

**GOOD GOVERNANCE IN LOCAL PUBLIC ADMINISTRATION: IT
POTENTIALS FOR PEOPLE-ORIENTED ECONOMIC
DEVELOPMENT IN MACEDONIA**

Snezana Savoska, Ph.D¹
Branko Dimeski, Ph.D²

**A PAPER PRESENTED AT THE 20th NISPAcee CONFERENCE, MAY 23-26, OHRID,
REPUBLIC OF MACEDONIA**

¹Dr Snezana Savoska is Assistant Professor in the field of Management Information Systems at the Faculty of administration and management information systems at the St.Kliment Ohridski University- Bitola, Republic of Macedonia

²Dr Branko Dimeski is Assistant Professor in the field of Public Administration at the Faculty of administration and management information systems at the St.Kliment Ohridski University- Bitola, Republic of Macedonia

ABSTRACT

Good governance practice is a condition sine qua non in establishing democratic values, developing human rights and improving the well-being and economic development in a society. There are good and bad examples of many policies trying to accomplish those goals in almost every angle of the human and societal activities. IT technology and its application helped in promoting good policies by increasing the scope of information, level of transparency and public accountability.

The principal research objective of the paper is:

- analyzing the impact that IT application in public sector institutions helps the business oriented people and business community in promoting economic development on local level in Macedonian municipalities;

The scope of the research in this paper is covering explanation of the abovementioned objective and will depend on the knowledge and available data that exists in the literature and practice about the role of IT in sustaining local economic development in Macedonia.

In correlation with the main objective and scope of the analysis in the paper, the research will concentrate in answering the following research questions:

- What IT policies exist at local level? Are they successfully applied?
- How they help the business community in promoting the local economic development?

The research design in the paper will follow the following research steps:

- Introduction;
- Research questions;
- Literature review of the past and present same or similar research in Macedonian and international context;
- Presenting and analyzing the impact of local IT policies on economic development in Macedonia;
- Research results;
- Conclusions; and
- Future recommendations.

For the purpose of writing the paper, we employed a combination of different methodology aspects that are based on:

- content analysis of various governmental documents and research papers that are dealing with good governance, IT policies and local economic development in Macedonia;
- using administrative databases and numerical data for the purpose of explaining the research issues;
- interviews with managers/employees from local enterprises and local community; and
- deduction approach will be applied through the content analysis.

1. INTRODUCTION

The issue of governance has emerged as a key concept pre-occupying the international community. Governance refers to the way a society sets and manages the rules that guide policy-making and policy implementation. Per capita income and the quality of governance are strongly positively correlated across countries. Three complementary possibilities work their way into this correlation. One possibility is that better governance exerts a powerful effect on income. A second possibility is that improvements in governance are the result of a higher income. Yet, a third possibility is that there are other factors that interplay to make countries richer and better governed, including IT development. In cases where higher per capita incomes fail to result in better governance, one possible explanation is ‘state capture’, defined as the illicit influence of the elite in shaping the laws, policies and regulations of the state. The ‘capture’ of the institutions of the state by elites implies that they can benefit from the lack of good governance, and therefore are likely to resist demands for change. *Governance* is a very broad concept, and operates at every level, such as household, village, municipality, nation, region or globe [Nzongola-Ntalaja, 2002].

The paper reviews the literature on the concept of governance when it is applied in situations when IT capacity of the local government is expected to serve or to foster the local community business development within the municipality in the Republic of Macedonia. Furthermore, it synthesizes the various perspectives on public governance to present a comprehensive understanding of this issue. The role of governments should be to provide a stable political and economic environment. Government policies throughout the world should aim to promote fiscal responsibility, remove barriers to competition, ensure a legal framework for property rights and regulatory oversight, and ensure transparency of the law and policies. The United Nations has considered “good” governance as an essential component of the *Millennium Development Goals* (UN Millennium Development Goals), because “good” governance establishes a framework for fighting poverty, inequality, and many of humanities’ other shortcomings. This fact has motivated researchers in this paper to try to assess governance, and this effort is an attempt to synthesize the results of this ever-expanding body of literature. The paper seeks to provide an overview analysis of the link that exists between IT capacity development and the local economic development in the municipalities in the Republic of Macedonia. The model that we will provide in the following sections of the paper will be searched in four local governments that are part of the Pelagonia region in Southwestern part of Macedonia. Those are Bitola and Prilep as urban municipalities, and Makedonski Brod, and Krivogastani representing the rural characteristics of the Pelagonia region. In order to get more precise picture of the overall situation, in the paper we will try to answer the following research questions:

1. What types of IT policies exist at local level and how successful they are implemented?
2. How they can be improved in order to provide better and accurate information for the local business community?
3. Is the IT implementation of local policies good managed and it is in function of fostering local economic development?

