

e-Market Benefit—Findings from Chinese Main Websites Case Studies

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Abstract. e-Market is on the agenda both in research and in practice and there is a rather broad research field. This paper examines current case studies in order to seek the e-Market benefit and some directions for future research. All data collection in this paper comes from the websites of Alibaba.com and Taobao.com, 2004-2006. The case studies provide an insight on the benefit businesses can gain from e-Market which not only improve business' survival environment but also enhance business' competitive advantage.

1 Introduction

Marketers have been using electronic tools for many years, but the Internet and other information technologies created a flood of interesting and innovative ways to provide customer value. e-Marketplace is based on traditional market with information technology. The Internet and other technologies affect traditional market in three ways. First, they increase efficiency in established marketing functions. Second, the technology of e-Market transforms many marketing strategies. Finally, it has fundamentally changed consumer behavior through a power shift from firms to mouse-holders. The Internet also serves as an efficient marketing planning tool for both secondary and primary data collection. e-Business is important, powerful, and unstoppable. But what is it, exactly?

In e-Marketplace, e-Business is conducted on computers and the Internet with continuous optimization of a firm's business activities. With digital technologies, computers and the Internet can store and transmit data in digital formats so that e-Business can implement the business' strategies and attract and retain the right customers and business partners. While e-Market flows from the organization's overall e-Business strategies and selected business models. It permeates business processes, such as product buying and selling. It includes digital communication, e-Commerce, and online research, and it is used by every business discipline.

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e-Market and e-Business era are both changing the way businesses look at globalization and competition. Organizations are rushing to adopt some kind of e-Market strategy. In many organizations, information is now accessed via corporate web-servers, so the web browser is a universal user interface for the corporation databases. The Internet has made it possible for business to gain access to an information infrastructure larger than that owned by any major corporation. But how much does the Internet help business gain benefit in its operations and practices?

This paper is to explore the benefit of business in e-Marketplace, based on the result from Report on the Survival and Development of e-Market in China 2004-2006 (RSDEB) [1]. From 2004 to 2006 a questionnaire survey of Chinese companies was carried out within the framework of RSDEB project among other things on their use of Internet. The questionnaire covered 3628 firms with between 10 and 500 employees. The selection was based on several different criterions such as size, region, branch and so on.

The paper provides an analysis of a series of case studies of Chinese businesses which are active e-Market users. The discussion is based on RSDEB and the case study addresses the pre-conditions for e-Market success and strategic effects resulting from its use. The paper includes presentation of the background of the literature reviews, participants, research method, and analysis of e-Market benefits according to the results of RSDEB.

2 Background of the participants

2.1 The Present Situation of e-Markets

At a World Internet Centre symposium in Silicon Valley in 2000 one session focused on the topic: “B2B e-marketplaces and the future of e-commerce: what path will it take?”

In business, everyone started with great expectations and predicted a path that e-market would lead to great success. Buyers expected to reduce costs by automating processes and, at the same time, increase visibility. Suppliers expected to increase sales by being hot-wired to a purchasing chain – a new sales channel – just a mouse click away.

In China, the e-Marketplace, Alibaba.com was set up in 1999. It was eye-catching. At the very beginning, Alibaba.com had its clear business model with the purpose of becoming the biggest and most active e-Marketplace in the world. Up to July, 2001, it had 730,000 members from 202 countries and regions of the world. Everyday more than 1500 businessmen register for membership of Alibaba.com. In 2006, Alibaba.com had gained more than ¥2bn. Obviously, this model – providing firms e-Marketplaces, local or regional, horizontal or vertical, and the opportunity to think about joining e-Markets – will help more and more firms to get their desired benefit.

2.2 Literature Review

e-Market researches are extensively made. Since 1989 the research area "e-markets" is a relevant topic for the CCEM Competence Centre Electronic Markets at the Institute for Information Management, University of St. Gallen. An overview of the previous work and a detailed analysis of the theoretical framework can be found in [13], [14], [15], [16].

The current research of e-Market is targeted at the four sites: e-Market infrastructure (Ashish Arora, Gregory Cooper, Ramayya Krishnan and Rema Padman, 2000;)[17], e-Market innovation(Qiuli Qin, Zhao Xi, Jingyan Chen,2001)[18], e-Market model (Prithviraj Dasgupta, Louise E. Moser and P. Michael Melliar-Smith, 2005;)[19] and e-Market evaluation(Qizhi Dai and Robert J. Kauffman, 2006;)[20].

