

# Competitive Strategy and Information Systems

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## I. INTRODUCTION

Putting into place a sound economic footing for technology strategies has gained new interest and importance after a spate of dot dotcom failures and a downturn in spending in information technology. Management science is replacing trial and error in evaluating technology initiatives. A number of prominent researchers from around the world have come together in this mini-track to critically examine business models, assess the apparent value of information technology investments, and provide strategies for evolving models to survive in the competitive marketplace for capital and customers.

Under what conditions do investments in information technology payoff? This is the question addressed by the first paper in the mini-track. Using an extended data sample and a panel of experts to rate the use of IT in firms, Richardson and Zmud examined stock price reactions to IT investment announcements. Multivariate analysis reveals that firms that use IT to transform or informate business strategy development. These effects are shown through get a statistically significant and positive stock price reactions, as reported in the article.

The information goods industry has been most transformed by developments in e-commerce. Digitization and digital communication have transformed the way many intellectual property based property-based goods are created and distributed. Traditional channels are increasingly in the danger of being disintermediated. Clemons, Gu and Lang combine the theories of resource-based based competitive advantage and that of newly vulnerable markets to create a framework to determine which markets are ripe for attack

and difficult to defend. They examine two industries, the music recording industry and newspapers to assess their potential for disintermediation. The authors also suggest strategies that a firm in this industry may employ to defend against disintermediation.

One way to survive in the new world of electronic commerce is to integrate brick and mortar and web channels so as to exploit synergies between different channels, create new products and market them differently. Steinfeld, Adelaar and Lai examine ten firms in the United States that have successfully integrated these channels. They find that these firms used cross-channel channel marketing strategies, applied used technology to enhance the services to existing customers, and paid particular attention to harmonizing operations across channels. Even firms that have been successful in utilizing ecommerce did not necessarily have the all the strategies in place at the start of the ecommerce venture. These firms “morphed” their strategies as the technologies and markets evolved. This is examined by Kauffman, Miller and Wang. They use evolutionary game theory models to determine conditions that predisposed some firms to succeed at in transforming their business strategies.

Some of the new strategies that have evolved include new pricing structures and new promotion and advertising strategies. These are examined by two other papers in this mini-track. Riggins uses two-tier tier pricing to exploit the differences among consumers to develop new market segmentation strategies for marketing information goods. Dewan, Jing and Seidmann examine the use of messaging capabilities of the internet Internet for sending personalized, and selective advertisements and promotions to customers. They show that such “narrowcasting” strategies can create valuable markets even when market failure may have occurred due to high search costs.

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