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The New Public Management within the Complexity Model

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Abstract

This paper wants to bring up the circumstances and the results that are achieved when observing the new public management through complexity pattern. The complexity theory and the new public management share a point of view for the monitoring and the feedback when steering the behavior in organizational systems. The concepts are not well implemented on the local organizations although. The new public management focuses on results and underlines the need of evaluating the performances on objectives-achieved scale, when the responsibilities are clearly defined for reaching the goals. The article synthesizes how the public management can evolve when taking notice of the two concepts, and also when dealing with limited resources and multiple challenges, generated by the complexity of the system to which it pertains.

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1. Introduction

The tools of complexity science found their articulation within the physical sciences. Once developed, scientists started to bring up similar processes in everything; fluctuations of different mechanisms, population of seas and living ecosystems, movements of stock markets and traffic. Social organization and groups are complex systems that are difficult to define and to put them in specific contexts. You cannot easily establish the general properties that guide the analyzed system in a whole of other parts that represent an ecosystem.

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The complexity science explores the emergent behavior of complex systems by focusing on interconnections of the system components and systems architecture, rather than the individual components themselves. It represents a novel scientific approach across traditional discipline boundaries.

A model of the complexity science it is offered by the complex adaptive systems. Matei and Matei (2011) offer in their work a view of the complex social environment represented by the European Union and they say that EU administration is a complex system, with multiple loops of feedback, incorporating the national administrations in its structure, respecting their identities and values. This research will focus more on the local level of public service systems, governed by the EU regulatory ecosystem.

All the adaptive systems have a great number of agents, which interact. Interconnected and interdependent elements and dimensions characterize the systems. Feedback processes shape how change happens within a complex system. The emergence describes how the behavior of systems emerges, unpredictably, from the interactions of the agents, showing that the whole can be different to the sum of the parts. E. Mitleton-Kelly (2003) considers that a complex adaptive system is defined by their general characteristics:

-self-organization; emergence; interdependence; -feedback; Systems far-from equilibrium; Space of the possible; co-evolution; historicity; trajectory dependence.

Besides social applications, we will observe the political ones that are approached through a complexity lens (Scarlat, 1997). We will focus on the feedback concept in the economical-administrative systems, especially on the local development. The complexity theory brings an alternative, which admits the importance of the information and monitoring in having a success organization. „The complex management”, according to Kauffman (1995), is having democratic problems resolved and a decentralized experimentation, rather than control from the center and conformity. The public management, which has its basis on complexity theory it, is also seen as an approach of a complex system and includes within its references a wider environment, and so the organizational performance appears not only as a function but also as the performing platform of the entity.

2. The New Public Management- efficiency and evaluation

New public management theory focuses on results (Hughes, 1998, Strathern, 2000). Those outputs need to be monitored for the success of an organization. This organization needs to perform in order to achieve great results and to prove to be efficient. We will study the behavior of the agents inside an organization when they need to come up with a public policy, efficient for the problem that was brought in the agenda. This policy needs to be evaluated in order to see the impact that has on the environment to which it refers.

We take into account not only the problem that needs to have a resolution but also the strategy that leads to the accomplishment of the objectives. Although in complex systems we cannot have optimal approaches for every situation, we can still use that optimal solution for the required choice. The justification stands on intermediate evaluation that shows the evolution of the social-economical context and the possibility of making the policy within the established frame.

When we analyze if the objectives established within the policy of local development were implemented we must talk about the effectiveness of how the process took place. This is another characteristic of the new public management, which requires an economical evaluation of the costs related to the results. Effectiveness represents ex-post evaluation criteria and refers to the social impact that occurred when using an amount of resources. Cost reduction and smart resourcing are two concepts that are embraced by the new public management and leads to the idea that efficiency and effectiveness can represent performance criteria for the local development politics.

Matei (2004, p.105) outlines that the “base of the social and economical development is represented by the endogenous resources, the initiative and the entrepreneurial activity at local level” and the definition of the concept “local” is made by referring also to the regional, interregional and border level.

The local development is a growth process in a region or a geographical area that delivers a better quality of life. Those processes have as objective the decentralization of the public policies towards regional and local administration, cooperation between the different levels of the administration (local, regional, national) and between public agents and private ones. Altogether they represent agents in a complex system.

In order to develop an area you need first to see the points that need to be investigated in order to have a better approach on the situation. This is items are included in public agenda. This will be the base for a public policy as soon as the internal agents decide to respond to this stimulus. The environment is considered to have a major impact on small structures, and in the end the small structures will need to change themselves, to adapt. Also, they evolve together and we can also refer to co-evolution in this case. The adaptive system will change its coordinates and its actions across the way for achieving a goal. This also might translate in several changes of strategies in order to comply with the great strategy.

The interaction of the agents is even more pronounced when the public administration takes measures to resolve the public issue with the available resources. Other types of agents also appear in this stage and we are talking about people, material resources and informational technology. There is a public manager who coordinates the process and the resources. He gets support from the system and from the new technological benefits. As he proceeds with the plan of delivering quality services and responses to public needs, he is actually involved in the general action strategy of the system. So we have again, small components, working together in delivering the final goal-good quality public service.

In an administrative system we can identify three important subsystems: a driven subsystem, whose output controls the input of the entire system, a decisional subsystem, whose output represents the input of the driven system and a reaction system that transmits the output of the driven system at the input of the decisional subsystem.

3. The diagram of the local administrative level

We will draw a system that represents the way new public management controls the system and the environment close to that particular system, in order for the effectiveness and the efficiency to be the results of the activity. We will take into account the inputs, the impact they have on the environment and how they might affect the integrity of the system. As an example, if the administrative staff working in the institution will suffer from staff reduction, the entropy of the system will decrease/increase as well as the organization and complexity degree might grow/ come down. Prigogine and Stengers (1985) say that in non-equilibrium conditions, the entropy may produce, instead of degradation, order and organization, which leads to the idea that if some of the systems disappear, some others evolve simultaneously and grow with more coherence (modern IT technologies that can substitute functions and people).