In China, scholars pay attention to e-Market and does research concerned. Zhu [2] presents the three modes of e-Business from e-Market management perspective. They are: (1) e-Market controlled by seller means that the suppliers create their webpage a products catalog by themselves to attract more buyers and reduce the transaction costs. (2) e-Market controlled by buyers means that the buyers create webpage and put their products on e-Market by themselves to attract more suppliers and reduce the transaction costs. (3) e-Market controlled by intermediary means that e-Market play the role of digital intermediaries [5, 6].

Liang et al. [9, 10] proposed that a successful e-Market provides the users with transaction opportunity, transaction verifying and transaction executing. For example, demand and supply information can be aggregated and disseminated, and buyers and sellers can be matched in e-Markets, and to make transaction at the marketplace for increasing transaction efficiency and reducing transaction costs for both parts. He states that intermediary e-Market provides the platform for small and medium sized enterprises which can't establish their own company website, and for large enterprises which realize the integration of interior ERP/MRP/MIS/CRM with exterior exchange markets.

Jiang [7] presents that the greatest advantages of e-Market are improving efficiency, reducing transaction costs. The platform integrated the different suppliers and purchasers into the e-Market, which has greatly facilitated finding products and the selection of suppliers who can more easily promote their products. This not only reduces the cost of sales, but also can handle inventory and make an inventory of assets.

Yan et al. [8] explored the mechanisms for building reliable transaction between sells and buyers under the environment of e-Market. A theoretical framework of e-Market is proposed for reliable transaction system includes credit control, credit appraisal, credit obligation, credit feedback and cooperation criterion.

In summary of literature found, although prior work in this field has substantially contributed to our understanding of the role of e-Market in China, but more case studies need to be conducted to find companies how to get benefits via the process of practical transaction in an e-Marketplace.

2.3 A Case

The Report on the Survival and Development of e-Market in China 2004-2006 (RSDEB) [1] reports that from 2004 to 2006 a questionnaire survey of Chinese companies was carried out within the framework of RSDEB project on their use of Internet. There are 3628 businesses participating in this study. These participants were selected from the websites of Alibaba.com and Taobao.com etc [11, 12]. Businesses which had been involved in an earlier survey research project designed to establish the profile of Chinese businesses using the Internet. The questions designed for the study involve the following aspects: business sectors; the services and products they provided; staffing; turnover (in RMB\$); number of years they have been using the Internet; investment plan; and the key reasons expressed for their ongoing Internet use.

The sample was deliberately chosen from a variety of business sectors, so that the existence of the non-manufacturing sector could be investigated. This is important to further research and the formulation of future research questions.

3 Research method

The survey study was designed to collect quantitative data and made no provision for interaction with the participants, with the result that any important issue not covered directly by the questionnaire would be missed. While such an approach is ideal for capturing larger samples' attitudes and activities, it is realized that a deeper insight into the dynamics of Internet use would be helpful to understanding current and future activities within the non-manufacturing business sector. So in order to understand the implications of business Internet use, some more focused methodology was clearly needed.

The case studies were designed as a series of interviews and site visits. Where site visits were not feasible, owing to distance or time factors, the questionnaire on-line were carried out instead. Interviews and discussions were recorded as a series of field notes and subsequently transcribed into more detailed accounts and figures, which were then verified with the case study participants for accuracy. The interviews were carried out by using a set of open-ended questions as guide to avoid drifting from research foci. The survey mainly covers the following parts:

- i. Gathering information on the background of each company, its director, and the role played by the director/management in adopting Internet use;
- ii. Asking participants to provide examples of how their firms have gained benefits from e-Market;
- iii. Attempting to identify the integration between existing internal application systems and e-Market;
- iv. Examining each organization's way of using e-Market to support traditional business activities.

4 Results and analysis

The data analysis process involves identifying patterns in the participants' answers to the open-ended questions. The main points made by participants are consolidated and the information and results from a survey study conducted prior to the case studies are incorporated, which makes it possible to assess the validity of the dominant patterns recurring in the 3628 cases. For example, the answers from the majority of participants all indicate that there is need to use e-Market to support human communication.

