

# Chapter 20

## The Effect of Information and Communication Technology on Customer Relationship Management: Jordan Public Shareholding Companies

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### ABSTRACT

*The essence of the information technology revolution and in particular, Information Communication Technology (ICT) is the opportunity offered for companies to choose how they interact with their customers. This research paper investigates the influence of Customer Relationship Management (CRM) factors benefiting from information communication technology on (CRM) performance. The results suggest that the three elements have positive relationships with CRM performance. Questionnaires numbered at 330 have been distributed to 110 public shareholding companies (PSCs) in four economic sectors in Jordan; banking, service, industrial, and insurance. The findings further suggest that CRM performance mediates the effects of marketing orientation, IT investment and mass customization on customer network effect.*

### INTRODUCTION

In the last decade, considerable development and enhancement seen in information and communication technologies (ICT) had a great affect on all business areas. ICT has become the core

of many major applications such as e-business, Supply Chain Management (SCM), Knowledge Management (KM), and Customer Relationship Management (CRM); thus ICT has become one of the major investments and the price of entry for manufacturing and service companies to the competitive electronic global market. ICT empowered the organizations with capabilities

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to better understand and control their marketing information, and shift towards customer-centric business models (Roberts, 2000). Further, CRM emerged in the ICT era as a set of strategies that generate a 360 degree view on customers across all functional areas. It is aiming to provide customers with a maximum level of services and to generate long-term one-to-one relationship with the customers (Seeman & O'Hara, 2006). CRM has its roots in Sale Force Automation (SFA) tools that focus more on *selling*, rather than on administrative activities, by automating routine activities like tracking customer contact information, and sales forecasting. In addition, it has roots in relationship marketing, which concentrates on attracting and improving customer relationships for the purpose of developing long-term profitability. It does so by moving towards customer retention, by managing customer relationships rather than transaction-based marketing aiming to gain new customers. Hence, CRM is a sophisticated application that provides comprehensive knowledge about customers by mining customer data to predict their behavior, hidden trends, and buying patterns (Chen & Popovich, 2003; Light, 2003). Despite the humble start of CRM, the last decade witnessed a massive growth of CRM systems in many business industries, thus the emergence of ICT has positively affected the CRM by introducing a new era of IT based CRM models. In summary, with the help of data from existing PSCs in Jordan, this paper will demonstrate the effect of ICT on CRM performance; it is one of the first studies about the effect of CRM and ICT in this sector.

## **Literature Review**

CRM research can be classified into many areas which address it in terms of concept, framework, software, applications, strategies, technologies,

and performance. However, minimal research on CRM and ICT has derived the need to discuss the relationship between ICT and CRM performance and the effect of CRM factors, such as, market orientation, IT investments, and mass customization, benefiting from ICT on CRM performance.

## **CRM Background**

CRM can be viewed as a set of comprehensive strategic, process-oriented, cross-functional, value-creating for buyer and seller, and a means of creating superior organizational performance, and superior value for customers (Lambert, 2010). These comprehensive sets of strategies for attaining and maintaining knowledge about customers, and partnering with customers involves the integration of marketing, sales, customer service, and supply chain functions of the organization to achieve greater performance in creating and delivering customer value (Ngai, 2005). Moreover, from an Information Technology (IT) perspective, CRM is considered as an enterprise wide communication and integration of various technologies such as: data warehousing, web site, intranet and extranet, mobile application system, marketing, accounting, and sales (Bose, 2002). Moreover, CRM can be defined as a set of activities that utilize technology to gather, analyze, and distribute data about existing and future customers. This will enable one to generate better understanding of customers and thus create longer relationships with them. Peppard argued that the enhancement of CRM strength and capabilities relies on Information and Communication Technologies (ICT), by benefiting from massive computing power, enormous database and storage facilities, and communication technologies, via networking on the internet (2000). Thus, ICT can be considered a major factor in the success of CRM, and it plays a key role in achieving a better CRM experience.

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