

MARKETING FOR ELECTRONIC MARKET PLACES – THE RELEVANCE OF TWO “CRITICAL POINTS OF SUCCESS”

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OVERVIEW

The fact that an electronic market (EM) belongs to a specific market place operator results in specific objectives of its marketing. The main question is: How can an operator promote the performance of his market place ?

The central task of an EM is the coordination of supply and demand. Thereby the market place operator collects offers and demands and assigns the transaction partners according to a specific coordination mechanism.

The success of the coordinating function depends on two "critical points of success": On the one hand, the critical cost factor in which the transaction costs equal the costs for coordination. From this point on, the coordination of a transaction via the EM will be cheaper than via traditional market places. On the other hand, the critical performance point at which the costs of coordination equal the coordinating performance. From this point on, a specific EM will perform better than competing electronic market as its transactions will be more accurate than via other comparable electronic market places.

MARKETING FOR ELECTRONIC MARKET PLACES ?

Due to digital information networks, (i.e. internet/www) individual data can be sent or received at almost unlimited speed. The contact to other market place participants herewith will no longer be a matter of distance in space or time but a question of the arrangement of the quasi-personal contact within these data nets (Weiber/Kollmann 1997). However, the reduction of the limits in space and time (Zbornik 1996) simultaneously requires and fosters an intensified use of electronic coordination instruments to collect, process, and

transmit information. In order to coordinate various commercial contacts different topic-oriented electronic market places (EM) increasingly emerge. Within the data nets these EM combine streams of information on supply and demand in a goal-oriented manner.

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Accordingly, an EM is a trade system initiated for specific business transactions. It coordinates needs of market participants within the virtual market according to certain competition processes (Zbornik 1996). A virtual market space is created due to the initiative of a market place coordinator (or a market organisation) who has no ownership of the traded goods. This market offers a timewise permanent zone for economic transactions and can be reached from any location within higher-level data nets. The fact that an electronic market (EM) belongs to a specific market place operator results in a central marketing-oriented question: How can the operator market the performance of his EM ?

THE COORDINATION FUNCTION OF ELECTRONIC MARKET PLACES

The central aim of an EM is the coordination of supply and demand. This basic task applies to any form of market, even if so far a market was considered to be an abstract place where supply and demand meet. However, in the case of EM a virtual market develops that exists independently from real conditions. The market operator collects offers and requests and coordinates the transaction partners according to a certain coordinating mechanism (guided coordinating function). This steered coordination is the actual performance of an EM. Therefore, marketing this performance is at the centre of the economic success of an EM.

Up until now, however, no complete marketing concept for the operator of an EM can be found. On the other hand, general aspects of direct electronic trade between enterprises and consumers via data nets can serve as a starting-points. Still, it is not the question of whether electronic trade relations ought to be generated (aspect of transaction costs) but rather how virtual commercial transactions for a EM can be acquired, supported and reinforced. To achieve this, the operator can follow three strategies: He offers the coordination of a transaction cheaper, better or quicker than competing market places. In this respect it can be assumed that the aspect of "transaction costs" (strategy: "cheaper") rather tends to come to bear as far as the competition of the electronic market places with traditional markets is concerned (Wyckoff 1997).

In the intensifying competition between EM different success factors become relevant (strategies "better"/"quicker") as in data nets the cost of transmitting digital information tends towards zero.

THE COORDINATION PROBLEM OF THE MARKET OPERATOR

The need for coordination does not automatically result in a solution of the problem of coordination as at every stage of development specific peculiarities of EM

become relevant. These specific peculiarities can be divided in analogy to the three basic strategies (mentioned above) in quantitative and qualitative problem areas (Kollmann 1998a). Therewith, the following quantitative problem aspects emerge at the centre.

CHICKEN-AND-EGG-PROBLEM:

The need for interaction within EM cause the so-called Chicken and-Egg-Problem (Durand 1983; Earston 1980), which is also referred to as *circulus vitiosus*. The Chicken and-Egg-Problem can be illustrated by two statements:

- ◆ If the number of suppliers is too small or if the attractiveness of the suppliers is not strong enough, no new or attractive buyers will approach the market place.
- ◆ If the number or the attractiveness of demanders is too small, no new or attractive suppliers will enter the market place.