1.2 Why and How to Evaluate Governance?

The evaluation of “good” governance is important for a number of reasons. First, donors and reformers take it into consideration when assessing the impact of policies and determining future development projects. Second, “good” governance evaluations determine the investment climate. It is well established that aid flows have greater impacts on development in countries with “good” governance. Governance can be examined at three levels. On a global level, governance can be compared across countries and over time, thanks to standardized data that can be applied to diverse cultures, economies, and political systems. Governance data can enable robust benchmarking between countries, using common units of analysis. On a national level, governance can be analyzed more comprehensively thanks to more flexible and specific features. On a local level, what is subject of interest in this paper, governance assessment is targeted in a geographical region. This paper focuses on the local perspectives, searching for the link between or the impact of local government IT technology capacity on local business development. We assume that one of the concepts of securing good governance is the IT capacity of local government to respond to the business

interests of the local government in the Republic of Macedonia. That will be discussed in greater detail in the following sections of the paper.

2. LOCAL GOVERNMENT IT CAPACITY: A LITERATURE REVIEW

Local governments have, for a long time, made use of information technology (IT) to manage public services. Applying IT to government has prompted ample research about the relationships between IT and organizational and environmental factors, for example the effect of environmental and organizational factors on IT adoption (Brudney and Selden, 1995), the impacts of IT on organizational structures (Heintze and Bretschneider, 2000), the economic impact of IT investment (Lee and Perry, 2002), the effects of partnerships with private entities for IT innovation (Brown and Brundney, 1998). More recently research on IT use in local governments has extended to the discussion of E-government (Chen and Gant, 2001). While new IT tools especially web-based applications are becoming more and more prevalent in local government, applying new IT continues to depend on the general ability of local governments to obtain, manages and effectively use IT, as a whole their capacity to manage IT. Hence, it is important to clarify the causal mechanism in which organizational and environmental factors affect the level of IT capacity. For local governments, IT centered innovation must consider the unique factors influencing public organizations and the public policy process, such as a higher degree of control by external environment and administrative authorities-city mayor, city council and state government, and intensive formal and legal constraints (Bozeman and Bretschneider, 1986). Support for IT innovation from external environment and administrative authorities may enhance the effectiveness of IT innovation. Additionally, the capability of specific IT manager who plans operates and maintains information systems and trains end-users, provides another critical consideration.

Organizational capacities or capabilities are typically defined as an ability of an organization to do something, for example technological capacity is the ability to change or innovate through technological means (Daft, 1992). Following this model the general concept of IT capacity for local governments is the ability of the local government to effectively apply IT to achieve desired ends. It is important to note that, the type and amount of IT varies significantly across local governments, even local governments of comparable size and character, but the amount and type of IT does not adequately capture variation in effective use of technology. One reason for this failure is that IT by itself does not accomplish anything without the appropriate human and managerial resources. Over two decades ago, Kraemer and associates found that in order to understand how computers changed organizations, it was necessary to look at the entire “computer package” which encompasses ‘technique’ that is organizational structures and institutional arrangements for maintaining information system, as well as ‘equipment’ (e.g. hardware, software, network) and ‘people’ who operate, process and use the equipment (Kraemer, Dutton and Northrop, 1981). Thus, IT must be coupled with human and managerial resources in-place to more accurately capture IT capacity as defined above and is depicted in following Table 1 below.

Table 1. Level of IT capacity

	Level of Technological Development		
	First order (IT Infrastructure)	Second order (Office Automation)	Third order (Integration)
Non-Human Capacity	Hardware	Application development tool	Data Base Management System
	Network	Vendor provided applications	Web – Site/ Portal Service
	Operating System	Applications developed in-house	Geographic Information Systems
	Network Software		Intranet
Human Capacity	Analytical capacity of	Analytical capacity of	Analytical Capacity of

	users for IT infrastructure	users for applications	users for integration
	Attitude of users to IT infrastructure	Attitude of users to applications	Attitude of users for integration
	Training Resources for IT infrastructure	Training resources for applications	Training resources for integration

Table 1 identifies the major elements of our operational approach to local government IT capacity. The first dimension for this model is the level of technology development and the second is human vs. non-human capacity corresponding to the technology level. The first level of technology is core **infrastructure**. The next two levels reflect the historic development and current wisdom associated with IT management practices. The use of the technology to solve a specific problem or to perform a particular function is known as an **applications development** approach. The application development approach is often augmented by the existence of network integration of technology at least in the form of office automation. At this level specific problems can be solved and services enhanced, and solutions can be shared by multiple users, but the full capability of the technology remains unrealized due to the lack of integration across all uses and applications. The final level includes the development and use of **integrating tools** like databases and e-government web-portals. At this level the technology has the greatest potential to deliver the highest capacity. The human dimension of capacity captures the specialized human resources who work with IT directly, but also considers the non-specialized IT staff human resources which typically have little exposure or training in the use of IT. The principal dimensions of this human capacity are through both improved levels of specialized IT staff and increased capacity of non-IT staff at effective use of IT. Both of these group's capacity to use IT is related to analytic capacity and attitude. The third and in some sense most important element of human capacity though is the capacity to train, because training increase the number of specialized IT and non-IT staff's capability to utilize the potentials of IT. In almost every major study of IT in state and local government, it is this capacity that is typically sorely lacking (Caudle and Fletcher, 1989; Fletcher, Bretschneider, Marchand, Rosenbaum and Bertot, 1992; Maxwell School, 2002). Each lower level of technology is necessary but not sufficient for the next level to exist. Often the level of human capacity constrains the ability of a government to make the transition to the next level. Sometimes organizational and environmental constraints prevent transitions as well.

