

# Chapter 23

## Customer Knowledge Management (CKM): Customers as External Knowledge Assets in Small-to-Medium-Sized Software Enterprises (SMEs)

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### ABSTRACT

*SMEs operating in high-tech sectors are typically reliant on specialist knowledge to help them build the right product with the objective of meeting customer needs. The nature of niche software markets means that products must be closely informed by customer requirements for the software product to be a success. The importance of understanding how smaller organisations manage knowledge has become vital to their success; however, there remains a dearth of empirical research in SMEs in the area of IS research. Using a qualitative analysis approach in five Irish software SMEs, this chapter identifies how this type of organisation leverages their customers as external knowledge resources, with particular emphasis on knowledge acquisition, a Knowledge Activity (KA) in which customers play a significant part. Through the establishment of KAs a firm can develop an approach to Customer Knowledge Management (CKM) to build value-creating relationships with a reliable customer base.*

### INTRODUCTION

The focus on knowledge is not new to the business world; indeed, knowledge has been passed between master and apprentice for centuries (Hansen, 1999). The basis for the concept of

KM is that if organisations know more about what they know, they may be more effective in meeting their objectives (Davenport & Prusak, 1998; O'Dell & Grayson, 1999), extant research contends that this may be extended “*to know what our customers know*” developing an ap-

DOI: 10.4018/978-1-4666-6547-7.ch023

proach to Customer Knowledge Management (CKM) (Gilbert, Leibold, & Probst, 2002, p.1). In the way of achieving this, stands the difficulty in dealing with personal or tacit knowledge that is a difficult to capture and get visibility upon in the overall context of a firm both inside and outside the organisation. In today's challenging economic times, organisations recognise the need to leverage their existing knowledge resources to sustain market position, but often fail to develop the routines and procedures that would allow them to fully utilise what they have. Indeed from an SME perspective, their size means that they are wide open to market influence; small changes in market demand or economic climate can significantly impact the success and sometimes survival of an SME. According to Duh and Belak (2008) external sources of knowledge are very important for small business in the face of a changing knowledge environment. As a result developing links with external entities such as customers through trust networks may facilitate increased knowledge acquisition activities (Evangelista, Esposito, Lauro & Raffa, 2010; Ojala, 2009). This is important for SMEs as the impact of changing supplier, market, and customer activities requires smaller organisations to respond rapidly to the environment (Sparrow, 2001).

However, according to Ichijo, Von Krogh, and Nonaka (1998), in order to achieve the benefits associated with KM, an organisation's approach should be formal in nature. SMEs need to take stock of their external knowledge resources i.e. customer knowledge, where it is stored and how it is used to improve competitiveness (Zapata-Cant, Criado & Criado, A., 2009). In addition, consideration must be attributed to the knowledge activities (KAs), or component parts of the KM approach. By doing this, the organisation can identify where its strengths lie, by better understanding the type and extent to which customer knowledge is leveraged in terms of making the right product or service available to the right customer at the right time. This chapter concludes by assessing an SME's

approach to KM with a view to better facilitating an organisation's ability to leverage customers as external knowledge resources while improving the product/service provided to the customer.

## **DEFINING ORGANISATIONAL KNOWLEDGE**

The ongoing discussion defining knowledge, its various types, and related terms is a sign of the complexity of this topic. Alavi and Leidner (2001) contend that uncovering the 'universal truth' about knowledge is not a determinant factor in triggering researcher interest in managing organisational knowledge, although in their view some consideration provides support for a research study. However, Kakabadse, Kouzmin, and Kakabadse (2001) purport that the terms 'knowledge' and 'information' are often used interchangeably in the literature, resulting in an assortment of definitions for these concepts with little consensus in terms of universal definition and meaning. While information is comprised of messages from which knowledge may be created, knowledge is conceptualised as internalised information developed in the minds of individuals based on their concepts, interpretations and assumed relationships (Meredith, May & Piorun, 2000). From this model, the nature of information is typically externalised and easily shared while knowledge is internalised and personal to the individual. However, some research challenges this chain of relationships highlighting the difficulty in distinguishing the different nature of the three phenomena, particularly in respect to information and knowledge (Alavi & Leidner, 2001). Instead of an insistence to propose a best knowledge definition, the importance of focusing on knowledge in the context of a specific individual or organisation (collective mind of individuals) is not to be underestimated. Alavi and Leidner (2001) contend that two individuals share the same understanding of data or information when they share the same

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