IMPROVING "CUSTOMER" SATISFACTION IN PUBLIC SERVICES WITH THE HELP OF INFORMATION LOGISTICS

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Summary

Public services and logistics are generally treated as different fields, but the ideas of logistics management with the help of the Unified Services Theory services can be used for the benefit of the public services building on the concept of New Public Management. The expectations in the advanced, globalized world are pushing governments to find new methods to fulfil the needs of the citizens while keeping up or even increasing efficiency and effectiveness.

The aim of this theoretical paper is to examine how the ideas of logistics and public services could be integrated to improve citizen satisfaction and to explore what role logistics methods can play for the benefit of all.

Public services are in many ways similar to services provided by private businesses but they also differ from them. Nevertheless the importance of efficiency and effectiveness are crucial for both kind. Customer satisfaction also have key importance in the private sector and as the world changes its importance is growing on the public field as well.

This paper connects the concepts of New Public Management, E-government and the Unified Services Theory as they aim to improve customer satisfaction. The paper also discusses how information logistics could help to achieve this particular goal within the field of public administration by involving people into the processes.

Keywor ds

public services, New Public Management, Unified Services Theory, E-government, customer satisfaction, information logistics

Összefoglaló

A közszolgáltatások és a logisztika alapvetően eltérő területek, de a logisztikai menedzsment gondolatai a Unified Services Theory (Egyesített Szolgáltatás Elmélet) segítségével a közszolgáltatások hasznára válhatnak a New Public Management koncepciójára építve. Az elvárások a fejlett, globalizálódó világban arra kényszerítik a kormányokat, hogy újmódokat keressenek az állampolgárok igényeinek kielégítésére, miközben megtartsák, vagy akár még növeljék is a hatékonyságot.

A tanulmány célja, hogy megvizsgálja elméletei keretek között, hogyan lehetne a logisztikai menedzsment elképzeléseit integrálni a közszolgáltatásokba úgy, hogy javítsuk az állampolgárok elégedettségét, valamint, hogy feltérképezze, milyen szerepet tudna játszani a logisztikai megközelítés a hatékonyságnövelésben. A közszolgáltatások sok tekintetben hasonlítanak a hagyományos szolgáltatásokhoz, azonban egyúttal el is térnek tőlük. Azonban a hatékonyság kritikus szempont mindkét típus esetén. A vásárlói elégedettség szintén kulcsszerepet játszik a magánszférában, és ahogy a világ változik ez a fontosság úgy nő a közszférában is.

A tanulmány megkísérli összekötni egymással a New Public Management, E-governemnt és a Unified Services Theory koncepcióit abból a szempontból, hogy mindegyik esetén fontos szerep jut az elégedettség növelésének. Emellett pedig arra is igyekszik rávilágítani, hogy az információ logisztika hogyan tudna segíteni ennek a célnak az elérésében a közszolgáltatások területén azáltal, hogy az embereket sokkal inkább bevonjuk a folyamatokba.

Kulcsszavak

közszolgáltatások, New Public Management, Unified Services Theory, E-government, vásárlói elégedettség, információ logisztika

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Introduction

Public administration as a profession is facing increasing stakeholder expectations (Lathrop et al. 2010; Ringold et al. 2012; O'Toole–Meier 2015). Citizens of a state can be considered as customers, but customer satisfaction is a complex concept which is difficult to define properly (Stoker 2006; Meynhardt 2009). The field of satisfaction is studied from several different aspects, and in business life it is one of the main indicators of future success because if our customer is happy it is likely that he or she will make further purchases. But every customer is unique with own perspective and needs which are sometimes hard to satisfy. Especially if we are speaking about the field of public administration.

Public services and logistics are generally treated as different fields, but the tools of logistics management can be used for the benefit of the public services. The expectations in the advanced, globalized world are pushing governments to find new methods to fulfil the needs of the citizens while keeping up or even increase efficiency and effectiveness. This paper examines the tools of logistics and public services could be integrated with the help of the Unified Services Theory building on the concept of New Public Management for the benefit of all.

To a logistics manager lead times are critical and customer satisfaction is crucial for longterm survival. In business customer satisfaction translates into money and profit, but in public administration satisfaction does not necessarily relate to money. In business to be successful companies fight for customers and always try to improve themselves and their goods in order to not loose current customers or even gain new ones. But in order to improve their efficiency and effectiveness companies need information. Whether they are offering products or services they have to know what the customers want. Thus they try to involve customers' opinions in the development processes. I think this is the key for success.