The factors found in innovation literature in general as well as IT innovation research may contribute to developing a model to explain what organizational factors are critical to the level of IT capacity. Based on Mohr (Mohr, 1969), innovation is a function of the motivation to innovate, the strength of obstacles against innovation, and the availability of resources for overcoming such obstacles. In local governments, therefore, barriers to IT innovation can be resistance from end-users to new information system, top decision makers' lack of will and understanding about the IT innovation and insufficient support or inappropriate regulations from upper level government. On top of that, IT manager who is not capable of planning and implementing IT innovation projects may hinder the success of IT innovation. Figure 1 provides an overall model of how various organizational and environmental forces promote or constrain a local government's IT capacity. The control variables identified within figure 1 are the primary environmental forces, while the main internal organizational factors are varying forms of administrative support including, general administrative support directly and indirectly through financial support, as well as specialized managerial capability in information technology, or technical leadership.

Figure 1. Determinants of IT capacity level in local government

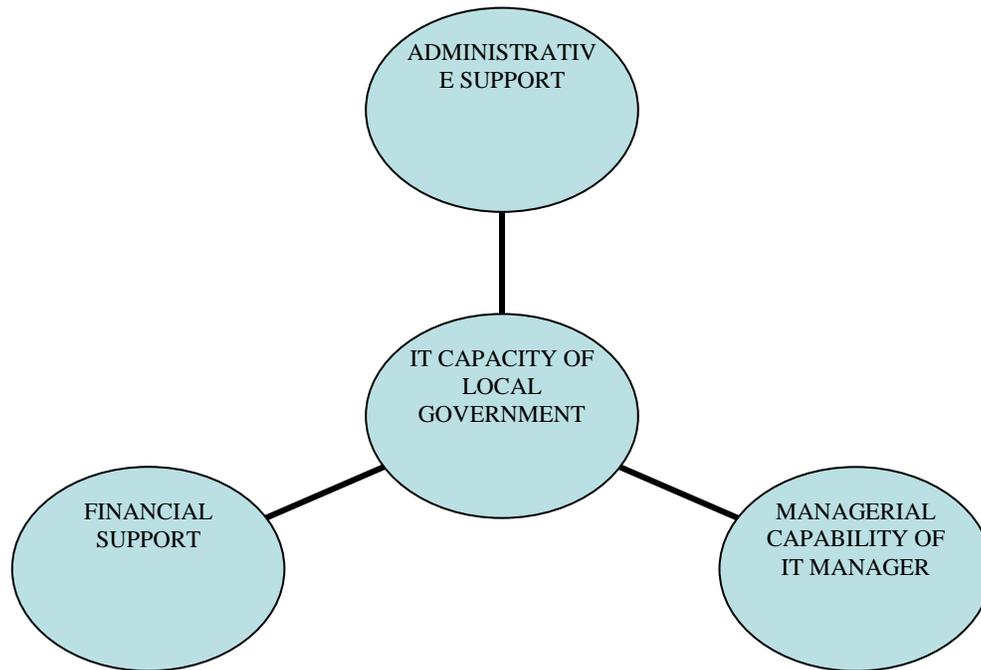


Figure 1 attempt to clarify that causal mechanism: *Managerial capability of IT manager* affects general *IT capacity* level of a local government through the *interaction* with the *support from administrative authorities* as well as with the *financial support for IT innovation*. This theory identifies three important factors affecting the level of IT capacity. Each factor is a necessary condition, but no one factor can be thought of as sufficient to achieve certain level of IT capacity.

