

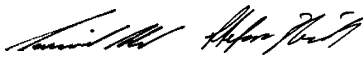
## Dear Readers,

Electronic commerce is booming more than ever. Businesses are eagerly establishing Web-pages, and online services such as Compuserve, America Online or Microsoft Network are reporting ever increasing memberships. Electronic Commerce has clearly become a 'must' for companies. When we started EM-Electronic Markets four years ago, many of these trends were only a pie in the sky. Meanwhile, the number of subscribers to our newsletter has been growing steadily with a marked increase in the last two years. In view of this development and also the very positive feedback we have been receiving from many of our readers, we decided to professionalise our newsletter and to expand it into a full-scale journal. Next year EM-Electronic Markets will appear in a new shape. We are currently in the planning phase and would welcome your ideas on what we should improve. Enclosed you will find a questionnaire that will take you at most two minutes to complete. Please use this opportunity to help create an EM-Journal that optimally matches with your interests.

Last but not least, there have been some changes concerning the editors themselves. Rainer is currently a visiting researcher at the University of California in Irvine. Stefan is now with Telekurs in Zurich where he is in charge of the realization of a new interbank payment system and its integration into electronic markets.

In closing, we would reiterate our plea for your cooperation in filling in the questionnaire and assure you that we will reciprocate by keeping you posted on the latest thoughts and ideas in our fascinating field.

Sincerely



Rainer Alt      Stefan Zbornik

Editors

## Electronic Commerce and Reduced Transaction Costs

### Firms' Migration into Highly Interconnected Electronic Markets

Electronic commerce is a rapidly growing area enjoying considerable attention with the emergence of the Information Superhighway or the National Information Infrastructure (NII). Numerous firms are beginning to position themselves on this superhighway in terms of providing hardware, software, information content or services.

Most industry observers stipulate that it will take about five to ten years until the NII will be fully in place. When this state is achieved, considerable changes in the

*\* by Prof. Dr. Rolf T. Wigand  
Syracuse University*

economics of marketing channels, patterns of physical distribution and the structure of distributors are likely to occur (e.g., [7]).

The ideas presented here are based on five key assumptions once the NII has emerged and a critical mass can be identified:

1. Everyone and every organization will be connected.
2. The connections will be at a very high band width rate, greater than a billion bits per second and sufficient to carry out interactive multi-media transactions.
3. Cheap, high-speed computation will be available on the NII to facilitate the implementation of low-cost coordination transactions.
4. A *market choice box* will serve as the interface between the consumer and the NII and will provide interactive capabilities necessary to exercise free market choice in an easy and intuitive way.
5. There will be no market access favoritism in the design of the NII.

This research is based on previous studies focusing on transaction cost theory and electronic markets, suggesting that due to efficiencies gained:

- Intermediaries between the manufacturer and the consumer may be threatened as the NII reaches out to the consumer.

- Profit margins may be substantially reduced.
- The consumer is likely to gain access to a broad selection of lower-priced goods.
- There will be many opportunities to restrict consumers' access to the potentially vast amount of commerce.

An essential component to the evolution of this future world of electronic commerce is the *market choice box*. This is understood as the consumer's interface between the many electronic devices in the home such as television, cable, telephone and computer, and the information superhighway.

### Transaction Cost Theory

Transaction cost theory helps us to understand how markets and hierarchies are chosen. In free market economies one can observe two basic mechanisms for coordinating the flow of materials and services through adjacent steps in the value chain: markets and hierarchies [10, 16]. Williamson [19] classifies transactions into those that support coordination between multiple buyers and sellers, i. e. market transactions, and those supporting coordination within the firm, as well as industry value chain, i. e. hierarchy transactions.

The price a product is sold for consists of three elements: production costs, coordination costs and profit margin. Throughout the relevant literature, scholars often choose different terms to describe coordination costs; Chandler, e. g., labels them as administrative costs [4]. Malone et al. [10], e.g., distinguish among productions and coordination costs. A recent Office of Technology Assessment study [14] provides a de-