ABSTRACT
This chapter reports on research investigating the benefits and barriers of e-Enabling Technologies such as e-Sourcing and e-Purchasing in the healthcare sector. The research is based on a case study conducted at the KAT General Hospital (KGH) in Athens, Greece, and examines aspects regarding the implementation of specific e-Sourcing and e-Purchasing tools, such as e-RFx and e-Auctions, focusing on the resulting benefits and the existing barriers of adoption. Findings suggest that although quantifiable benefits were identified, e-Sourcing and e-Purchasing are still at an early stage of maturity in the Greek Healthcare Sector. The chapter entails a literature review, a description of the research methodology used, the findings based on the case study and the final conclusions.

1. INTRODUCTION
With over $4.5 trillion in expenditure, the global Healthcare industry is one of the world’s largest and fastest growing industries, comprising various sectors: medical equipment and supplies, pharmaceutical, healthcare services, biotechnology and alternative medicine sectors (Beeny, 2014). It is facing an increasingly complex regulatory and legislative environment as well as a variety of economic and business...
challenges (UPS Survey, 2013), such as the policy level that may restrict product selection possibilities, the service delivery point that may face frequent stock outs due to poor forecasting, unavailability of transport and a variety of other issues (UN CoLSC, 2014). These risks combined with new growth opportunities are driving healthcare businesses to overcome the inefficiencies of the past. Given the personal and professional impact of timely, cost efficient and most importantly effective treatments, today’s global healthcare industry is forced to manage its supply chain more effectively. To be effectively managed, supply chain resources, such as suppliers, partners and customers need to be linked. The supply chain is transforming from a controlled entity within the four walls of a warehouse into a network of resources, scattered across facilities and entities in different cities and countries (Beeny, 2014).

Failing to manage the supply chain effectively has been shown to have significant negative impacts on organizations (Kanyoma et al., 2013). It has been argued that especially for the healthcare industry inefficient supply chain management (SCM) processes cause significant cost increases (De Vries & Huijsman, 2011), as activities related to the purchase, distribution, and management of supplies account for about one third of the operating costs of healthcare facilities (Kumar et al., 2008). These findings are supported by industry surveys, which show that healthcare providers are using almost a third of their annual operating funds to support their supply chain (Nachtmann & Pohl, 2009). The management of the supply chain in the healthcare industry in particular, possesses an additional dimension of complexity, as companies have to do a highly accurate job, considering that potential dysfunctions might have negative consequences on peoples wellbeing and even peoples lives (Mustaffa & Potter, 2009). Thus, companies in the healthcare sector need to make continuous efforts to improve their supply chain performance, especially since experts have estimated that SCM practices of the healthcare industry are 10 to 15 years behind other industries such as retail and manufacturing (Chen et al., 2013). According to a survey among healthcare executives, investing in new technologies was identified as the top strategy to improve competitiveness and increase efficiency (UPS Survey, 2013). As the significance of information and communication technologies (ICT) in improving healthcare supply chains has been proved, many healthcare organizations initiated related projects (De Vries & Huijsman, 2011). Even in developed countries such as the US, the healthcare industry is suffering from inconsistent and inaccurate product information, which negatively impacts the rest of the supply chain including the quality of care delivery for patients (Pleasant, 2009). Room for improvement through the use of ICT also exists for UK’s national healthcare provider NHS, as it is characterized by lack of common commercial and procurement data standards, which means that the analysis of expenditure and demand requirements across organizations is very costly in terms of time and resources (Hodson-Gibbons, 2009; Kritchanchai, 2012).

Regarding the Greek healthcare sector, where the presented case study of this paper resides, the implementation of supply chain concepts is in an early stage, reflecting into poorly functioning supply chains and leading to redundancy of efforts, higher costs, stock outs, wastage and, as a result, lower level of healthcare services (Fragkiadakis et al., 2014). The participants in the healthcare supply chain, whether manufacturers, wholesalers, distributors or healthcare providers appear to be acting isolated with low levels of coordination amongst them. Similar to studies performed on the healthcare sector of developing countries, such as Thailand (Kritchanchai, 2012), it is evident that SCM in the Greek healthcare sector is characterized by inefficient processes, inconsistent and inaccurate data information, lack of data standardization, lack of systems integration and low transparency.

The importance of the healthcare sector and the significance of SCM in the healthcare context combined with the fact that the majority of prior supply chain studies focus on the manufacturing environment, establishes the need to study hospital supply chain integration and performance to extend the body of