Innovation would be more likely when the political environment to which an organization belongs has norms favoring the change (Tolbert and Zucker, 1983). According to Fountain (Fountain, 2000) enacting technology is highly influenced by institutional and political arrangements. Hence, improving IT capacity of local governments depends on whether support from administrative authorities- elected or appointed top administrators (mayor or city council) and also state government- is available for IT managers who are in charge of implementing IT adoption process and its utilization. Even in the case that IT managers initiate the adoption of new technology, support from administrative authorities may play a significant role in whether the innovation efforts are frustrated or completed. Support from administrative authorities can be expressed in several ways. First, top administrators' innovativeness is important for mobilizing resources. IT innovation requires large amount of investments, and its effects are not realized in a short term. To implement IT innovation, top administrators are expected to take the risk of failure or delay of IT adoption (Miller, 1983). Therefore, the top administrator has to have risk-taking propensity to support IT managers to design and implement IT adoption plan without worrying about the consequence (Moon and Bretschneider, 1997). Second, top administrators' knowledge of IT should be considered. Top administrators knowledgeable of the potentials of IT are more likely to have more positive attitude to IT innovation and to endorse the innovation initiatives raised by IT managers. Third, legislative body, i.e. city council, is as important as top administrators are, because budget allocation and other legislative supports are finally authorized by city councils. Like top administrators, city councils' IT innovativeness and knowledge form a crucial part of support from administrative authorities. Fourth, state governments'

influence also needs to be considered. State governments make efforts for state-wide technology diffusion, such as providing information about innovations, financial support during development, and procedural facilitation (Moon and Bretschneider, 1997).

The availability of individuals capable of producing new ideas is one of the significant factors promoting innovation (Moon, 1969), and innovations are likely to be proposed by individuals who have expertise in a particular area (Daft, 1978). Especially, IT innovations tend to start from ingenious application devised by managers with a technical background (Borins, 2000). Therefore, managerial capability of IT manager, which can be defined as the ability to identify problems of the current information system, and to develop and evaluate alternatives to improve the IT capacity of the organization, appears to be a decisive factor affecting the IT capacity of local government (Honadle and Howitt, 1986). This notion of managerial capability conforms to our early definition of capacity in general and IT capacity specifically, as the ability of the local government to effectively apply information technology. In local governments, an IT manager is in the position of initiating and implementing IT innovation projects. An IT manager's managerial capability as a change agent can be thought to be composed of *knowledge of IT*, *innovativeness* and *motivation*. *Knowledge of IT* is an essential part of IT managerial capability. As previously noted, IT encompasses a broad range of technologies. As innovation capability is contingent upon the skill level of the staff (Perry and Danziger, 1980), without the comprehensive expertise in IT, IT managers may neither design a plan appropriate to obtaining IT capacity nor gain trust from the administrative authorities whose political supports are essential for executing innovation ideas.

While *Knowledge* is a objective condition necessary for IT innovation, an IT manager is also expected to have the personalities necessary for initiating and implementing an innovative plan aimed at achieving a higher level IT capacity. *Innovativeness* and *Motivation* for innovation also comprise managerial capability of IT manager. *Innovativeness* of the IT manager is defined as the propensity to search any problems in the current system and seek out solutions for improvement, and *Motivation* of the IT manager is conceptualized as initiative attempts actually made to design innovation plans and the ability to obtain political and financial supports for such plans, for example, securing budget for new hardware, software, network equipments and training resources.

The availability of financial resources is one of the strongest predictors of innovation (Mohr, 1969). For organizational innovation, especially for adopting advanced IT, *financial support* is indispensable for procuring and developing adequate levels of hardware and software, and training end-users as needed. Therefore, we can expect that a large variation in IT innovation among city governments can be explained by the amount of budget available to adopting new IT. However, as the size of total budget differs from government to government, the relative proportion of the IT budget in the budget structure could be considered as the criteria to judge the level of financial support.

According to Bingham (Bingham, 1976), the socioeconomic status of citizens gives a positive effect on innovation in a local government. For this research, it is likely that the general *IT literacy* of citizens within a jurisdiction sets a level of expectation of citizens for delivery of local services through the IT means. Thus the level of IT literacy of citizens can be considered as an important environmental variable to explain IT capacity. Depending on the level of understanding of the potentials that IT may create, citizens' support for government IT project may vary. If more citizens use computer for their daily lives, they are more likely to expect that the government should provide services utilizing IT or utilize IT for the internal management innovation.

3. MUNICIPAL IT CAPACITY AND LOCAL ECONOMIC DEVELOPMENT IN MACEDONIA

Technology has been shown to affect the economy in many different ways. In recent years, researchers have documented the influence of technology on the productivity of individual workers organizations and industries and, the marketplace and wages (Tushman and Anderson, 1985; Bartel and Sicherman, 1998, 1999). It follows that technological change will have a dramatic impact on every community. The challenge

in many communities has been to identify strategies for providing access, training, and encouraging meaningful use of digital technologies. Educators, social service organizations, community based organizations, private firms, major corporations, federal agencies, municipal governments and local citizens have all entered the arena of technology access to solve the problem and yet the problem continues to exist. The economic implications of these findings can only be estimated at this point. Many agree that as society integrates digital technology into all aspects of living, the equitable distribution of digital resources will become an increasingly significant issue. Today, institutional and economic obstacles thwart equal access to information, commerce and the benefits of a new economic environment to all people.