4.1 e-Market as a communication medium

Most of the 3628 firms take the key function of e-Market as a medium for human communication. These firms see the e-Market succeed in providing what the telephone or fax services cannot offer – asynchronous communications, overcoming time and geographic limitations and multimedia transmission. Cost savings is also regarded as a key reason for using e-mail, although most does not take into consideration set-up and ongoing costs. Being able to transfer electronic documents is suggested by some participants as very important, because neither the telephone nor the fax services can do this as easily as e-mail does.

In Figure1 below it can be seen that the firms use e-Marketplace to do their business from 1999 to 2006. If these results are compared with Figure2, it can be seen that the extent of implementing business on E-Marketplace has increased. That means that more and more firms are using the new technology and are trying to gain an understanding of whether e-Market, for example, is a medium for increased contact in the market. Replacing paper-based communication between firms and their vendors/customers is also high on their list of priorities.

Though it is not long since the businessmen are engaged in the e-Marketplace, they are curious to find the value of e-Business and make good use of it. According to a survey (see Figure1 below), 1999, only 1% of businessmen used e-Marketplaces to do their business. In 2003, the percentage went higher. Up to 2006, the number of e-Businessmen of the first half of the 2006 was the same as that of the whole year 2005.

At the same time, there is much difference among firms in their choosing e-Marketplace. As is shown in Figure2, the number of e-customers both Alibaba.com and other websites served, was growing in 1999. As time goes by, more customers prefer to choose Alibaba.com. It shows that e-Businessmen have a clear knowledge of e-Market. They choose e-Marketplace for their business development based on their own characteristics and other factors.

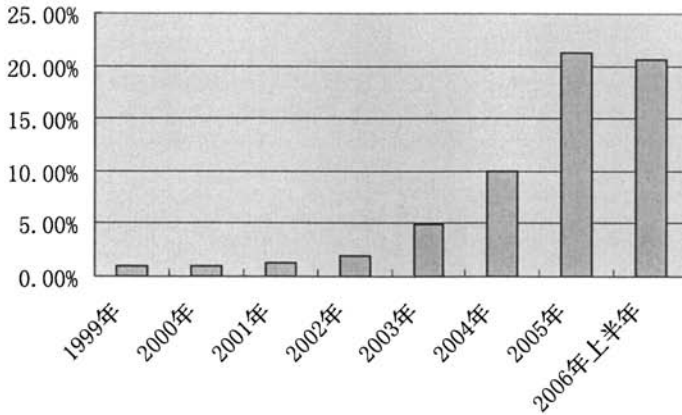


Figure.1.Firms on e-Market (%)

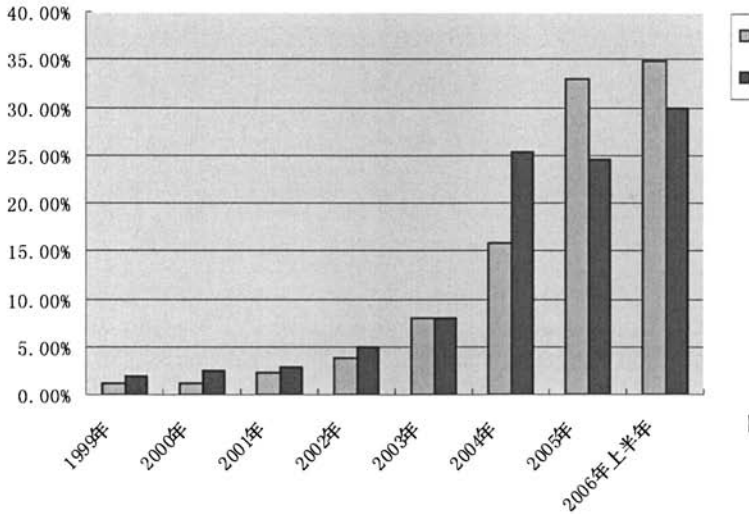


Figure.2. Website used (%)

4.2 Promoting management on e-Market

The extent to which firms put effort into e-Business process development can be seen in Figure3 below. The results show that during recent years businesses focus more on the management and organization development to improve e-Business process than other.

According to the result of the interview, both external forces in the form of customers and competitors as well as internal requirements to improve efficiency in the organization are the driving forces behind the changes.