Of course a company can be profitable without asking customers what they want and just offering them generalized basic products. But in time the world will change, and often customers' expectations are changing with it. New competitors rise with new products and customers will move on where they feel they can be more satisfied and the company who offers only the basic products without the desire to change will suffer. Thus, in the private sector the coercive force to change and to adapt quickly is great.

But in the public sector, in most cases governments do not have competitors and this monopolistic state seems to allow them to change slowly and offer generalized services without great efforts of citizen involvement. But the world still changes and every citizen of a state is a customer of many private companies. Thus, they get used to the idea of satisfying their needs through companies. The technological advancements of the last decades allows them to express their needs more often in several ways which offers great potential to gather information.

Because of these advancements and changes citizens can also express their needs more and more accurately towards public services but the lack of options deprive them from the possibility of moving on. They are forced to use the same services even if their level of needs changed. As they are using more improved services offered by private companies they also expect the improvement of public services on the same rate.

From a certain point of view the public administration system can be considered as a large scale supply network. If we are speaking about supply chains and networks, people generally associate them with the flow of goods from the point of origin to the point of consumption. But there is also the flow of information which travels to both directions. From my point of view the public administration system has both attribute in its own specific way.

As we will see logistics management and other managerial areas can be really useful for public services if we embrace the concept of the Unified Services Theory, to see services as processes in which customers are playing key roles.

There are several governmental approaches from which the concept of New Public management tries to give space to new ideas within the field of public administration while also

highlights the importance of the citizens' real needs. Even if it is considered to be outdated by many scholars the main ideas of NPM's attitude towards citizens are worthy to examine and offer a broader understanding of the new evolving concept: the E-government. On the other hand the Unified Services Theory as a method and a special way of thinking can help us to see services differently, from a new angle where citizens (as the customers of the state) are exceptionally important and so their increasing amount of feedback should be considered as a part of the developing process of new public services solutions to face social and environmental challenges effectively.

But to develop these new solutions appropriately we need the right direction. We have to know where to go and for this we need information. This is the part where the field of logistics and more importantly the idea of information logistics come into the picture.

Both topics, the evolving E-government concept and the information logistics are considered rather new. This article intends to show how information logistics can help to improve customer satisfaction among public services through the glasses of a logistician, using Unified Services Theory as a tool to reinterpret service delivery and approaches of both NPM and E-government to define advantages of treating citizens as customers of a state in order to create public value which meets with the increasing and ever changing expectations.

Public services

Sometimes services are difficult to identify because they are closely associated with a good, but usually during implementation when services are sold no transfer of possession or ownership takes place and services cannot be stored or transported. They only come into existence at the time they are bought and consumed.

The government offers many services what people need. But this offer seems to be completely natural for everyone and no one think about how these services are planned and executed, if they are available. They have to be available at all time, because if they are not, that could cause major problems. And even if they are available, the efficiency, effective ness and usefulness could be questioned both by the service providers and the people who use these services.

Basically summarized those institutions that are maintained by the government to provide general services for the citizens are considered as public institutions and the offered services are public services. In most of the developed countries the term of public services often include healthcare services, emergency services, education, postal service, security and infrastructure on many fields such as transportation, water supply or energy. The numbers of publicly provided services are different in every state but even if they are not publicly provided or financed, they usually are highly regulated by the government for social or political reasons.

Besides these overall services the government provides many more additional services which are essential to the citizen's everyday life and are available to everyone regardless of income or physical or mental ability. If our driving license or personal identification expires or we would like to claim a passport to visit a foreign country we use public services as well. These services are performed by civil servants or public employees who are hired by the elected officials.

Most public services are under-provided by the market or exclusively provided by the government itself and because the characteristics of the service term itself, they do not involve manufacturing goods. They may be provided by local or national monopolies, especially in sectors which are natural monopolies.

To secure the availability of these governmental services the state is forced to build and maintain a state-wide supporting infrastructure. It is necessary to ensure the local accessibility through local offices. The public administration offices are conduits between the government and the citizens, and these local access points where the services can be accessed are considered the most common interface between the people and the state. And because of this their efficiency and functioning capability shapes people's thoughts about the government itself. At a national level, public services underpin human welfare and economic growth. To supply and provide these public services without any major problems are key tasks for the government. And as I mentioned people care about public services and depend on them being delivered well (Rondinelli 2007).