The local economic development is a term that is very exploited in the Republic of Macedonia, especially with the current process of decentralization and separating the functions from the central to the local government. In the world, this trend of “localization” of resources is differently implemented and can be found good as well as bad examples of the process of governmental decentralization. However, it is fact that during periods of globalization, the role of local economic development is very important issue for the local government development especially in providing information and conditions for a specific help of the business community and every local resident that wants to start new business or to support some already existing local business. One of the great supports for the local economic development can be a development of inventive and dynamic IT surrounding that can contribute for changing of the organizational culture in the environment, both internal and external, and can provide appropriate conditions that will enable the young people to start local businesses in order to prevent the process of internal and external migrations from the country. A process that is much more evident in the last 10-15 years. According official statistics, a total of 120 000 young people left the country in the last 20 years. The number of classes in the primary and secondary schools is permanently decreasing every year which implies to the fact that the birth rate on municipal, regional and national level is permanently decreasing.

In order to stop or to alleviate the negative tendencies, the global development of IT technologies is one of the solutions. The IT technologies enable many young people to work for the global companies using internet connection. More important, the IT technologies enable greater flow and scope of information and transparency of the data that is necessary for the overall business development of the local communities. Considering that, our primary goal is to analyze the present impact of IT application among the local public administration in fostering local economic development in local governments in the Republic of Macedonia and to propose possible improvements by creating different structure of the organization of needed data for local economic development that is stored and managed by local administration.

In almost all local governments in the Republic of Macedonia exist particular local economic development sectors that have released basic information from explaining its legal jurisdictions (local economic development planning, creating strategies and priorities as well as tracking the legal obligations etc) to individual contacts and links about relevant institutions, agencies, non-governmental organizations etc. There are basic facts about local government as well as information that the local municipality has the legal obligation to release in public regarding the legal principle of transparency.

Overall, we think that the data that is directly needed for the business sector development is very often presented in many different governmental web sites and is not provided on one place. That can be very discouraging and time consuming for the local citizen that wants to get enough information before registering and starting new business in the local community. Taking into consideration the context of local economic development, a great number of local governments have created their own local economic development strategies that are easy accessible, put on the local government web site and readable by the general population. Those strategies consist information about almost all local government characteristics, provide a descriptive and analytical analysis of current situation, business climate analysis, the strengths and weaknesses as well as potentials and threats. In addition, the local advertisements on their web sites are also of big importance for the local business community.

Besides all the above, we must agree that when we think and speak about strategic planning of local government IT application there are no significant results. Why?

When IT application is planning in the local government, first of all, that pertains to providing transparent data that the local governments are legally obliged to provide to local businesses. In almost all local governments they are provided by using Content Management web sites. However, most of the data are very large in scope, bad structured, hard for browsing and without strictly defined dictionary of individual phrases. Besides the fact that the web sites contain all the information about local government on first look, the data is not regularly and automatically updated, static (without any possibility for direct user-interaction except the possibility for sending e-mail to some individual address) and do not possess parts that introduce the inventive and innovative business processes, which for local economic development is extremely important.

In many Strategies for local economic development we found relatively well defined information, but one of the problems is that they did not contain the necessary links for the mentioned data nor the data was updated in the last 2-5 years. All this problems, give us the right to think that besides existence of particular local economic development sector and official document called Strategy for local economic development, there are other pre-conditions for effective and efficient use of IT technology for successful work of the local economic development sector.

First, we will mention the invention skills of IT employees in the local economic development sector within local government, improving the organizational culture of local government employees as well as animating the business sector with this part of local government and tracking all the fresh information that is business oriented. At the same time it is very important to be included those employees that work with international organizations and track international project calls (fund raising) and can publish that information for the local business needs within or part of the sector for local economic development).

Second, the contacts with the local economic development employees, except by e-mail can be done by using separate blogs that are very popular tools for collaboration and communication as well as different other forms of Njiki logs as well as other mediums of individual communication such as popular web pages, Facebook, Twitter etc. Some local governments have already opened profiles, but mostly they are activated for informing the political same thinkers. Basically, the information exchange between the business community and the sector for local economic development is very important and in most cases results in positive business feedbacks.

Another element that is very important for successful functioning of IT application and support for the local business community in the Republic of Macedonia can be using join databases between local officials and local business community. Besides the fact that many of this information has not public character, there must be any way for them to become available to business community stakeholders or to be prepared in such a form that will not violate the current Law on Protection of personal data of service users or the Law for public information. Besides the fact that many local governments already possess the large scope of information that can be put in official databases, unfortunately that data is not well prepared for usage. They are still in Office Documents and must be additionally transformed in order to be in suitable format before becoming part of the official databases.