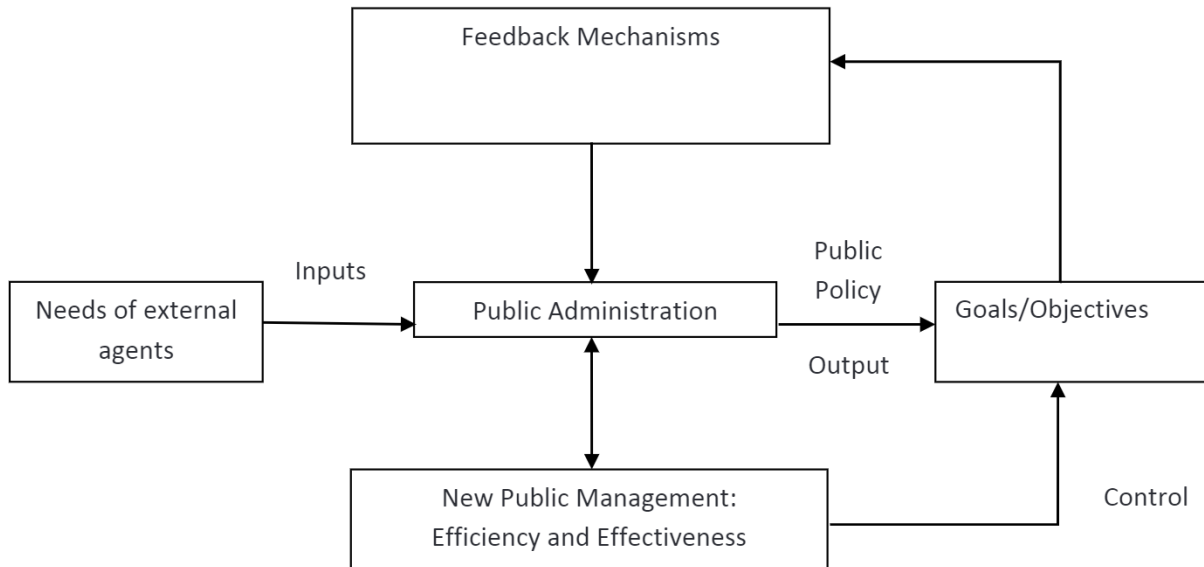


Fig. 1, Local Administrative System Diagram, Authors, 2013

Figure 1. Represents the complex system, which describes how the process of satisfying external agents' needs can evolve. The Public Administration is considered to be the main pillar in the figure, its reactions to these needs are supposed to be the solution to the problem, translated in Goals or Objectives. We have established that the agent's needs are considered inputs for the system, and the Public Policy, which is the response to that stimulus, represents the Output. The goals need to be achieved in order to provide customer satisfaction in a short matter of time, as the longer the timeframe is, the more the problem evolves.

Next we will describe how this solution (goals, objectives) perceived by the external agents. This will be translated into feedback mechanisms. If the Public policy manages to resolve the problem in a short timeframe and the solution is provided quickly, and then the feedback is negative, the system will maintain its internal characteristics. This means the local government has the necessary resources to deal with its "customers" needs. On the other hand, if the results come difficult, the policy is not well implemented and the goals that needed to be achieved changed because of the long time manner in which they were approached, the positive feedback changes the system characteristics. This translates into disorder, reelections, destructive responses, (Prigogine and Stengers, 1985). Public administration is considered to be a complex adaptive system but loose when it comes to drastic changes in the organization. In this system we find adaptive agents, which can generate policy-shifting behaviors (Ramalingam et al, 2008). Agents will be diverse in their properties and behaviors because they may be having divergent properties, such as age, cultural values and also because their experienced history of the environment and other agents is diverse. Worth mentioning here is the public sector accountability as an emergent property of a complex system. O'Connell (2005) uses the term "accountability environment" to shape and structure the public sector and the interactions between the organizations and other entities in the organizational 'field'.

The relations between entities are co-evolving (Kauffman, 1993, p. 279). Co-evolution means responsibility, because the influenced ecosystem will also affect the other entities around him. Co-evolution affects the agents and the systems and it is operational at different scales and levels, and therefore we have endogenous co-evolution and exogenous co-evolution. The emerging behavior needs to be evaluated and controlled and this happens inside new public management doctrine.

The figure also shows there is a two ways connection between new public management concepts and the complex adaptive system, represented by the public administration. There are mechanisms that need to control and to evaluate the way public administration responds to external agents needs. Efficiency and effectiveness are the main indicators of the doctrine. Public sector needs to improve its actions and to acquire the good private sector example and to guide it's processing in offering effective and efficient solutions. The results of the institution need to be evaluated and the report between the outcomes over the desired objectives are translated into effectiveness. This indicator is not sufficient, and new public management wants to be also efficient, which means that we need to have better results on less involved means.

Conclusion

New public management is a doctrine that will improve the complex adaptive system, the public administration, but also the whole ecosystem represented by all systems involved in the public service delivery process. Agent's needs are the steering wheel of the system and every reaction needs to be quantified in order to show how effective and efficient each result is. Behaviors in the complex adaptive system are analyzed inside this logical frame in order to provide the best of their interactions. Because of the multiple factors that need to be evaluated it is hard to come with a single solution for improving policymaking and implementation. All the actions need to be taken in clusters and for a short timeframe, as the more time passes, the more a problem can evolve and change its initial characteristics.

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