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## **Chapter IX**

# **STP Technology and Global Financial Market: An Assessment Framework and a Case Study**

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## **ABSTRACT**

*Straight Through Processing (STP) is the end-to-end automation of security trading process from order to settlement. It is to be used for cross-border trades to speed up settlement, reduce risk, and build the foundation for a more effective and efficient settlement process. To remain competitive, financial firms need to take actions promptly to address the opportunities and challenges brought about by STP from a global perspective of electronic business. Global STP capability may not be achieved by simply initiating a series of projects to address the challenges. It needs to be approached by a well-orchestrated re-engineering activity and enterprise-wide technology solutions. This paper presents a general model of security trading processes under the umbrella of STP, and proposes a framework of STP readiness assessment from a global perspective of electronic business, which can be used to guide the STP implementation in organizations.*

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## INTRODUCTION

With rising trading volumes in domestic and cross-border security transactions, risks faced by global financial firms and markets are increasing. To manage settlement risks and remain competitive in global financial markets, US Security and Exchange Commission (SEC) has decided to shorten the settlement cycle of security transactions from the current T+3 to T+1 by June 2005. As a result, key players in financial markets will need to develop capabilities to cope with challenges arising from this impending change. One initiative for addressing the issue is referred to in the securities industry as Straight Through Processing (STP). Little research has been conducted on STP so far. STP provides a nonstop flow of information from trade execution to settlement. It is to be used for cross-border trades to speed up settlement, reduce risk, and facilitate the move toward T+1. To remain competitive, financial firms need to take actions promptly to address the opportunities and challenges brought about by STP from a global perspective of electronic business (Guerra, 2003). However, global STP capability may not be achieved by simply initiating a series of projects to address the challenges. It needs to be approached by a well-orchestrated re-engineering activity and enterprise-wide technology solutions (McKenzie, 2003). This paper presents a general model of security trading processes under the umbrella of STP, and proposes a framework of STP readiness assessment from a global perspective of electronic business, which can be used to guide the STP implementation in organizations.

## CHALLENGES TO GLOBAL FINANCIAL MARKETS

The financial services sector is undergoing rapid changes on a global basis. The NYSE reported an increase from US \$382 billion (13,015,000 trades) in 1980 to US \$11.2 trillion (221,040,000 trades) in 2000. Global equity markets are also growing at a fast speed, with the number of global security trades doubling every three years. Whereas in the US the volume of equity transactions has increased 17 times since 1980, 20% of these transactions were related to cross-border trades (Baker, 2001). Financial markets in other countries are, by no means, isolated from the developments in the major global markets. For example, reported in its 2001 fact book, the Australian stock market has achieved an average daily trade volume of 58,718 trades valued at US \$1.55 billion and is expected to show continued growth from local as well as global institutional and retail players.

Percentage-wise, current estimates of online cross-border security trading volume are only in the 5-7% range and predominantly by sell-side users; yet online systems will continue to increase in importance as additional buy-side institutions overcome their hesitation and recognize the benefits of Straight Through Processing (STP) and order execution (Platt, 2001). Platt predicts that 10-15% of buy-side clients will be using online systems within the next 12 to 18 months and the growth trend will continue with no ceiling. "The ability to process cross-border security trades efficiently, with minimum manual intervention and fewer mistakes, not only supports larger foreign exchange institutions, but also allows smaller volume institutions to compete in a lower spread environment," (Platt, 2001, p. 18). Though they present tremendous opportunities and potential, cross-

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