

# Teamwork, extended enterprise and electronic commerce

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## 1 Introduction

To compete in today's global information-based and customer-driven economy, companies must be efficient, innovative and competitive; able to respond just-in-time, focus on quality, and implement a so-called mass-customization. They try to adapt and align (a) their strategy, (b) their organizational structure, and (c) their use of information and communication technologies (ICT) in order to remain competitive, survive or grow.

In order to monitor the changes in their environment and to gain the advantages of both an innovation strategy and an efficiency one, companies are in the - maybe too slow ? - process of reviewing their organizational structures and processes. We distinguish three worldwide-adopted paradigm shifts that some companies try to adopt in order to:

- flatten some of their old-fashioned hierarchies by adopting **teamwork**, revising their decision processes, improving their integration and re-engineering their business processes [Ciborra, 1995]
- build or join alliances or strategic networks by adopting new patterns in collaboration with their business partners and transforming themselves in **extended enterprises** [Konsynski, 1993]
- establish more customer-oriented relationships by adopting **electronic commerce**, mass-customized practices and renewed intermediation structures [Kalakota, 1996]

Companies know that information and communication technologies (ICTs) can be a lever to implement their strategy and re-engineer their organization. Such information and communication technologies can be used for improving:

- **information gathering** capability and interaction with the environment by getting and sending information outside the boundaries
- **communication** and cooperative relations when making transactions with partners (i.e. supplier, customer, consumer, value-added provider, third-parties)
- the **coordination** of activities among partners and with customers; by adopting market-oriented mechanisms, sometimes more adequate than the hierarchical paradigm.

## 2 Teamwork and auto-organization

Academics, since Peter Drucker, argue that organization has to be flat and flexible with empowered teams of knowledge workers re-engineering and improving business processes. New information and communication technologies such as on-line databases and services, electronic document management (EDM), executive information systems (EIS), electronic meeting systems (EMS), video-conference, workflow automation, can leverage the redesign of

- the share of information, reporting and environmental scanning,
- the communication between team partners, and
- the coordination of their activities.

## 3 Extended enterprise

The traditional view of the firm with clear boundaries, limited relations with partners and stable markets is evolving. Today, information and communication technologies such as CD-ROM, on-line services, electronic data interchange (EDI), efficient customer response (ECR) and the Internet, can leverage a redesign of the inter-organizational relations allowing the companies

- to get better at gathering information about their out-of-boundary environment (trade contacts and opportunities, market intelligence, statistics),
- establish EDI-based partnerships with their clients and suppliers, and
- share electronic markets and platforms with their competitors.

*Electronic platforms* represent the initiative of one or more players (trade participants, professional organizations, or industry associations) in a market to provide a common electronic platform for the industry. The intention is to offer transaction savings, bring economies of scale, and improve the efficiency of trade for the entire participating community.

*Electronic markets* refer to computer-supported places where an intermediary performs many essential market functions like seller and buyer identification, matching, negotiation, settlement, insurance and trust brokering, product and service valuation. The intent is often the promotion of fair and competitive markets.

## 4 Electronic commerce

Firms communicate with their customers through various media. The computer-mediated environments such as the Minitel, CompuServe, and the Internet allow on-line marketers to increase their on-line spending in order to be

- better at gathering and diffusing information within their environment,
- more efficient in their relations with their customers, and
- more attractive on their consumer markets.

Most on-line marketers are adopting a trial-and-error method to find the best

approach to integrate these new media in their marketing strategy [Bloch, 1996b] in order to (a) learn about customers and get their feedback, (b) build a brand or corporate image, (c) make product promotion and increase the number of different visits, (d) adopt new distribution channels, (e) improve the customer service, (f) create new products, (g) build learning organizations, (h) create new business opportunities, and (i) introduce new intermediaries.

Information brokers such electronic markets and information malls are intermediaries that allow consumers to cost-effectively access, compare and discuss more data about the products they are willing to buy.

## 5 Conclusion

This paper suggested a framework, illustrated in table 1, for analyzing the use of ICTs in the companies. This framework adopted the idea that teamwork, extended enterprise and electronic commerce are *co-opetition* structures for coordinating business activities, balancing a high autonomy (competition) and a high control (cooperation). The framework also showed that the ICTs should facilitate the sharing of information, the communication between partners, and the coordination of activities.

	information	communication	coordination
Teamwork			
Extended enterprise			
Electronic commerce			

Table 1 : The analysis framework

## References

This paper is a summary of Y. Pigneur; *A Framework for New Informations Systems*; F. Bodart & al. (eds), *The Future of Information Systems: Challenge and Pitfalls*; FUNDP, Namur, October 1996, pp. 61-102 (see <http://inforge.unil.ch/yp/pub/toFUNDP.htm>)

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