The support for increasing the innovative ideas of the local business community can be implemented by using many tools. Besides the blogs used by the members of the business community for exchanging business ideas, a so-called discussion groups can be created for some issue or problem where the members can ask questions, but also can answer on questions that are business oriented. During the time a so-called knowledge-base can be created that can contain the most often asked questions on blogs as well as data for experts that can help in some problem-solving fields, for example, providing consultancy, preparing the appropriate documentation etc. Our idea is that these collaborative tools and communication styles between the business community and local government must be provided by the local economic development sector and to take permanent care about its successful functioning. That means that the local economic development sector must provide hardware and software infrastructure that all the abovementioned will be supported as well as training of the competent people that can help in the process of implementation. In the global, especially developed world this type of communication and collaboration is especially highly developed in central and local governmental institutions and is very exploited way in communications with the citizens. Also, this type of work is very important for the national and global companies that have

geographically distributed employees that have a constant need for permanent communication and exchange of information and data. The effective work can even involve tele or videoconferencing or brainstorming sessions for particular set of problems. This type of work can improve the innovative capacities of the business community as well as the sector of local economic development in the municipality.

Besides, one of the most important questions that are imposed during the implementation of these types of projects is the negative human resource selection that brings status quo and ineffective work. In other words, political party employment of people not professional, without appropriate education and training and in very bad situation “not present on their workplace”. Many workplaces that were created or had a large capacity field in some problem area, were just politicized and did not bring any new support for the implementation of the IT projects that have a large potential for fostering business community economic development in the municipality.

4. MUNICIPAL SURVEY RESEARCH

In order to search for IT capacity in providing transparency and support for the local business community in fostering the local economic development, we sent a questionnaire of total of 15 questions to 4 local governments from Pelagonia region. Two of them urban (Prilep and Bitola) and two of them rural (Makedonski Brod and Krivogastani). We choose these pilot local governments as a small portion or sample from the all 84 municipalities in the Republic of Macedonia. The structure of questionnaire is presented in APPENDIX A at the end of the paper. In addition, the results or answers on the questions are presented in APPENDIX B, also at the end of the paper.

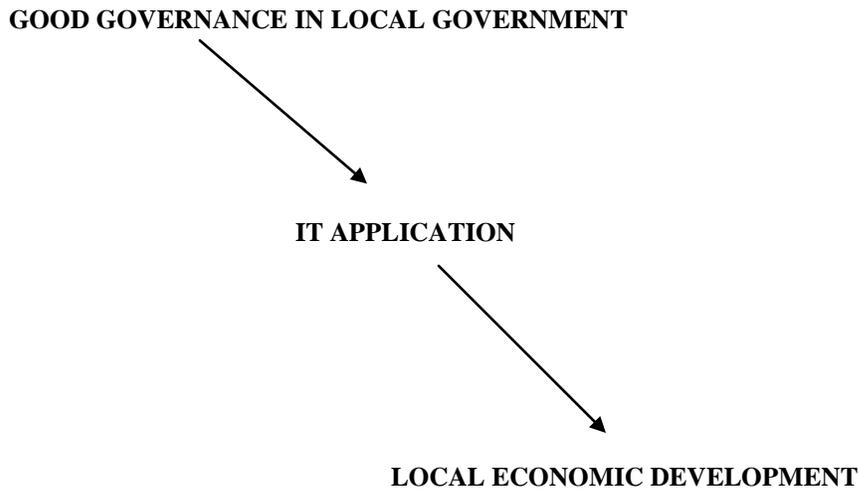
From the answers that we received from the survey, we were somewhat disappointed. Most of the answers were negative. Except urban municipalities, the rural municipalities did not even have web sites. Their answers to questions were unclear and incomplete. Urban municipalities have their web sites but are lacking IT personnel, technical equipment and do not possess integrative IT applications. When asked about transparency, their answers were that all the required information in the question can be finding in other institutions, mostly at national level or local or regional non-governmental organizations. All municipalities answered that do not provide direct business support for training, crediting or informing the local business community.

According the answers, undoubtedly, we can put the IT capacity of these municipalities in first order according Table 1. But that pertains to the urban municipalities. The rural municipalities did not have even got to the first order. In short, the results of the survey are very frustrating and point to the fact of very low level or very weak IT preparation and capacity in order to best serve the local community development. The external variables, such as administrative support, financial support and managerial capabilities of IT managers do not have any influence on IT capacity development because they are marginal or non-existent at all.

5. CONCLUSIONS AND FUTURE RECOMMENDATIONS

After almost twenty years of Macedonian independence to date, the Macedonian local governments do not have the needed IT capacity in order to provide sufficient support to local community business development. There are serious constraints in administrative, financial and training aspect. But, let us remind to the beginning paragraphs of the paper. Good governance concept is based on transparency and permanent citizens and institutional support. That is depicted in the figure 2 below.

