ANALYSES OF E-GOVERNMENT MODELS

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Today E-Government projects are introduced in many countries and big cities. There are three main models for build E-Government project, in this paper basic concept and elements of these models are considered.

Diffusion of Innovations Theory (DOI) model described in [1]. Diffusion is the process innovation that is transmitted by a specific channel in a period time between members of a system, on other hand can be defined as a special type of communication concerned with the spread of messages that are perceived as new ideas. Figure 1 illustrates Diffusion of Innovations Theory (DOI).
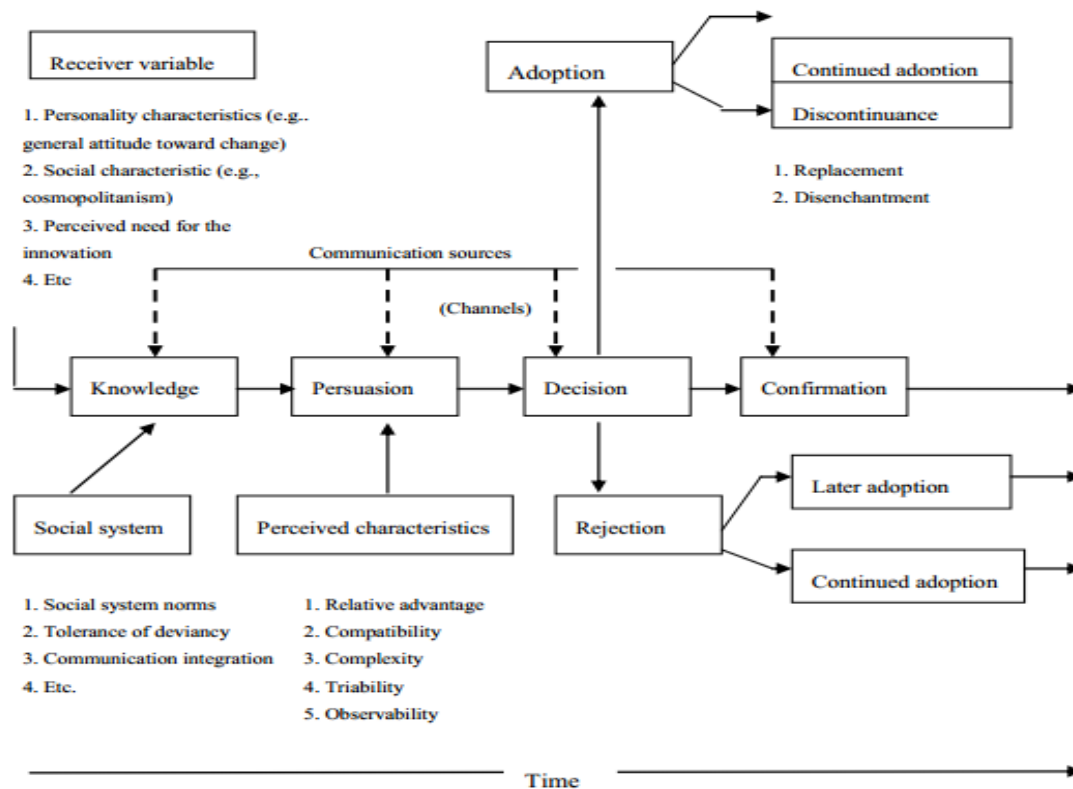

Fig. 1 – Elements of Diffusion of Innovation (DOI) Theory model

The **Technology Acceptance Model (TAM)** used for many studies, describing understanding by users the use details of technologies in the field of information systems (IS), and now become active. According to [2] there are two salient beliefs of TAM model. Perceived usefulness (PU) is the degree to which an individual believes that a particular system would enhance job performance within an organizational context. Perceived ease of use (PEU) is the degree to which an individual believes that using a particular system would be free of effort.

The goal of TAM model is to provide of the determinants the behavior through a wide range of user's computing technologies. TAM model is providing a basis for determining the effect of external variables on internal beliefs and intentions. Figure 2 illustrates original version of TAM**.**
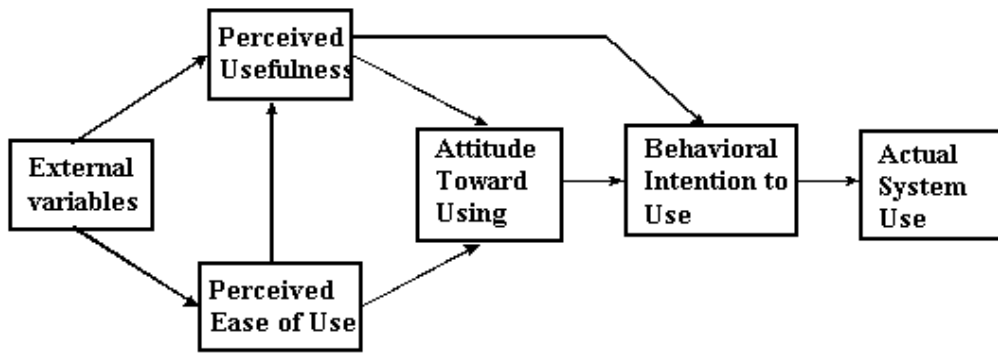
Fig. 2 - Technology Acceptance Model

The **Technology–Organization–Environment (TOE)** model takes into consideration that e-government is not based only on the technological consideration, but also based on organizational and environmental contexts [3] (see Fig. 3).
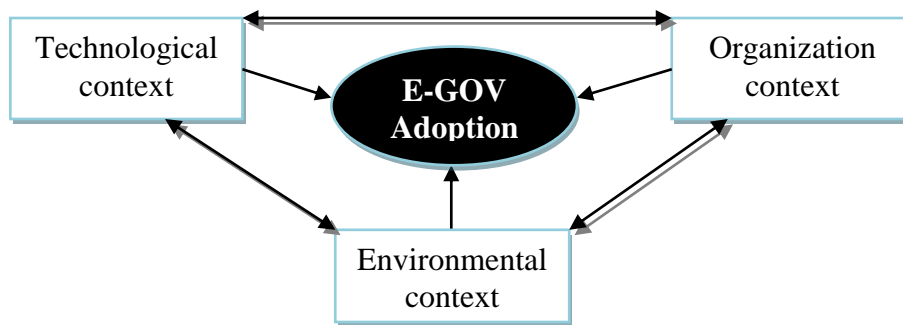

Fig. 3 - Conceptual model of TOE

The technological context explains features the technologies in use and new technologies available to the organization. Organization context help to explain the tangible and non-tangible factors: top management commitment, extent of coordination, IT expertise, internal communication, organizational size and compatibility. Environmental context helps to provide a suitable environment to success of appropriate application of ICT services and particularly the e-government.

Some works used the TOE framework with other theories models to understand and improvement e-government adoption. These studies demonstrate combining TOE and DOI model [2], TOE and TAM model [4] and others variants [5].

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