

## **Regional eCommerce Development: The Need for Cross Border Cooperation and Concerted Action**

### **Panel Members:**

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### **Aims and Objectives**

This panel session will discuss obstacles for regional eCommerce development and ways to overcome them in order to

- evaluate the current state of knowledge on this topic,
- have a look at key issues in the field,

- consider what are the most fruitful research directions and developing an international research agenda and
- identify best practices in cross border electronic commerce projects.

## **Background**

Regional eCommerce development has become more and more topical throughout the last months. What is to be considered as a region in the eCommerce domain thereby is context dependent. For example, when looking at a certain supply chain, the port of Koper (Slovenia) may be called the 'neighbour' of the port of Rotterdam (The Netherlands) concerning physical delivery of goods, and from the IT perspective it is only a mouse-click away on a portal focusing on transportation services.

Developing and improving cross border eCommerce transactions clearly requires cross border cooperation. A network bringing together industry, users, research centres, universities and governmental organisations has to be formed in order to effectively address issues in the field of regional eCommerce development. For this reason various cross border initiatives, like the business and government executive meetings with representatives from Austria, Croatia, France, Germany, Hungary, Italy and the European Commission in Slovenia have emerged. Yet it is still a long way from regular meetings to the successful implementation of projects. One save way of dealing with the complex problems of different standards, languages and cultures is the design of prototypes that can demonstrate the feasibility and benefits of such solutions. For example, portals supporting the information flows and transactions in cross border end-to-end processes can have an enormous impact on the way business is done amongst all involved actors.

## **Issues for Discussion**

Panel members will address a number of issues, drawing together information from different national environments. These issues include:

- What are the main barriers to regional eCommerce development?
- Who are the necessary players to successfully promote regional eCommerce development and what are their roles?
- How can businesses and governmental organisations be encouraged to participate in projects aiming at regional eCommerce development?

- Which business models can be developed that ensure the economically viable implementation of solutions?
- Which best practices do exist and how can they be adapted to match different requirements stemming from culture, language, business tradition and so on?

## **Position Statements**

### ***Otto Petrovic***

From the last 5 years of work in the field of regional eCommerce development the following lessons learned can be summarized:

- Cooperation per se is inconvenient if there is not a clear goal and benefit for all participants
- Clear goals and benefits can only be aimed at if there is a viable business model for the cooperation
- The public hand can and should initiate cooperation, but it will not be sustainable if there are no business interests on the part of the industry
- eCommerce leads to a more networked economy. In the evolving networks it is the task of regional eCommerce development to strengthen the nodes and the links. Strong digital links lead to a redefinition of the terms “closeness” and “regional”.
- For developing networks concerted actions are necessary as the strongest node is useless without links and corresponding nodes
- Digital transactions very often occur together with physical transactions. Thus “real world” links like railroads and highways have to be strengthened just like their virtual counterparts - concerted actions are also necessary between the real and the virtual world.

### ***Dragan Čišić***

#### ***Regional Cooperation and Transport Corridors***

Transport corridors are generally composed by various modes under the management of different operators. Due to the lack of integration policies, isolated modes may have high level of productivity as such while the transport corridor, as a whole may be inefficient, however. Infrastructure deficiency, bureaucracy, and lack of appropriate supply chain management

are usually related to the inefficiency of the transportation system. To make the intermodality effective, and the various activities of the supply chain efficient, it is of great importance to utilize technological information on the logistic chain, as well as to consider all the relevant (monetary and non-monetary) costs. Fundamental development trends in the field of transport technologies are changing the transport corridors, and especially seaport, as node points of the transport corridors. From fixed outlined areas, transport corridor hinterlands are becoming more difficult to demarcate. A transport corridor's hinterland is the continental area of origin and destination of traffic flows through a transport corridor, in other words, it is the interior region served by the transport corridor. As the region is the transport corridor's market, a prerequisite in developing an efficient marketing strategy is to know its spatial dimensions.

Up to this point we assumed that only transportation costs are relevant in the determination of the hinterland. In practice, however, direct monetary costs do not determine the relative attractiveness of the transport corridor towards a certain inland market only. The costs of using markets i.e. the so-called *transaction costs* should also be considered in such a context.

