

# Chapter XX

## Service Innovation Management:

### New Service Development Strategies in the Telecommunication Industry Test Template for Data Mining Publications

**Fotis C. Kitsios**

*Technical University of Crete, Greece*

**Panagiotis Tzortzatos**

*Technical University of Crete, Greece*

**Constantin Zopounidis**

*Technical University of Crete, Greece*

#### **ABSTRACT**

*Nowadays that the world depends more and more in services, there is no issue more fundamental for service organizations than understanding the factors that separate success from failure in new service development. The new service process is not so well studied and researched as new product development, and as a result the failure rate is high. However in order to survive in the market place, service organisations need to make the most of all of their resources in order to introduce new services to market ahead of the competition. The purpose of this exploratory study is to investigate the factors that have impact on success and failure in new service development (NSD) in the telecommunication (TLC) sector. The results of the exploratory study are summarized in a conceptual model for further research.*

#### **INTRODUCTION**

In today's increasingly competitive climate, more and more senior managers are having to update themselves on the range of factors that determine service innovation success (F. Axel Johne and Patricia A. Snelson, 1988). The critical role of innovation has long been recognized in physical goods; however, the development of innovative services has received much less attention (de Brentani, 1989).

The success rate for new service projects are on average 58 percent (Griffin, 1997), in other words four out of ten new services fail in the market place (Ottenbacher). Success factors for new services are in general similar to those for new product development, only the potency of the factors differ (Cooper and de Brentani, 1991). This can be explained by the nature of services, which are largely intangible, produced and consumed simultaneously, heterogeneous and perishable (Zeithaml and Bitner, 2000).

In studies of services management in general, quality has become a central concept. Many quality problems are recurrent and may to a great extent be seen as results of shortcomings in the development processes of new services (Edvardsson and Haglund, 1994; Mattsson, 1995).

## **BACKGROUND**

The majority of NSD research has concentrated on the financial service sector, and one of the largest industries world-wide, the TLC industry, has not been specifically investigated. Drawing from the research stream of new service development in other industries, such as financial (Brentani, 1990; 1991; Edgett, 1993; 1994; Cooper and Brentani, 1991; Parkinson, 1994), hospitality (Ottenbacher), tourism (Kitsios, 2005) etc., and using a comparative methodology of analysing successes and failures, some answers could be suggested to may what drives success in developing new services. The whole idea is to make a parallelism for TLC industry by using results of similar researches and the knowledge of some expertise. Generally, the critical dimensions that influence new service performance can be categorised into four clusters: (1) product-related, (2) market-related, (3) company-related, and (4) process-related (de Brentani, 1999).

## **NATURE OF THE INDUSTRY**

The telecommunications industry is at the forefront of the information age—delivering voice, data, graphics and video at ever increasing speeds and in an increasing number of ways. Whereas wire line telephone communication was once the primary service of the industry, wireless communication services and cable and satellite program distribution make up an increasing share of the industry.

During the late 1990s, the telecommunications industry experienced very rapid growth and massive investment in transmission capacity. Eventually this caused supply to significantly exceed demand, resulting in much lower prices for transmission capacity. The excess capacity and additional competition led to either declining revenues or slowing revenue growth, which has led to consolidation within the industry, as many companies merged or left the industry.

The largest sector of the telecommunications industry continues to be made up of wired telecommunications carriers. Establishments in this sector mainly provide telephone service via wires and cables that connect customers' premises to central offices maintained by telecommunications companies. The central offices contain switching equipment that routes content to its final destination or to another switching center that determines the most efficient route for the content to take. While voice used to be the main type of data transmitted over the wires, wired telecommunications service now includes the transmission of all types of graphic, video, and electronic data mainly over the Internet.

These new services have been made possible through the use of digital technologies that provide much more efficient use of the telecommunications networks. One major technology breaks digital signals into packets during transmission. Networks of computerized switching equipment, called packet switched networks, route the packets. Packets may take separate paths to their destination and may share the paths with packets from other users. At the destination, the packets are reassembled, and the transmission is complete. Because packet switching considers alternate routes, and allows multiple transmissions to share the same route, it results in a more efficient use of telecommunications capacity as packets are routed along less congested routes.

The transmission of voice signals requires relatively small amounts of capacity on telecommunications networks. By contrast, the transmission of data, video, and graphics requires much higher capacity. This transmission

13 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

[www.igi-global.com/chapter/service-innovation-management/20552](http://www.igi-global.com/chapter/service-innovation-management/20552)

## Related Content

---

### Functional Examination of the Evolution of Universities' use of Hyper-Connected and Internet Marketing Strategies

Darrell Norman Burrell, Sharon L. Burton, Eugene J.M. Lewis, Darrell Ezell and Dawn Lee DiPeri (2020). *International Journal of Hyperconnectivity and the Internet of Things* (pp. 38-57).

[www.irma-international.org/article/functional-examination-of-the-evolution-of-universities-use-of-hyper-connected-and-internet-marketing-strategies/258103](http://www.irma-international.org/article/functional-examination-of-the-evolution-of-universities-use-of-hyper-connected-and-internet-marketing-strategies/258103)

### Understanding Image Classification Using TensorFlow Deep Learning - Convolution Neural Network

Vinit Kumar Gunjan, Rashmi Pathak and Omveer Singh (2019). *International Journal of Hyperconnectivity and the Internet of Things* (pp. 19-37).

[www.irma-international.org/article/understanding-image-classification-using-tensorflow-deep-learning---convolution-neural-network/241803](http://www.irma-international.org/article/understanding-image-classification-using-tensorflow-deep-learning---convolution-neural-network/241803)

### Analysis of the US Privacy Model: Implications of the GDPR in the US

Francisco García Martínez (2019). *International Journal of Hyperconnectivity and the Internet of Things* (pp. 43-52).

[www.irma-international.org/article/analysis-of-the-us-privacy-model/234344](http://www.irma-international.org/article/analysis-of-the-us-privacy-model/234344)

### Strategies to Improve B2B Customer Relationships Through Digitally Enabled Experiences

Laura Ingrid Maria Colm (2022). *Handbook of Research on Digital Innovation and Networking in Post-COVID-19 Organizations* (pp. 18-35).

[www.irma-international.org/chapter/strategies-to-improve-b2b-customer-relationships-through-digitally-enabled-experiences/307534](http://www.irma-international.org/chapter/strategies-to-improve-b2b-customer-relationships-through-digitally-enabled-experiences/307534)

### A Comparative Study of SIP Overload Control Algorithms

Yang Hong, Changcheng Huang and James Yan (2013). *Network and Traffic Engineering in Emerging Distributed Computing Applications* (pp. 1-20).

[www.irma-international.org/chapter/comparative-study-sip-overload-control/67496](http://www.irma-international.org/chapter/comparative-study-sip-overload-control/67496)