Chapter 4.7

Evolution of Online Financial Trading Systems: E-Service Innovations in the Brokerage Sector

Alexander Yap
Elon University, USA

Wonhi Synn
Elon University, USA

ABSTRACT

This chapter focuses on the theme of e-service innovation in financial electronic markets. The discussion will cover the theories of “technology bundling” and how bundling creates value-added in servicing electronic markets. More specifically, this chapter looks at innovations created through e-service bundling for online brokers connected to various financial electronic markets. The proliferation of different e-trading systems raises the question of which systems provide better service to online stock traders. Many online brokers (e-brokers) now provide low-cost transactions and financial research capabilities, so where is the next level of innovation? The objective of this chapter is to show that several innovations in broker e-services are critical in the following areas: (a) how order processes are efficiently managed in financial e-markets; (b) how responsive e-trading systems are in handling trading rules and regulations; (c) how different systems address unique niches in financial e-markets; and (d) improving systems stability and reliability.

BACKGROUND

Introduction

In this chapter, we start analyzing an entire sector (the brokerage service sector) rather than one particular business organization in order to understand the case studies. The reason for using the entire sector as the unit of analysis is that the e-service problems and challenges are similar for the entire sector and is not unique to one organization alone (see next section, which discusses the problem of
Evolution of Online Financial Trading Systems

In previous studies (Yap & Lin, 2001), the transaction capabilities of online trading systems as well as their knowledge-based components have been explored. These studies showed that earlier Web-based trading systems took one to three minutes to execute market orders; whereas more current systems can execute orders in one to three seconds. Transaction speed is not the real issue anymore. The real concern is whether traders are getting the “best price” for their trade executions. The demand for financial research and knowledge-base services online also needs to be more innovative to distinguish the uniqueness of e-services provided by different e-brokers. So the issue is what more can e-brokers provide their clients? In what areas can e-service innovation take place in the online brokerage sector? To get an idea of where innovation needs to happen, the problems of the online brokerage sector needs to be defined. Only then can we see how innovations in technologies and its bundling can provide solutions to such problems.

Defining the Problem in the Online Brokerage Sector

The problems with the electronic services provided by most online brokerage outfits are threefold: (1) Not all systems comply with the U.S. Securities and Exchange Commission (SEC) Trading Requirements (rules and regulations). Most information systems used for financial trading have loopholes in terms of preventing traders and investors from breaking SEC rules and U.S. government laws. This is important because many amateur traders are not familiar with laws governing the trading of financial instruments in U.S. financial markets. Breaking the law could be very costly and may prevent a trader from trading stocks again. This is a very serious problem not adequately addressed by e-service systems in the brokerage sector. (2) There is a need to connect fragmented financial electronic markets to reflect more realistic stock quotes. There are financial e-trading systems that