CC EM

CC EM3 - The Strategic Potential of Electronic Commerce

This April the CC EM has finished its second project phase. It is followed by its third phase which will be focussing on the strategic potentials of electronic commerce on new infrastructures. The following article illustrates the main goals.

The Internet is changing the way companies do their business. It is opening vast new opportunities and at the same time it is threatening traditional patterns of commerce and division of labour. With the advent of the World Wide Web, the Internet has become a platform that more and more companies consider using for electronic commerce. They open virtual storefronts and offer all kinds of products and services that can be ordered electronically and paid via credit card and emerging payment services on the Internet. Although it is not yet clear whether the Internet will become a mass market where companies actually can earn money, the chances are very high. The current focus is therefore on providing products and company information to customers but business transactions are likely to follow.

Strategic Questions

We have seen the almost euphoric launching of electronic commerce platforms in the past but the rate of diffusion and acceptance and subsequently the actual business conducted on these platforms have been significantly lower than anticipated. The question that companies are facing right now is whether it is of strategic importance not only to observe the development of the Internet but also to develop a strategy for the usage of this medium. We distinguish four interrelated areas that will be affected by the diffusion of electronic commerce and where companies need to formulate their strategies and to position themselves:

1. The electronic commerce platform: As new electronic commerce platforms are emerging, the mechanisms for electronic trading and marketing as well as payment and security services need to be defined and refined. The potential of new hypermedia computer-mediated environments such as the WWW for business needs to be specified and existing solutions like EDI need to be integrated. The global electronic marketplace offers new opportunities for small and medium-sized enterprises. It is changing traditional patterns of division of labour and we are currently observing numerous new entrants into areas like payment services or retailing from outside the industry.
2. Customer relations: WWW provides new mechanisms for vendor-customer interaction and thereby redefines the role of the customer. The customer will be able to take a more active role in selecting information and customising products. Feedback is becoming easier and more widespread, and more customers are becoming involved in discussions over products, services and their experiences.
3. Procurement and interorganisational relations: Much attention is paid to the retailing potentials of the Internet. However, more and more business-to-business transactions are conducted over the Internet which emerges as a platform for new organisational forms such as networked organisations or virtual corporations. As the response time on the retail side is shrinking, companies have to devise new mechanisms to accelerate their own operations. Highly distributed processes and operations among autonomous organisational units, some of them conducted continually around the globe in different time zones, have been designed to meet the market requirements.
4. Internal adjustments: In a similar way, internal operations are changing and companies are exploring the structural opportunities of distributed operations in a networked organisation with email, telework, WWW, EDI, etc. As currently most of the information services on the WWW are free of charge, the information/service providers have to look for ways to recoup some of the Web-related costs which, however, are very limited in relation to marketing budgets for traditional media. One option is to use electronic interactions/transactions in order to streamline internal operations from procurement to order management. Companies may consider setting up customer information, frequently-asked-questions sites and email conferences on the Web in order to reduce the volume of personal calls. Within the Competence Centre 'The Strategic Potential of Electronic Commerce' (CC EM3), we are studying these areas in collaboration with six companies, the studies being pursued along three inter-related research tracks:

1. Monitoring and evaluation of ongoing developments: Confronted with a permanent stream of innovations and initiatives, we are maintaining an international network of relations with other research institutes and screen electronic information services in order to be able to understand and evaluate current trends.
2. Studies: In some pivotal areas, such as marketing on the Internet, electronic payment services, security, comparison of Videotex and WWW, EDI and the Internet, we are conducting in-depth analyses for and in cooperation with our partner companies.
3. Evaluation and development of business cases: Given the current rate of change and innovation, any conceptual and strategic analyses have to be linked to concrete actions. Therefore, we are studying and developing business cases with our partner companies for Internet/Web-related business, such as electronic storefronts, customer information and services, electronic product catalogues, etc. The Electronic Mail Bank provides a perfect testbed for these cases and we are developing architectures for electronic commerce and are continually scrutinising the emergence of interaction and business on this platform.

Figure 1: Electronic commerce - areas of impact