Figure 2. Interdependence between good governance, IT application and local economic development in the local government



We cannot speak about good governance when there is absence of permanent support from local government. And IT capacity and application is just a tool or bridge between good governance and fostering local economic development.

The results of the survey confirmed that still there is a serious lack of IT support for the local businesses in the Republic of Macedonia. The four municipalities answered that they do not have integrated databases, developed communication and discussion tools and platforms in order to respond to the citizens needs.

Among many possible future recommendations, one is unique and can explain many other problems in this field:

The Macedonian local governments, both urban and rural, must invest a lot in the future in order to promote the concept of good governance by using IT technology. They must get into the third order from the present first order of IT development. Local businesses require informational support from the local public authorities and that is a real challenge for them at the moment. The power of technology to shape the local community economic development is enormous in today's global but at the same time local world. Macedonian municipalities are still far away from the concept of IT application and therefore still far away from the concept of good governance in the field of information support and transparency. The best choice is self-learning or self-development concept and the other, less time consuming is learning from the developed countries.

REFERENCES

- Bartel, Ann. and Nachum Sicherman, 1998. Technological Change and the Skill Acquisition of Young Workers. *Journal of Labor Economics* 16: 718-755.
- Bartel, Ann. and Nachum Sicherman, 1999. Technological Change and Wages: An Inter-industry Analysis. *Journal of Political Economy* 107: 285-325.
- Bingham, R.D., *The Adoption of Innovation by Local Government*, Lexington Books, Lexington, MA, 1976.
- Borins, S., "Loose Cannons and Rule Breakers, or Enterprising Leaders: Some Evidence about Innovative Public Managers:", *Public Administration Review*, 60, 2000, pp. 498-507.
- Bozeman, B., and S. Bretschneider, "Public Management Information Systems: Theory and Prescriptions", *Public Administration Review*, 46, 1986, pp. 475-487.
- Brown, M.M., and J.L. Brundney, "A "Smarter, Better, Faster and Cheaper" Government: Contracting and Geographic Information Systems", *Public Administration Review*, 58, 1998, pp. 335-345.
- Brudney, J.L., and S.C. Selden, "The Adoption of Innovation by Smaller Local Governments", *American Review of Public Administration*, 25, 1995, 71-86.
- Caudle, S.L., D.A. Marchand, S.I. Bretschneider, and P.T. Fletcher, *Managing Information Resources: New Directions in State Government: A National Study of State Government Information Resources Management*, School of Information Studies, Syracuse University, Syracuse, NY, 1989.
- Chen, Y., and J. Gant, Transforming Local EGovernment Services: The Use of Application Service Providers, *Government Information Quarterly*, 18, 2001, pp. 343-355.
- Daft, R.L., "A Dual-core Model of Organizational Innovation", *Academy of Management Journal*, 21, 1978, pp. 193-210.
- Daft, R.L., *Organization Theory and Design*, West Publishing Company, St. Paul, MN, 1992.
- Fletcher, P., S.I. Bretschneider, D. Marchand, A. Rosenbaum, and J. Bertot, *Managing Information Technology: Transforming County Government in the 1990s*, School of Information Studies, Syracuse University, Syracuse, NY, 1992.
- Fountain, J., *Building the Virtual State: Information Technology and Institutional Change*, Brookings Institution Press, Washington, DC, 2000.
- Heintze, T., and S. Bretschneider, "Information Technology and Structuring in Public Organizations: Does Adoption of Information Technology Affect Organizational Structures Communications, and Decision Making?", *Journal of Public Administration Research and Theory*, 10, 2000, pp. 801-830.
- Honadle, B.W., and A.M. Howitt, *Perspectives on Management Capacity Building*. State University of New York Press, Albany, NY, 1986.
- Kraemer, K.L., W.H. Dutton, and A. Northrop, *The Management of Information Systems*, Columbia University Press, New York, 1981.
- Lee, G., and J.L. Perry, "Are Computers Boosting Productivity?: A Test of the Paradox in State Governments". *Journal of Public Administration Research and Theory*, 12, 2002, pp. 77-102.

Maxwell School of Citizenship and Public Affairs and Eagleton Institute of Politics, *The New Jersey Initiative: Building Management Capacities in New Jersey Municipalities*, Syracuse University, Maxwell School of Citizenship and Public Affairs, 2002.

UN MDGs, United Nations, "Millennium Development Goals", <<http://www.un.org/millenniumgoals/#>>

Miller, D., "The Correlates of Entrepreneurship in Three Types of Firms", *Management Science*, 29, 1983, pp. 770- 791.

Mohr, L.B., "Determinants of Innovation in Organizations", *The American Political Science Review*, 63, 1969, pp.111-126.

Moon, J., and S. Bretschneider, "Can State Government Action Affect Innovation and Diffusion," *Technology Forecasting and Social Change*, 54, 1997, pp. 57-77.