Public services need to be centered on citizens, and need to be responsive to their needs, while delivered with integrity. Promoting greater transparency and enabling ordinary citizens to assess the quality, adequacy and effectiveness of basic services, to voice their needs and preferences and to become involved in innovation offers an opportunity to enable better use of public funds, and improve service delivery (Ringold et al. 2013).

The quality of service delivery is critical both for the government and the citizens. We are living in the 21st century but the way how most of the public services are delivered was designed in a previous era to fulfil the needs of that era. Because of this most governments struggle to respond to present day needs driven by complex challenges, such as those created by aging populations, chronic health conditions, mega cities and poverty and inequality. Even if the integrity of public resource flows can be secured, these new challenges require new solutions and completely new approaches (Ringold et al. 2013).

Public services are traditionally organized in a way that puts the public in a passive role, as the recipient of a standardized service. But life is changing and so do the people. The innovation of other areas such as travel, communications, media make deep impact on how we see our everyday life. Nowadays citizens are connected like never before and have the skill sets and passion to solve problems, and are used to give feedback on the goods and services they receive, and to play an active role in making choices. With such an approach and high expectations from people the old school bureaucratic processes and the lack of fast and efficient solutions often turn people against the government leaving permanent bad impressions. For example government employees are often accused by not working hard enough (Richwine 2012).

Despite the fact that it may not be obvious the governments feel the pressure and they are already experimenting with new solutions, and they try to redesign different parts of the system to meet the expectations. Trying to involve the citizens and make their role from completely passive to at least partially active cannot be done in a day. It requires both long time and long term solutions. But at the end citizens can play a more active role as a user community for public services. The new technological solutions and the easily available data enable a different kind of participation (Lathrop et al. 2010).

However translating information into action seems to be a difficult challenge. The relationships between citizens, policy-makers, program managers, and service providers are complicated and are not easily altered through a single intervention, such as an information campaign or scorecard exercise (Ringold et al. 2012).

New Public Management

Traditionally governments never thought about citizens as customers and because of this the way how public services were executed excluded the citizens as potential feedback resources. But in the last decades of the 20th century as our technology and society developed governments realized the necessity to develop new ways and methods of the services to maintain efficiency and serve the changing needs of citizens in order to secure public satisfaction.

Globalization has grown over recent decades, and levels of global interconnected ness most recently resulted in the need for major public innovations (Walker 2011).

One of the modern public administration approaches is what we call New Public Management. Basically in this case different kinds of management techniques from the private

sectors are taken over and used in the public sector for the benefit of the government to enhance efficiency and effectiveness and while doing so it centers the actions on the citizens.

New Public Management has as many followers as critics, but for a better understanding we have to dig a little deeper both in time and space. Also it is not entirely new despite its name, as the saying goes: everything is new for a newborn child. Ideas spread like viruses from older host to newer ones, from developed countries to developing countries all around the world. But if we are careful we can learn from previous mistakes and even improve previous successes.

The foundations of the New Public Management were laid off in the eighties mostly in England, Australia and especially New Zealand (Stark 2002; Hood–Peters 2004), and until the nineties it was mostly seen as a developed country, particularly Anglo-Saxon phenomenon. But at the beginning of the nineties the popularity of the New Public Management started to grow and several variants of NPM techniques appeared in some developing and transitional economies, such as management decentralization within public services, downsizing and performance contracting with the help of autonomous agency creation, budget and financial control devolution and increasing the performance, outputs and customer orientation in the public services (Stark 2002).

There is a wide set of ideas connected to NPM. According to Kettl (1995) New Public Management can be interpreted as the competition between public and private service providers, decentralization and delayering of government bureaus, benchmarking and output measurements, using private sector management tools, and more importantly offering more choice for citizens.

