

# Chapter 7.16

## The Definition Dilemma of E-Commerce

**Aileen Cater-Steel**

*University of Southern Queensland, Australia*

**Shelly Grist**

*University of Southern Queensland, Australia*

### INTRODUCTION

There is confusion among researchers, practitioners and policymakers about the meaning of terms such as e-commerce, and small and medium enterprise (SME) (Krochmal, 1998; Mesenbourg, 2001; Poon, 2002; Xydias-Lobo & Jones, 2003). The lack of standard, universally adopted definitions presents a challenge to researchers and leads to inaccurate comparisons of rates of adoption. This article provides an analysis of various popular definitions of e-commerce and highlights the distinctions between them. A classification system is proposed and applied using examples of e-commerce transactions. Recommendations are provided which should prove helpful for researchers and practitioners interested in developing regional communities with information and communication technology.

### BACKGROUND

E-commerce is recognised as having the potential to contribute to national productivity, economic growth and welfare (Brown, 2002; Poon, 2002), and has been the subject of intense research efforts and conferences in the academic, industry and government arenas. In particular, regional business activities can benefit substantially from greater involvement in e-commerce (Brown, 2002). Rural SMEs also have much to gain from an effective engagement with e-commerce (Grimes, 2003). The Organisation for Economic Co-operation and Development (OECD) is developing policies to promote e-commerce as a core element to achieve sustainable economic growth, more and better jobs, expanding world trade and improved social conditions (OECD, n.d.). However, at the same time, the OECD recognises that the Internet alone

will not improve the productivity and profitability of enterprises in developing countries as such firms may be hampered by weak infrastructure, limited managerial expertise and poor quality control (OECD, 2002a).

Recently, in writing a case study article, we encountered difficulties in deciding on a definition to use for the term e-commerce (Grist & Cater-Steel, 2003). It seemed that every information systems textbook and government report used a different definition, for example: "every type of business transaction in which the participants prepare or transact business or conduct their trade in goods and services electronically" (DCITA, 1999); or "the marketing, buying, and selling of products and services on the Internet" (Awad, 2002); or "the use of Internet technologies for internal business processes (intranet), for business relationships (extranet), and for the buying and selling of goods, services and information (Internet)" (OECD, 1998).

It comes then as no surprise that 41% of small business owners surveyed in New Zealand were unsure about what the e-commerce concept meant (Locke, 2000)! In Australia, a survey of 1,200 small and 600 medium businesses found that respondents understood e-commerce to mean a variety of things: "undertaking business online and conducting business on a global basis" (27%); "buying and selling over the internet" (26%); and "undertaking payments and ordering over the internet" (13%) (Yellow Pages, 2002).

The situation worsened when we examined data relating to adoption of e-commerce. We wanted to compare adoption rates over the last

few years and also to compare the adoption of e-commerce in Australia with that of other countries, and regional adoption against metropolitan rates. E-commerce adoption figures released by the Australian Bureau of Statistics (ABS), as shown in Table 1, would include the case of a sole proprietor who uses Internet banking to BPay a telephone account. Other research, such as the Yellow Pages E-Business Report would not classify this type of transaction as e-commerce. Consequently, the comparison of adoption levels from different studies can lead to unreliable findings and questionable conclusions.

Some transactions are readily classified as e-commerce, for example the selection and payment of a book from Amazon.com. But if the owner of a small business pays the telephone account using an Internet banking bill payment facility, is that business engaging in e-commerce? A mobile phone can be used to purchase a Coca-Cola drink from a vending machine at Sydney's Central Railway Station, or to pay for street parking in Melbourne or Dublin; are these examples of e-commerce transactions? These examples and others will be discussed after the definitions have been explored in the next section.

## DEFINITIONS OF E-COMMERCE

There is no shortage of definitions for e-commerce. A search of the Internet using the Google search tool resulted in 882,000 hits for the search term "e-commerce definition". Close examination of various definitions showed that there are two di-

Table 1. Involvement of small business in e-commerce (ABS, n.d.)

| Extent of ICT Use      | Size                 | Nov. 1999 |     | June 2001 |     |
|------------------------|----------------------|-----------|-----|-----------|-----|
| Involved in e-commerce | Non-employing        | 24,400    | 5%  | 76,300    | 12% |
|                        | 1-4 employees        | 33,900    | 9%  | 86,800    | 22% |
|                        | 5-19 employees       | 23,700    | 20% | 47,100    | 37% |
|                        | Total Small Business | 82,000    | 8%  | 210,200   | 18% |

8 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/definition-dilemma-commerce/9605](http://www.igi-global.com/chapter/definition-dilemma-commerce/9605)

## Related Content

---

### On an Enhancement of XML Applied for Mobile E-Commerce

Xiaomin Zhu, Zhongxiang He and Shengbo Shi (2012). *Journal of Electronic Commerce in Organizations* (pp. 13-26).

[www.irma-international.org/article/enhancement-xml-applied-mobile-commerce/72895](http://www.irma-international.org/article/enhancement-xml-applied-mobile-commerce/72895)

### What Makes Customers Repurchase Grocery Products from Online Stores in Korea

Jin Yong Park and Dhanabalan Thangam (2021). *Research Anthology on E-Commerce Adoption, Models, and Applications for Modern Business* (pp. 1339-1356).

[www.irma-international.org/chapter/what-makes-customers-repurchase-grocery-products-from-online-stores-in-korea/281564](http://www.irma-international.org/chapter/what-makes-customers-repurchase-grocery-products-from-online-stores-in-korea/281564)

### Personalized Recommendation Algorithm Based on Product Reviews

Zhibo Wang, Mengyuan Wan, Xiaohui Cui, Lin Liu, Zixin Liu, Wei Xu and Linlin He (2018). *Journal of Electronic Commerce in Organizations* (pp. 22-38).

[www.irma-international.org/article/personalized-recommendation-algorithm-based-on-product-reviews/207297](http://www.irma-international.org/article/personalized-recommendation-algorithm-based-on-product-reviews/207297)

### Developing Mobile Commerce Applications

P. Benou and V. Bitos (2009). *Selected Readings on Electronic Commerce Technologies: Contemporary Applications* (pp. 74-88).

[www.irma-international.org/chapter/developing-mobile-commerce-applications/28576](http://www.irma-international.org/chapter/developing-mobile-commerce-applications/28576)

### Investigation of Internet Banking Users' Perceptions and Factors Affecting Internet Banking Benchmarks: Expanded With Unified Theory of Acceptance and Use of Technology 2 (UTAUT2) Risk

Yakup Akgül, Tuçe Öztürk and Züleyha Varol (2019). *Structural Equation Modeling Approaches to E-Service Adoption* (pp. 64-82).

[www.irma-international.org/chapter/investigation-of-internet-banking-users-perceptions-and-factors-affecting-internet-banking-benchmarks/225504](http://www.irma-international.org/chapter/investigation-of-internet-banking-users-perceptions-and-factors-affecting-internet-banking-benchmarks/225504)