Henceforward, we shall focus primarily on the transaction-costs, which can emerge in all phases of transactions: preparation, handling and controlling (Brand 1990). Depending on the phases, different forms of transaction-costs can be described as follows (Appel 1998):

- *Searching costs*: they are transaction-costs caused by the search for transaction partners or alternative actions (examples are: the amount of time needed for the search at special organizations or institutions, costs which are caused by the use of telecommunication, online services or special publications or management consultants).
- *Information costs*: information costs are defined as transaction-costs that are caused by the lack of information in the process of interaction. This covers costs that are caused by the use of different languages (e.g. translation costs) or by technical problems that disturb the exchange of information (costs of technical equipment to overcome this disturbance).
- *Decision costs*: decision costs are transaction-costs that arise from the inherent market- and technology-related uncertainty faced by the firm, from complexity of the decision-making situation as well as from the participation of different members in the group decision process. Due to different aims and motives of participants of decision groups, coming to an (commonly shared) agreement is a very time-consuming or impossible process. Moreover, decision costs may be caused by incomplete contracts which did not realize in the way they were negotiated or by contracts that were not closed in the intended meaning.

- *Bargaining costs:* bargaining costs are defined as transaction-costs that are caused by the process of negotiation (examples: costs of lawyers and consultants, costs of the required resources like costs of traveling and traveling time).
- *Control costs:* control costs emerge from the adaptation and supervision of transaction results (examples: costs controlling payments or arranged technical standards or quality).
- *Handling costs:* handling costs are transaction-costs that emerge from the management of converging action cooperation (examples: costs involving human resources, costs which are caused by the definition of business processes).
- *Adjustment costs:* all transaction-costs caused by the change of transaction conditions can be defined as costs of adjustment (examples: costs which are caused by the implementation of new laws or new IT-standards).
- *Disincentive costs:* disincentive costs emerge by an opportunistic behavior of the transaction partners or employees, i.e. every partner tries to interpret the contract to his own advantage (examples: unannounced high increase of prices by a supplier of products which have a very high level of specificity).
- *Execution costs:* execution costs are transaction-costs that arise from the collection of overdue performances or payments. A possible example is the collection of proceedings.

The hinterland potential of a transport corridor is dynamic. It can be changed due to fundamental developments in technology, economy and society, which all have an impact on the demand of shippers for transport services as well as on generalized transport costs. For a single transport corridor, the demand for services (the import and export of the regions) can merely be taken exogenously. To a large extent, this is also true for the generalized transport costs. Transport costs for the seller are not only direct monetary costs but costs related to risks and time should also be considered. Together with the direct monetary costs, these costs can be included in the concept of generalized transport costs.

These generalized transport costs could be minimized by decreasing of the transaction costs. In order to confirm previous thesis a series of postulates will be launched:

(P1) Companies within transport corridors form a virtual organization.

(P2) Transportation costs include direct goods movement costs (i.e. monetary distribution costs) and non-monetary transaction costs between the organizations which are coupled together with through the use of the transportation corridor.

- (P3) Diminution of the transaction costs significantly decreases the whole transportation costs
- (P4) Usage of the information systems and electronic commerce technologies decrease transaction costs
- (P5) Interconnections between the companies in transport corridor currently are not strong enough to force the usage of common standards, and .
- (P6) The regional electronic commerce cooperation will introduce closeness between companies, moderate the conflicts, strengthen the social capital and trust.

Appel W. - Behr R., (1998): TOWARDS THE THEORY OF THE VIRTUAL ORGANIZATIONS *vonet The Newsletter* @ [www.virtual-organization.net](http://www.virtual-organization.net) , Vol 2, No 2. IWI.

Brand, D. (1990): DER TRANSAKTIONSKOSTENANSATZ IN DER BETRIEBSWIRTSCHAFTLICHEN ORGANISATIONSTHEORIE. *The transaction-cost approach as a subject of the organisation theory*, Frankfurt/Main.

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