During the evolution of NPM techniques the efforts produced several paradoxes (see Hood–Peters 2004) but the basics of this concept can be summarized in these principles (O'Toole 1997):

- suppression of the role of the government, dismantling its functions and increasing the involvement of private market participants
- Effectiveness, efficiency and economy in government (the less is sometimes more)
- Decentralization of decision-making, the transfer of powers to the lower levels of political decision-making and managerial levels (let the driver drive)
- The reduction of hierarchical levels of the administration, by creating quasi-autonomous (agency-type) structures.
- "Marketization", introducing market-type mechanisms and methods in the creation of public services such as outsourcing tasks, complex outsourcing of public services, privatization
- "Managerialism", introducing corporate management techniques in public administration, such as performance measurement, performance-based assessment, strategic planning, benchmarking, and management control systems.
- Another main objective of the New Public Management is the reform and deregulation of the complicated legal system

According to Stark (2002) NPM can be defined in either the language of public administration or in the language of strategic management as it is recombines the roles in a new way (for more detail see: Stark 2002) and because of this it is really a new approach. I agree with this statement.

New Public Management reforms have been driven by a combination of economic, social, political and technological factors. A common feature of countries going down the NPM route has been the experience of economic and fiscal crises, which triggered the quest for efficiency and for ways to cut the cost of delivering public services (Hood–Peters 2004).

In the case of most developing countries, reforms in public administration and management have been driven more by external pressures and have taken place in the context of structural adjustment programs. Other drivers of NPM-type reforms include the ascendancy of neoliberal ideas from the late 1970s, the development of information technology, and the growth and use of international management consultants as advisors on reforms. Additional factors, in the case of developing countries, include lending conditionalities and the increasing emphasis on good governance." (Larbi 1999, 4)

As we can see the concept of New Public Management can be considered as a set of ideas with the common effort to extend the principles of economic sectors to the state (public) institutions while citizens of the state are also treated as customers. Its goal is the economic modernization of both the public institutions and the state's to create efficient public administration processes.

The NPM concept is not simply a corporate management approach to the public administration; it is also an effort to achieve higher rate of efficiency and effectiveness in the operations of the state, while it prefers the neo-liberal state concept, which only supplies the most important social responsibilities. The NPM methods require both economic performance and cost-oriented thinking, and they try to achieve with minimal cost the maximum performance.

One of the main factors of the New Public Management is the thought that the public administration serves the people and not the other way around and citizens can be effective contributors.

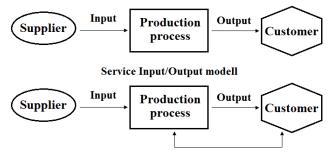
Features of the customer-friendly administration:

- understandable regulation
- deregulation of insecure or unnecessary rules
- simple procedures
- quality improvement of services
- information windows in offices
- customers-friendly environments in the offices

Unified Services Theory

To understand the Unified Services Theory we must embrace the thought that every service can be considered as a process. From this viewpoint we can see services as production processes where each customer provides additional input for the production. With non-service processes, groups of customers may contribute ideas to the design of the product, but individual customers' only participation is to select, pay for, and consume the output (Sampson 2010).

Figure 1: Customer's passive and active role in a non-service and service model
Non-service Input/Output modell



Source: own compilation based on resources

From the viewpoint of the Unified Services Theory the customer provides significant inputs into the production process of a service. During traditional product manufacturing groups of customers may contribute ideas to the design of the product as test audience, however, an individual normal customer can only select and consume the output (Sampson 2001).

As seen on the first figure in the Unified Services Theory the customer has a key role in the service system and support the process with additional information to create more added values for the benefit of both the future customers and the owners of the service operation.

According to traditional thinking when we are speaking about manufacturing something only the suppliers provide inputs, and the customers simply buy and consume the outputs. In this case the customers provide no input at all just simply pay for the given outputs. By contrast the Unified Services Theory claims that every manufacturing production and traditional service can be considered as a process in which the customers can provide additional input and may even contribute ideas to the design of the product. Of course in normal cases one customer will not redeem the world and change the particular attributions of the product he pays for, but the additional information in general can cause changes in the design of the overall service or in the overall service process.

Because the Unified Services Theory is based on the idea of customer inputs it is necessary to define who the customer is. Generally, the customer is the individual or entity who directly or indirectly decides whether or not the firm shall be compensated for production. With services a company's production process can be defined as company effort to add value to customer inputs. Company effort in preparation for production is the pre-production process. When the production process concludes the customer use the production outcome to continue to add value. This post-production process is primarily based on customer action. Often, well-designed service outcomes will enable the customer to create value in the post-production process. This principle occurs because the only ways companies can add value is through efforts and through outputs. Efforts can add value directly to customer inputs (given by the Unified Services Theory). Outputs, or outcomes, can allow customers to add value after the company's production efforts are complete (Sampson 2010).