Some firms have changed their information systems. The interview shows that most of the firms focus on e-Market issues and many firms are at present involved in making major changes in reform of their management. There may be many reasons behind the need for changing the information systems. Changes in business operations may, of course, require changes in information systems, but the rapid development in e-Market area also provides possibilities for increased management. New applications and new computerized approaches can influence the firm management.

When firms have made larger change to meet the e-Business process and organization on e-Market, the firms' managements are largely the basis for change.

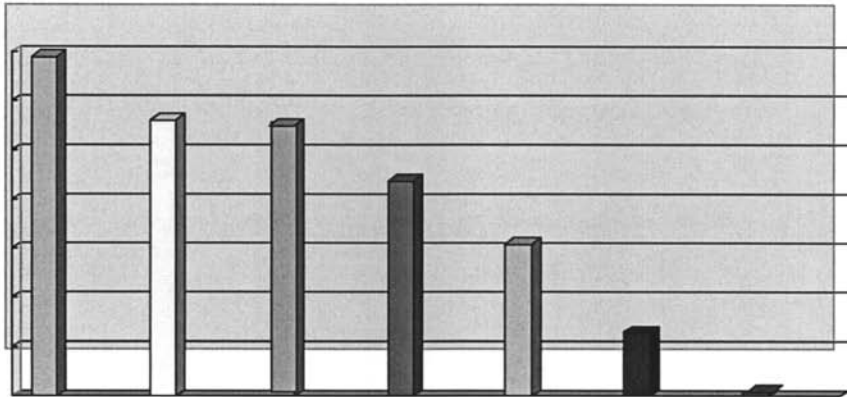


Figure.3. Changes for firms' management

4.3 Benefits from e-Market

e-Market benefit can be measured in a variety of ways. In this study, it can be measured in change of financial turnover and investment since adopting e-Market. Figure4 shows the firms' turnovers on e-Market in 2005. Figure5 shows that the firms have made change in the investment.

To the question whether there was sufficient return directly resulting from e-Market that they could cover their connection costs, participants from small businesses gave answers of either "no" or "barely". So, it is confirmed to some extent that small businesses were not reaping significant short term benefits. However, most of the participants saw that online purchases and transactions were only one way e-Market could be used to support their businesses. As most of the participants were using e-Market as a communication medium, the ways e-Market supported their business operations were similar to common communication services like traditional way, but more easily and efficiently. Even those who admitted gaining short term benefits (particularly direct benefits) were aware that such benefits were only marginal, and often circumstantial. Most participants said that indirect benefits were keeping them connected to e-Market. As more businesses start

to trade via e-Market, most participants believe it is still much cheaper to access the global marketplace in this way, prior to setting up serious business relationships. It seems that the positive trend of e-Market business development was what kept the participants connected to the e-Market. Most participants believed not having an e-Market presence (most referred to an e-mail address and a Web page) will soon become a competitive disadvantage.

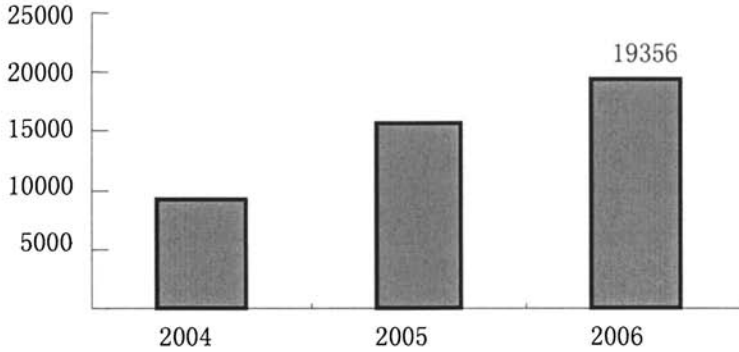


Figure.4. Average Invest of the Firms on e-Marketplace

The figures 4,5 indicates that businesses show more and more interest in doing business on e-Marketplace. Figure 4 shows that in 2004, e-Businessmen invested 9233 yuan (RMB\$) in the e-Market. In 2006, 19356 yuan was invested. The project group interviewed 10 successful businessmen and found that more than 90% of their business was done on e-Marketplaces. The most amount reaches 0.7 million yuan in the e-Business. Figure 5 shows that in 2004 most e-Businessmen only invested a few thousand yuan, but in 2005 and the first half of 2006, they invested more than 10000 in their e-Business.