The resulting dilemma poses an obstacle for the development of a "market place" and therewith for the development of EM as well.

TWO-SIDED CRITICAL MASS PROBLEM:

The installed basis (i.e. the user number already existing in an online system) determines the utility of this system for an adopter. (Farrell/Saloner 1986). The bigger the installed basis, the larger the derivative utility for the participants of the communication system is. If a certain user number is exceeded and the derivative use has accordingly surmounted a certain level, it is to be expected that the user will also use the communication system in the future. Moreover the number of adopters that will enter this communication system will increase. The smallest number of users that is necessary so that communication systems "...can develop a sufficient usage for a long-term application for a user circle is referred to as critical mass." (Weiber 1992).

Therefore, particularly at the beginning, the market place operator can be confronted with two start-up problems which

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are based on two critical masses: A critical mass of suppliers and a critical mass of demanders (Koch 1998). A two-sided critical mass problem therewith describes the situation in which there is a critical mass on every side of the market. For the supplier a certain number of demanders of a certain quality have to be present to make the market place attractive. At the same time a certain number of suppliers with certain characteristics have to exist

in that market place so that buyers enter. Besides that qualitative problems also occur in the further course (Kollmann 1998a):

SATISFACTION OF COORDINATING NEEDS

The number of market participants as such on the supplier and demander side does not yet allow any conclusions about the level and quality of the assigned transaction partners. Therefore, it has to be clarified to what extent the demand on both sides can be satisfied. Therefore, the decision to actively participate in a market place also depends on the way transactions are coordinated, i.e. the coordination design.

QUALITY OF BUSINESS DEALS

Additionally, the number of business deals that have been concluded does not say anything about their quality (form, degree and direction of transactions done and their effect on the whole market system). Correspondingly, in case of a market fee that depends on the value of the transaction (e.g. five percent of the value of the material), the value of each transaction plays an important role for the market place operator.

Over time a shift of the relevance from the quantitative to the qualitative problem area can be postulated. Before reaching the quantitative critical masses an acquisition of further market participants is in the foreground, whereas beyond this point in time a "trade-off" emerges and the quality of the individual transactions tends to be of greater importance (see figure 1).

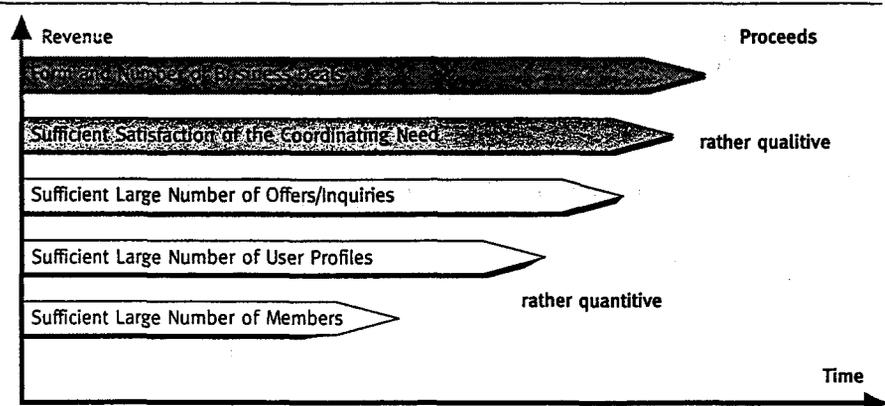


Figure 1 The development of coordinating problems

THE TWO "CRITICAL POINTS OF SUCCESS" FOR AN EM

It is obvious that the better the coordination performance (cp) of an EM is the further the transaction costs can be reduced from the viewpoint of the market participants (EM = transaction cost reduction - Brandtweiner/Greimel 1998; Wigand 1995). Besides, the transaction costs (negotiation with business partners) the fees of an electronic market place (coordinating costs in the sense of transaction fees) also come to bear. However, it also became clear that the attractiveness of an EM depends on the number of participants and the qualitative assignment of a transaction partner. This is due to the fact that in the case of a close business relationship or with less potential transaction partners, the effect of the reduction of the coordinating performance on the transaction costs declines. In a relation between the coordinating performance and transaction costs two "critical points of success" for electronic market places result from the point of view of a marketplace operator (Kollmann 1998a, figure 2).