As we can see Unified Services Theory brings us one step closer to understanding the nature of services and the intangible role of customers in the processes while it points out that in our developing world the more and more dynamic interactions among technological and human systems inevitably lead to managerial and organizational changes in services.

Logistics in public services

We know that with the help of the Unified Services Theory we are able to see any kind of service as a process. Public services supplied by the government are no different. We can see them as processes as well. Every kind of process needs supply and has a certain demand.

In any business or factory one of the major questions is: what do our customers want and how can we fulfil their needs? First of all we have to know what they want in order to produce the right product with the right specifications. Second of all we have to introduce our product to as much customers as possible to make them want what we produce.

After we know exactly what we have to produce to fulfil the needs of our customers the next step is to figure out how we should produce the exact "product" our customers need. The elements of logistics management can give us several cues and methods what we can use to effectively operate public services.

The goal of every supply chain and its participants is to create value with the purpose of fulfilling the needs of the customers. From a certain point of view the government and its infrastructure can be considered as a large supply network as well with several major nods through which information and material flows simultaneously in every directions. In this particular case we can speak about service supply chains as well.

According to the traditional assumption governments do not have customers, and thus no competitors, but as we discussed before governments are also service providers and have various types of customers such as the residents, taxpayers, investors, property owners, visitors, small business owners, and other funders and recipients of public services. It is true that in most

cases the government services are monopolies with no significant competitors so the citizens are captured and forced to use the services what the government offer to them.

And because of this monopolistic status the governments are not forced to act and change quickly as other businesses on the private markets. Many citizens are critical of the government because for example the lack of needed services, and specific complaints often include the belief that there is a huge discrepancy between the paid taxes and the value of received services in exchange (James 2009).

Governments have several challenges, they have to meet the expectations of improved service delivery while at the same time old and new services and programs often have budgetary constraints, but despite the difficulties with different management models and tools governments can deliver more quality, speed, efficiency, convenience and fairness to its citizens.

The public sector is different from the private sector but it also part of the economic life and deals with production, delivery, and allocation of basic public goods and services on different levels. Of course the customer-centric philosophy will require much more flexibility and the government has to take into account the individual needs much more in order to ensure the development of the public services (James 2009).

Information logistics

It is evident that modern information technology plays a key role in effective logistics management and public services as well. In the last two decades information technology has emerged in the world affecting our personal, social and public life and has made a significant impact on the quality' of life. Access to accurate information can influence decisions and in turn can affect the efficiency of the overall organization.

On the private market it is essential to the companies to continuously develop themselves in order to outrun their competitors. The management of information technology can provide efficiency and effectiveness or it can support strategy decision making. Management information systems can help organizations to maximize the benefit from investments in personnel, equipment, and business processes.

The effective information using is as important in the public sector as in the private sector. As we discussed governments in most cases do not have competitors thus the driving force of innovation is very weak in most cases. But as we can see in our nowadays world with the technological and social development, the needs of the citizens are also changing. They want better services and solutions to their problems, and they produce much more feedback towards governments. This feedback can be direct or indirect but in both cases it is pure information. Information isn't worth much if it doesn't serve a purpose so it has to be analyzed to serve the needs of public managers in order that they can make better decisions and changes in the system.

Today, management information systems are used broadly in various contexts. These include decision support systems, resource and people management applications, project management, and database retrieval applications. These solutions can be used and integrated into the public service as well, and governments should understand the importance of them in the context of enterprise revenue.

"In the last two decades information and communication technology has caused various waves of innovation that have a tremendous impact on our life. The Internet has become the major integration platform that allows integration of information from various sources. That enables the access to nearly any kind of information." (Deiters et al. 2003, 40)

But easily accessing to so much information can cause almost as many problems as benefits because it could lead to information overflow rather than to the desired results. The term information logistics as a subject of research aspiration is considered rather new and thus it has little but fast growing literature available. Information logistics focuses on information and it is closely related to information management, information operations and information technology and deals with the flow of information between human or machine actors within or between any numbers of organizations that in turn form a value creating network.

The main goal of information logistics is to make sure that the right information reaches the right person, in the right way, at the right time, in the right place and at the right cost and utilizes logistic principles to optimize information handling (Sandkuhl 2008).