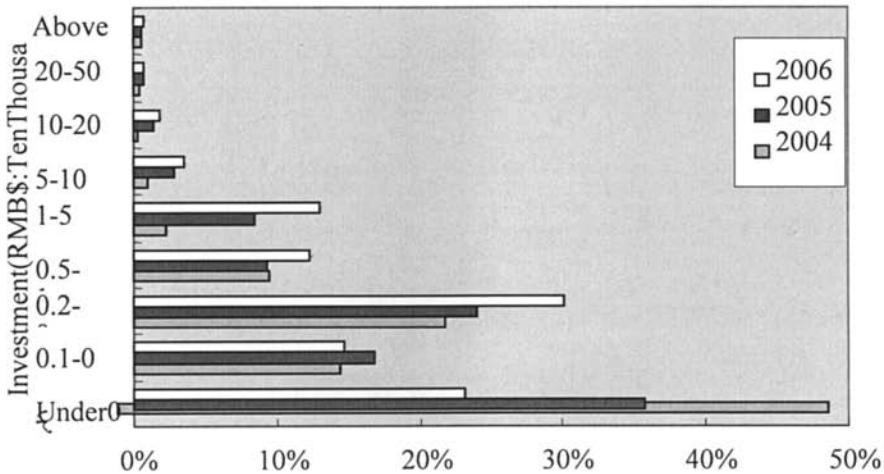


Figure.5. Investment of e-Market

4.4 Industry and product specificity

The figure 6 shows that when the businesses enlarge their investment in e-Business, e-Marketing is becoming multiple and united. In the e-Business model, business marketing and promotion has changed from comparatively exclusive to inclusive. E-business information of every kind is issued through internet. Thus e-Marketplace provides firms and users special and personalized e-Marketplace so that the competitive businesses can use the new tools in their competition with each other.

As for how e-Market is used in business operation, it becomes obvious that industry and product specificity have influenced them in using e-Market to support their business operations. It is observed that if the firm has more customers and business partners using e-Market, it is itself more willing to use e-Market for its business. There seems to be a “peer encouragement” effect in this case, particularly if all parties have convincing evidence that they are, indeed, better off. In terms of industry and product dependency, those firms which belonged to e-Market-spawned businesses were relying on e-Market more than firms from other business sectors. Figure6 shows the firms’ activities on e-Market. Apart from the fact that these firms were more “e-Market literate”, they had actually experienced first-hand the ways in which e-Market has improved the effectiveness and efficiency of their business relationships. Such improvements made them more competitive and this kept the advanced e-Market user exploring the e-Market for assistance in further aspects of their business dealings.

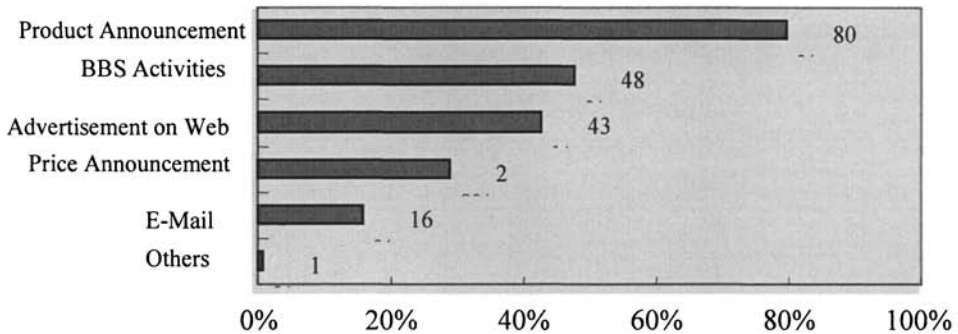


Figure.6. Activities on e-Market

In China, more vertical websites that focuses on a business are springing up. In the survey, at least more than 200 specific websites in 25 fields of business have been set up now. As Figure 7 shows, more than 10 businesses have their business operation in a considerable scale.

