

# Chapter 46

## IDTVOS: An INTECO Open Innovation Success Case

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### ABSTRACT

*Internet based networks and core competences; the way we communicate with each other and global economic pressure have changed the way we innovate. In this chapter, a new business model and work philosophy based on “open innovation” are presented. IDTVOS (INTECO Digital Television Operating System), developed by INTECO Labs dept., in collaboration with partners and end users, is the most recent success and serves as an example of this model. IDTVOS, a DTT decoder operating system, provides better interaction and accessibility to digital television services for disabled users. This project is a clear example of open innovation where the technologies developed provide added value for citizens, particularly those with more difficulties, while, at the same time, the knowledge and experience is open and shared with industry to create a new market.*

### INTRODUCTION

In this globalized world, it is essential to adapt organizational innovation systems to modern times while taking into account social and technological change and, especially, the growth of knowledge and the democratization of the world. We are facing a new knowledge society that is changing the innovation paradigm, leaving behind innovative individual firms and establishing open and permeable knowledge sharing with others. Therefore,

organizations need to think about innovation which is not just global but also distributed and collaborative (Von Hippel, 2005).

Currently, users are no longer mere consumers of products, where behavior, with respect to the product, is passive; they now have a much more active role. The traditional idea of innovation was based on keeping everything under control as a mechanism of intellectual property protection. The current philosophy of innovation is based on sharing, thinking, and innovating with different sources, such as innovation centers, universities, and individuals.

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The main purpose of traditional organizations was to develop products and services, differentiating through the generation of successful ideas (Von Hippel, 1998). These ideas were generated within the organization primarily using internal experts who obtained ideas at conferences, exhibitions, projects, etc. Hence, the ability to generate successful ideas was limited to experts. However, in an open innovation process, the objective is to seek the most successful ideas wherever they are (Von Hippel, 2001).

One of the great challenges of this new paradigm is, therefore, to identify, access and incorporate the knowledge necessary to develop a successful product or service. Identifying the necessary knowledge is not a trivial task but requires knowledge of what is happening in the sector via primary sources (researchers, suppliers, customers, etc.), and from secondary sources (Von Hippel, 1994; 1998).

This article presents Inteco Labs success story in which a new innovative product was created based on an open innovation approach.

This article provides a practical example; it describes our open innovation approach which is based on our business model, the advantages and disadvantages of being a public company from an open innovation perspective, and the key factors, concerns and recommendations.

Finally, we propose different future research directions, some of which could be predicted at the beginning of the project but some arose after the project was developed because of the “variable change” concept.

## **BACKGROUND**

Public Administrations are promoting the use of electronic services to make closer the relationships amongst citizens and public services. In this sense they offer both a great opportunity to increase their abilities to co-create and innovate in products and services. Local networks are

continuously becoming a more important source of collaboration.

E-government services are considered by the European Commission to be one of the key drivers in the information society (UE, 2010). Given the large impact that an efficient administration can have in our societies, developed countries commit vast resources to ensure a well functioning Administration. Information and communication technologies have been identified as one of the main avenues to attain higher rates of efficiency in public service as well as the means to provide novel public services to citizens and private firms (Huijboom et al., 2009).

Moreover, ICT as the main enabler of eGovernment not only saves public resources but at the same time helps private companies to share experiences, and to create more efficient processes based in real and experienced user needs, thereby improving industry competitiveness (De Pablos, Romo-Romero, Loyola, & Montero, 2003). Digital services can be classified as large technical systems according to (Hobday, 2005) in the sense of being a set of subsystems of medium (and in some cases high) technological novelty.

Electronic government, apart from the application of ICT for improving citizen relationships, means putting citizens and customers at the heart of all we do and offer them the opportunity to create together products and services that make more sense into final customer’s needs. In this sense, a socio-technical system approach (Kavan, O’hara, Patterson and Bostrom, 1999) is then created in terms of Evangelidis (2005). The virtual environment enabled by the digital services allows the integration of all the different agents, government, firms and citizens.

Some of the initial studies in e-governance analyze social impacts ((Marche & McNiven, 2003), critical success factors (Siau & Long, 2004) (Ke & Wei, 2004) and the measurement of intangibles (Gueorguiev, Dimitrova, Komitska, Traykov, & Spassov, 2005). Although there may be risk factors affecting the projects (Evangelidis, 2005), benefits

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