Moon, .M.J., and S.I. Bretschneider, "Does the Perception of Red Tape Constrain IT Innovativeness in Organizations?: Unexpected Results from a Simultaneous Equation Model and Implications", *Journal of Public Administration Research and Theory*, 12, 2002, pp. 273-290.

Nzongola-Ntalaja G. 2002. "UNDP role in promoting good governance", Seminar for the International Guests at the Congress of the Labour Party of Norway, Oslo
<<http://www.undp.org/oslocentre/pub.htm>>

Perry, J.L., and J.N. Danziger, "The Adoptability of Innovations: An Empirical Assessment of Computer Applications in Local Governments", *Administration & Society*, 11, 1980, pp. 461-492.

Tolbert, P.S., and L.G. Zucker, "Institutional Sources of Change in the Formal Structure of Organizations: The Diffusion of Civil Service Reform, 1880-1935", *Administrative Science Quarterly*, 28, 1983, pp. 22-39.

Tushman, Michael. and P. Anderson, 1986. Technological Discontinuities and Organizational Environments. *Administrative Science Quarterly* 31: 439-465.

APPENDIX A

1. Do the information that is needed for local economic development in the moment is transparent? Which types of information is available for the local businesses and where they can be found?
2. What documentation is LED needed for business development and where it can be found on-line?
3. Is there existence of business database on-line and where it can be finding? Can be extract some statistics?
4. Does the local government have developed a special web site that can promote business potentials of the local government?
5. Does the local government offers stimulation measures for international business partnerships?
6. Is there is a social map? Is there a list or roster of the available human professions or available human knowledge in the local government?
7. Are there any measures for easier employment in the local government?
8. Does the local government offers some assistance in business plan development? If there are, where can someone find information or help with business plan development?
9. Is there any information provided by the local government about participation on international events and projects?
10. Is there some type of information provided by the local government about the business crediting, and is there some service by the local government that make analysis and can give the private sector necessary support and help with business sector financial support?
11. Is there any information provided by the local government that gives an overview about the structure and potentials of the local businesses, number of employees etc.?
12. Is there existence of a special registrar about the local businesses with their needed attributes?
13. Is there an interest for creating an innovating site that will be a generator of new ideas- a blog that connects the Universities and the business sector in promoting local development?
14. Is there any idea about creating and developing stock labor market- supply and demand of labor in the local government?
15. Does the local government have prepared a Strategy for Local Economic Development for the next 3-5 years?

APPENDIX B

Number of Sample Question	Prilep	Krivogastani	Makedonski Brod	Bitola
1.	there is LED database, but its incomplete	partially, we do not have a web site	Currently, we are working for getting the real transparency on the web site	yes, on the official web site
2.	there are other sites	we do not have a strategy for local economic development	Available on the municipal web site	it is outside municipal jurisdiction
3.	the documents can be find on other places, they are not part of the web site	in two sectors, urbanism and construction or sector of statistics	there is database in the municipality	www.bitola.gov.mk
4.	they can be found on the Employment bureau web site	through the Center for development of Pelagonia planning region	in the phase of preparing different reports and putting them on the web site	www.bitola.gov.mk
5.	on the municipal web site you can find data about the municipality, and on the other sites the structure of employees is available	we do not have any data	there are such advantages. In the moment there is one company from Israel that searches for those advantages	yes, for investments in industrial zone Zabeni visit www.bitola.gov.mk
6.	on the Employment Agency web site or the Statistics web site	we do not have, probably you can get from the Agency for employment in Prilep municipality	this data can be found in the employment agency in Makedonski Brod	yes, in the sector of human resource development
7.	you can find them on the governmental web site www.vlada.mk	we do not have any data	no	/
8.	PREDA have training program and those business people that will register for training are put on a business incubator list	the municipality does not organize business plan development training, but it is possible through other organizations	there is a possibility for providing training	in the business incubator organized by the local government, visit www.bsctitola.org.mk

9.	there is no defined strategy around this issue, on some web sites you can access call for business projects irregularly	we do not have any data	it can be through IPA funds. This type of information will be soon put on the web site.	there is no such information available
10.	/	through the Center for development of Pelagonia planning region	no	a regional business chamber
11.	there is no analysis at all. The data can be found on the commercial banks web sites	www.pelagonijabiznis.mk	we are making efforts these type of data to be part of our web site	business credits-information in business incubator or the regional business chamber
12.	That is not work of LED. I do not think it can	yes, if you come personally in the municipality	currently, there is a process of gathering data for preparing a investment guide that will promote local business companies	www.bitola.gov.mk or the regional business chamber
13.	in UJP and Central Register	there is a small amount of data in the municipality	currently is in a phase of preparation	regional business chamber
14.	/	there can be find a mutual cooperation understanding	such idea exists for a longer time	/
15.	Contact the Agency for employment	No, but we plan this year	no	yes, visit www.bitola.gov.mk