INTRODUCTION

Virtual communities were initially recognized as social phenomena. This is evident from the definition of virtual community as “a social aggregation that emerges from the Net when enough people carry on public discussions long enough, with sufficient human feeling, to form webs of personal relationships in cyberspace” (Rheingold, 2000, p. 5). The idea of a virtual community as a profitable business model was subsequently raised by Hagel and Armstrong (1996, 1997) who claimed that the benefits of a virtual community would arise from two aspects: from the unique capabilities of the digital medium where the virtual community is located in and from the virtual community model itself. The latter aspect is what differentiates virtual communities from other online Web sites. Unlike other online Web sites, a virtual community is intended to create a “sense of community” that binds individuals to the Web site and serves as the “push” factor for repeat visits. Table 1 summarizes some of the proposed business benefits stemming from a virtual community (Bank & Daus, 2002; Hagel & Armstrong, 1996, 1997).

Although the startup cost of a virtual community is comparatively low, the costs of maintaining it are significantly higher (Hagel & Armstrong, 1997; Kim, 2000). Therefore the decision of whether to create a virtual community in support of an e-commerce Web site is not to be taken lightly. Critics have also questioned the validity of the suggested benefits of a virtual community,
Virtual Community Models in Relation to E-Business Models

Table 1: Potential business benefits resulting from a virtual community:

- **Increase purchasing intention.** A virtual community containing a wide range of information and options for customers can reduce customers' risk perception involved in making a purchase. Current customers sharing their positive opinions can also influence potential customers to make purchases.
- **Access to customer opinions.** A virtual community can provide valuable feedback to the company about its products and services, and how these compare with rival companies.
- **Greater ability to meet customers' demands.** A virtual community can connect companies to their customers in order to work together in developing products that meet customers' needs.
- **Additional sources of revenue.** A virtual community provides a means for the company to gather detailed information on customer profiles. This information could be used to attract advertisers or sold to marketing companies. Alternatively, if the community is of substantial value to the customer, the company could charge subscription or membership fees.
- **Lower customer service costs.** A virtual community can help reduce the costs associated with customer service personnel as community staff could prompt members to help each other with product advice and thus save on customer service costs otherwise incurred by the company.

Table 2: Classifications of virtual community models:

- **Basic needs (Hagel & Armstrong, 1996, 1997).** Classification based on the premise that each virtual community focused on fulfilling one particular basic human need. Identified models were:
  - **Communities of transaction:** facilitate the buying and selling of products and services, and deliver the information related to these transactions.
  - **Communities of interest:** bring together like-minded individuals, where the resulting interaction revolves around a specific topic of common interest.
  - **Communities of fantasy:** provide an escape from real life by allowing participants to engage in a fictional environment.
  - **Communities of relationship:** let people come together to share experiences.
- **Consumer or business-to-business focused (Hagel & Armstrong, 1997).** Classification based on the premise that each virtual community either focuses on dealings with individuals or companies.
- **Technological base (Jones & Rajbakh, 2000).** Classification suggested for virtual publics based on the technology base used, e.g., email, web-BBS, and Usenet group.
- **Requirements of community supporting platforms (Sazonova Schewe & Schmit, 2001).** This classification is based on the aim of the community and the type of transactions required by the community. Identified models include:
  - **Discussion communities** are dedicated to information exchange with reference to a defined topic, emphasizing content generation.
  - **Task- and goal-oriented communities,** where the driving force for participation is the achievement of a common goal.
  - **Virtual worlds** are online communities making around virtual worlds and spaces, which can provide a mapping of a real setting or a fantasy world.
  - **Hybrid communities** contain several intertwined communities with members who can take part in several communities.

particularly since there are no clear-cut measures to verify that these benefits can be attributed to the virtual community. Additionally, the fundamental premise which the virtual community relies on for its success, that is, its unique capacity for interaction amongst members and/or with the company (Balasubramanian & Mahajan, 2001; Lechner & Hummel, 2002; Mynatt, O’Day, Adler, & Ito, 1997), is subject to high risks of failure. This is because customers can always turn this capability to the company’s disadvantage by spreading adverse comments about the company’s products.