Methods for achieving this goal are:

- the analysis of information demand
- intelligent information storage
- the optimization of the flow of information
- securing technical and organizational flexibility
- integrated information and billing solutions

All organizations and companies are highly dependent on information. More and more companies and organizations realize that an efficient flow of information can create major advantages, both financially and with greater customer satisfaction. To be able to handle information efficiently saves both time and money and this is where information logistics comes into the picture. Today rarely the lack of information is the problem, quite the opposite in fact. Information flows like never before and because of this there is a high demand for information logisticians. The information logistician builds bridges between the separated blocks of information and crates contacts between users and providers. It is much more than knowing how information systems work, it is a technical skill combined with an overall view of the operations and envelopes knowledge of several other fields like economics, processes and management, information design or strategic business development (Meissen et al. 2004).

More importantly with the help of information logistics companies can plan what information they need from their customers in order to satisfy them and operate a successful business. They can also effectively supply their customers with information while within the company they can develop new ways to work more effectively to create quality.

E-government and E-governance

There is one last term we have to embrace to see the whole picture and this is the digital era government or in other words the E-government. Technology changed the world and changed the people. It offers several new methods and solutions to existing problems but also creates new ones. In electronic government systems, government operations are supported by web-based services. It involves the use of information technology, specifically the Internet, to facilitate the communication between the government and its citizens. The customer satisfaction depends greatly on the level of the service and the quality of the product and the private companies do everything they can to acquire information about citizens needs in order to convert these expressed needs into new kind of products, shorter lead times, increased service levels.

We could say that the private sector and the technological advancements spoiled the customers, because as soon as they meet with governmental infrastructure which is robust, much less flexible and seem to act slowly, the level of their satisfaction drops exponentially. While the governments are trying to meet the growing expectations of the citizens, the relations between the citizen and the public institution become more and more complex and they have mutual influence on each other. In my opinion it seems to be clear that in the 21st century the role and necessity of information technology solutions is increasing in the public sector, and its activity is growing. There are numerous IT tools which can be transferred to the public sector to increase both customer satisfaction both efficiency and effectiveness.

The concept of E-government focuses on the use of information and communication technologies as a tool to achieve a better working government and it tries to optimize service delivery, constituency participation and governance by transforming internal and external relationships through technology, the Internet and media. The main difference between e-government and e-governance is that while e-government traditionally centered more on the operations of government, e-governance tries to extend the scope by including citizen engagement and participation in governance. As I can see in terms of public satisfaction they cannot be divided from each other.

The term E-government itself consists several ways of interactions between citizens, government, employees, agencies and businesses. It is the use of electronic communications devices, computers and the Internet to provide public services to citizens and other persons in a country (Jeong 2007).

There are several definitions of E-government such as "the employment of the Internet and the world-wide-web for delivering government information and services to the citizens." (United Nations 2014) or "the utilization of Information Technology (IT), Information and Communication Technologies (ICT s), and other web-based telecommunication technologies to improve and/or enhance on the efficiency and effectiveness of service delivery in the public sector." (Jeong 2007, 17).

Ideally the solutions of E-government allows two-way communications between an agency and the citizen, a business, or another government agency, and enable the citizen transition from passive information access to active citizen participation on several ways such as informing or even involving them.

Information technology can play key roles in IT based changes in management systems and in methods of interacting with citizens and other service-users in civil society in the underpinning and integrating of current bureaucratic adaptations. Its effect is could not be just directly technological but it also affects a wide range of cognitive, behavioral, organizational, political, and cultural fields. Summarized this new set of ideas and reform changes is called digital era governance (Dunleavy et al. 2006).

E-governmental approach builds on New Public management in some aspects while also recognizes the deficiencies of NPM and tries to undo them by slenderizing over-decentralized public administration solutions. Besides that it tries to transplant and integrate modern solutions into the administration system to resolve the increased need to interact with citizens, and effectively serve them (Dunleavy et al. 2006).

IT systems are important elements in shaping changes in public administration for several decades now and their influence is growing ever since the first automated data processes were deployed to abolish clerical positions and produce smaller but recurrent savings and more significant alterations in administrative decision processes (Dunleavy et al. 2006).

