’s role for national project, including whether they are fulfilling the responsibilities including monitoring commercial research.
By such methods, monitoring and evaluation agencies not only guide the development of innovative practices but they also serve to lend credibility to emerging forms of higher education innovation. They need to set certain terms of good practice and encourage certain types of practices, while other practices are discouraged or banned. This represents a soft approach.

REFERENCES

Association of European Universities. 1997, Institutiona evaluation as a tool for change, Geneva, CRE.
Bernman, J. 1990, Quality Assessment in the public Sector in Britain, peer review and Performance Indicators: Quality Assessment in British and Dutch Higher education
Council for Higher Education Accreditation,(2003), Quality Review, Washington DC
El-Khowas E,(2001), Accreditation in the USA, Origins, Developments and Future Prospects, UNESCO, Paris, France
Institute for Research and Planning in Higher Education,(2003) Higher Education In Iran, A National Report, Tehran, Iran
International Development Research Center(1986), With Our Hands, IDRC, Ottawa, Canada
International Development Research Center(1982), Financing Educational Development, Proceedings of an international seminar held in Mont Sainte Marie, Canada
Supreme Council of the Cultural Revolution(2003), Articles os association of fund for supporting the researches in country, SCCR Resolution, Tehran, Iran
United Nations,(2003), Common Country assessment for the Islamic Republic of Iran, Tehran, Islamic Republic of Iran
Vaezi, Seyed Kamal (2005), "Application of Knowledge Management in Organizational Management" International Congress of ICEB, Hong Kong
Vaezi, Seyed Kamal, (2003), "A new approach to public Management", International Conference on management, sharif University of Technology, Proceeding, Tehran, Iran
Vaezi, Seyed Kamal (2004), Privatization of Higher Education in the Islamic republic of Iran, The congress of Privatization of Higher Education: Challenges and Quality Perspectives, University of Hyderabad, India.