Independent of the number of market participants the coordinating costs remain constant because of the electronic information processes. On the other hand, the classic transaction costs increase with the amount of potential market participants. The declining marginal transaction costs here are based on possibilities for segmenting or effects of "economies of scale and scope" respectively. Simultaneously, the value of the coordinating performance increases in a s-shape since the coordinating probability and thereby the coordinating potential of the market rises with the number of participants until the marginal utility decreases. Furthermore, in due course the increasing experience of a market leads to more potentials of improvement. From the points of intersection - critical points result: A first intersection is reached at the critical cost point where the transaction costs (c. of t.) equal the coordinating costs (c. of c.).

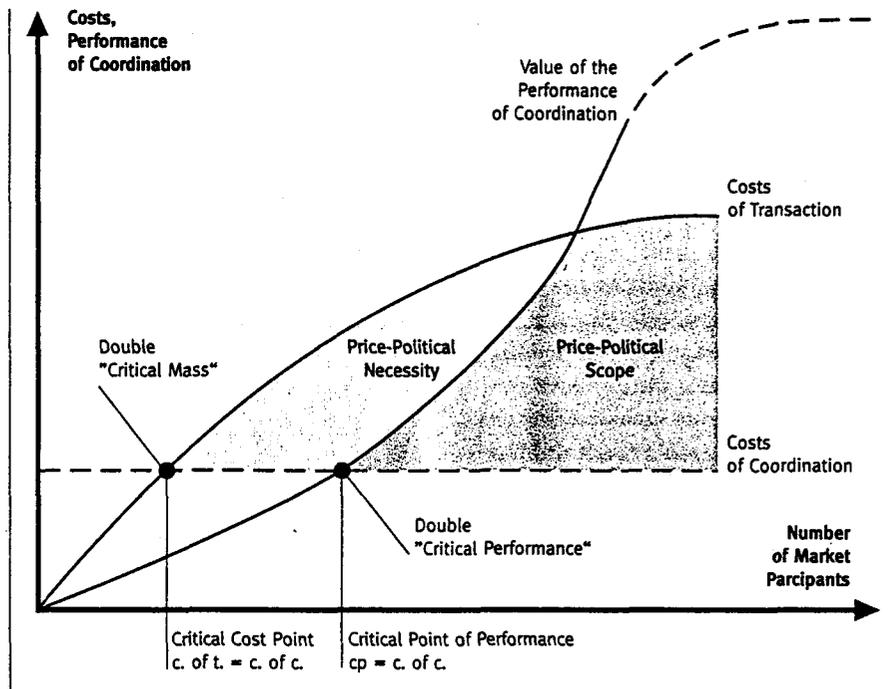


Figure 2 The two-dimensional "critical point" of EM

Source: Kollmann (1998a)

From this point on, the EM has an advantage over traditional market places as the coordination of the transactions by the EM will be cheaper. The market place operator has to assure that the number of market participants are balanced. This is due to the fact that the relation of transaction costs "EM vs. classic market" is analysed both on the supplier side as well as on the demander side. Entering the market from a quantitative-oriented point of view depends on their relation (double critical mass). Correspondingly, this first critical point resembles a hurdle for a price-political requirement of the market because it is to be assumed that initially, mainly cost aspects come to bear.