According to Dunleavy et al. (2006) as consumers' and corporations' behaviors in the private sector change, so there are direct demands for government information and transaction practices to shift in parallel ways. Digital-era changes have triggered several significant shifts such as the large-scale switchover internal and external communications, intranets in organizational information networks, the growth of electronic procurement systems, fundamental transition from paper-based to electronic record-keeping and last but not least the development of electronic services for different client groups.

The impact of digital-era governance practices can be considered under several main themes such as reintegration which is mostly a reaction to New Public Management's increasing problems, and advanced digitalization changes. It focuses on building a more agile governmental system and processes with more speed, flexibility and responsiveness towards the needs while it is trying to make the decision making more competitive in order to be capable of quickly reconfiguring to changing needs and responding to a volatile external environment (Dunleavy et al. 2006).

But implementing private business solutions are sometimes seem to be hard. Political or bureaucratic failures on higher levels often lead local governments to adopt ineffective and costly development programs. According to Jun and Weare (2011) there is a difference between adopting a solution and replicating with modifications trough reinvention it. In most cases the expectations are high and the deadlines are low but reinvention can lead to relatively superficial and ineffective rather than deeper and more efficacious implementation.

In conclusion E-government can be seen as a set of technologies and services that can be employed by a wide range of public organizations. The development of such structures often requires significant resources and the results can be uncertain but have the potential to achieve great improvement. It is not an easily feasible concept but the potential benefits offering effective service delivery, improved internal management, and better political communication may worth the risk (Jun–Weare 2011).

Maybe an entrepreneurial approach could play key role in the implementation of Egovernment solutions supported by information logistics methods and public entrepreneurs can effectively lead these innovations in the future. Within organizations, this means stimulating innovation through a problem-solving spirit and a natural bent for working more closely with citizens. Across systems, it means building coalitions and cross sector collaborations that can improve outcomes, control cost and sustain access in ways that span the traditional roles of government.

Conclusions

Different kinds of logistics management tools could play key roles in the shaping of the public management techniques and public administration itself but they are only useful if we have people with right knowledge and attitude to use them. The nature of different kind of public services and changing external factors requires different approaches in order to do the tasks as effective and efficient as possible.

The Unified Services Theory gives us a special framework in which we can see every kind of public services as processes and with building on the concept of New Public Management and developing it towards E-government we can handle these processes with different kind of tools borrowed from the private sector effectively.

The public sector and the private sector are traditionally considered as two entirely different areas but New Public Management aims to change that viewpoint and tries to use tools of the private sector to make significant changes. Of course we know that NPM have several difficulties and obstacles and many authors claim it is a dead fish in the water, a fossil of an extinct ancient animal. But we can learn even from fossils if we study them. And as we can see many ideas like the increased citizen involvement and customer-like treatment is worthy enough to keep and inherit into an even more improved conception like the E-government.

In the last decades as our technology and society rapidly developed governments realized the necessity to develop new ways and methods of the services to maintain efficiency and serve the changing needs of citizens in order to secure public satisfaction. Because as the world changes and develops so do the people who live in it. Governments have to keep the pace and adjust to these changes. We can observe the emerging of new thoughts and methods in public administration performance of government decision-making and administrative tasks more and more as the social and collective awareness is gaining more ground. Besides the market values like financial efficiency, economy, the community values become more and more important too.

Whether we are speaking about a lean or a broad government administration, we must move with the times and this can only be achieved with continuous development and with applying new techniques. In my opinion as we can see modern logistics management has the necessary tools and it can help in modernizing public administration if we can learn how to use them properly with a right kind of approach.

Both information logistics and the developing concept of E-government are considered rather new. As we can see and we can experience, the rapidly evolving information technologies are gaining more and more space on every field of our life. Companies have more opportunities to explore customer expectations directly and indirectly and customers have several ways to express their needs easily and quickly. Because of this the level of satisfaction drops quickly as well if the citizens cannot express their needs as easily as in the case of private businesses.

Of course governments try to remain in competition with the private sector and borrow solutions from there as we can see through the examples of New Public Management and the E-government in order to satisfy citizens. At this point the involvement of information logistics can be vital because accessing information was never before as easy as now. In previous eras gathering information from citizens was slowly and costly because the lack of necessary tools, but in the era of smart technologies governments have everything they need and even more to gather the necessary information (in the good sense), if they use the right tool. So to answer the question: yes, the author believes information logistics can help to improve the satisfaction of the customers of a state.

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