The effect of product (or service) specificity related to e-Market use can be measured by investigating how much the customer would be satisfied with an electronic version of the actual “thing”. Our findings lead us to believe that if the usefulness of the product or service is preserved or enhanced when delivered in digital form, then the business itself, its customers and business partners would tend

to use e-Market more. For example, group of e-Market spawn businesses often use e-Market to deliver their products (e.g. software or Web page design), not only because the electronic version was better than its physical counterpart, but also because this saves time and costs (service enhancement). This is why the specific websites attract most users, including firms and customers.

As benefit in the e-Marketplace is going up, more and more industry group attaches importance to enhancing their e-Market. Figure8 shows the firms' plan of investment in 2007 for similar reasons. Other participants were using e-Market as improving management, such as a document transfer medium etc.

No.	2005 Business Volume (¥)	Special Website
1	Under 5 million	90
2	5-10 million	75
3	10-50 million	10
4	Above 50 million	5
Total		180

Figure.7. (2005 Business Volume on Special Website)

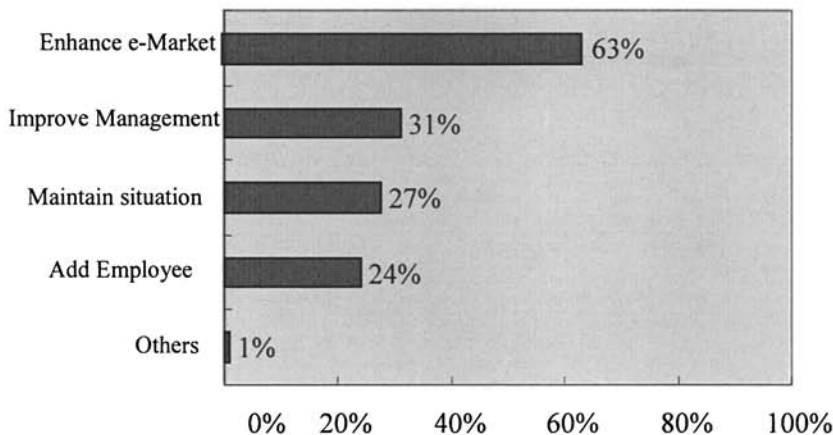


Figure.8. Plan of E-Business in 2007

4.5 Integration for e-Business systems on e-Market

In the questionnaire firms are also asked to state the extent to which sectors were specially grouped for different functions. The interviews also show that to the extent they have IT specialists these often have the role of operations sectors. Literature on e-Market and strategic advantage often stress that longer term benefits can only be

realized with well-planned integration of business functions in an inter-organizational or sector-wide manner. But the findings indicate that at present there is little integration between e-business systems and e-Market among this group of early adopters. Among the participants, internal IS functions such as accounting, customer and inventory management were still operating independently of e-Market. For this group of companies, there was a gap between inter-organizational and internal IS activities. Although all firms were using e-Market for information exchange with their customers, none has reached the integration so that messages through e-Market, such as orders, could be processed by its internal system automatically.

The results of our studies, in fact, suggest the process of integrating e-Business systems with internal application systems among businesses is likely to differ from the conventional ones. IT enables business transformation to start with local business functions within the organization, then expands to inter-organizational and, finally, to sector-wide transformation. Although this does not explicitly state that the different stages are sequentially connected, it is implied by examples showing organizations passing through these stages sequentially.

5 Conclusion

The overall result from the study indicates that among those who have been online for about two years, there is evidence that e-Market has been providing benefit to its adopters. The study provides evidence that the most crucial issues affecting ongoing e-Market use within businesses are management's commitment and perception of benefits. Most firms are still using e-Market as a communications medium in addition to the telephone and facsimile, although advertising and marketing are also driving Internet use.

When compared to traditional internal application systems, e-Market offers a tool on which users can build their business processes. Therefore, user input and ways of use will determine how much benefit one can get out of e-Market. This leads us to believe that businesses that use e-Market will eventually create the difference between firms which has a positive attitude towards e-Market use and those having a negative view of this e-marketplace.

We admit that there are many other factors in both dimensions which have not been explored in this study. Yet, the outcome from this study helps to focus future research efforts on this topic. We hope the outcome of this study will help to focus current and future initiatives by governments and international bodies in helping Chinese firms to become beneficiaries of e-Market. Our future research will further investigate the types of benefit gained from e-Market and whether these are sensitive to organizational context.

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