As already explained the attractiveness does not exclusively depend on quantitative but also qualitative characteristics. Taking these considerations into account, a second point of intersection appears: the critical point of performance. Here the coordinating costs equal the coordinating performance (cp). From this point on, a specific EM holds an advantage over other competing electronic markets. From hereon the coordination via this EM is more reliable than via comparable elec-

tronic market places. This point of intersection is located to the right of the critical point of cost since the probability of the coordination in relation to the costs will be above a minimum number of market place participants. The market place operator still has to assure that the coordination is based on a balanced relation of market participants (e.g. five suppliers with five offers each will be assigned to 25 demanders versus one supplier with 25 offers will be assigned to 25 demanders). The reason for this is the comparison "EM versus EM" which is undertaken by suppliers as well as by demanders. It is this comparison that determines the quality-oriented entering of market participants (double "critical performance"). Accordingly, this second critical point resembles the threshold for the price-political necessity for the EM to be cheaper than traditional markets, and, in contrast to other competing electronic market places, to increase the revenue for the participants through a better coordinating performance. Against this background it is to be assumed that in the course of the expansion of electronic market places quality aspects will be of primary importance. The cost aspect in

comparison with traditional market places is a co-criterion and a first order condition for an EM, whereas the aspect of performance resembles a second order condition for the success of electronic market places.

The first survey among operators of electronic market places in the German-language internet (Kollmann 1998a) was able to support the idea of two critical points of success: On a scale of 1 = important to 6 = not important the statement that in contrast to traditional market places the advantage of cost was primarily of importance rated 2,72 whereas this cost advantage is considered to be significantly lower in comparison with the competition to other electronic markets rated 3,58. Along with these findings the success of EM over traditional market places was mainly put down to the cost advantage whereas in comparison with other electronic market places this clearly shifted to the coordinating performance (see figure 3)

MARKETING FOR ELECTRONIC MARKET PLACES!

The marketing for electronic market places follows quantitative and qualitative characteristics because of the two critical points of success. If it is to be assumed that the Internet will establish itself as a general data net basis (corresponding communication structures are present) and that its possibilities are used, the access to an electronic marketplace by software will become solely a matter of being connected (quantitative characteristic) apart from communication fees. The connection determines the quantitative amount of market participants whereby, following the "double critical mass" (see above), a sufficient number must be present on both sides of the market (critical point of costs).

Apart from being connected, the usage (quantitative/qualitative character) also resembles a necessary element, as a market place derives its attractiveness not only from the "entering of the market participants". The simple presence of market

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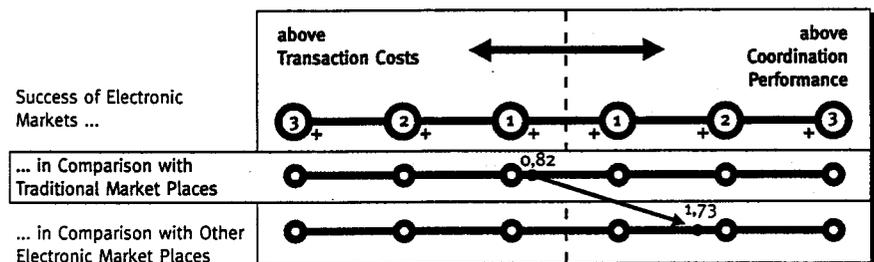
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participants is not sufficient yet as they have to connect their need for coordination through the use of the "market information pool" (usage of interactive modules to place an offer or an enquiry). In that context electronic market places can also be considered to be a "system of use" in which the success does not only depend on the "purchase" of a market access (act of attachment) but especially on the use (act of use) of the virtual information supply (Kollmann 1998b).

Subsequent to the specification of the individual coordination aims by the market participants, the actual performance of the market place operator - the assignment of transaction partners - comes to bear. This coordination within the coordinating function is achieved through the coordinating act (qualitative characteristic), in which the individual's needs and specifications are analysed and assigned to one another. Process-technically seen, it has to be kept in mind that the coordinating act resembles a further processing of the information of the act of use. The perhaps most central point of differentiation in this context is the fact that the use only causes a quantitative effect concerning the coordination contents. That means the more intensively an electronic market place is used the higher the possibilities for a successful coordination are because more offers or enquiries with a higher specification are placed. The market place operator in the short or long term has to offer a satisfying coordinating performance as otherwise the market place cannot fulfil its task of bringing together supply and demand (critical point of performance).

Figure 3 Criterion of differentiation of the EM from competing markets



Source: Kollmann (1998a)