e-business w@tch

The European e-Business Market Watch

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Electronic Business Trends in 2005: Industry Perspectives

Main *e-Business W@tch* Event 2005

Brussels, 26th October 2005

Representatives of industry federations, business intermediaries, statistical and policy-making institutions, the academic and research communities, from across Europe and the Americas, attended the Annual *e-Business W@tch* Event on 26th October 2005. The event was organised by the European Commission's *e-Business W@tch* and chaired by Mr Costas Andropoulos (Head of Unit, DG Enterprise and Industry).

1 Background and objectives

Electronic business is continuing to develop dynamically. Technological advancement (for example in wireless technology) and the increasing competitive pressure on companies in a global economy are driving this development. However, the pace and direction of e-business take up differs considerably between sectors: in some industries, firms focus on new opportunities to cut costs; in others, e-business and in particular the internet are significantly changing the way companies interact with their customers and business partners.

At its 2005 Annual Event, *e-Business W@tch* presented the current state of play, trends and industry perspectives on electronic business in the EU. Presentations summarised the research undertaken in 2005, which was based on the most recent evidence and statistics drawn from an enterprise survey in 10 sectors and seven EU Member States (EU-7[1]). The objective of the event was twofold:

- To present and discuss with industry representatives and policy-makers the results of *e-Business W@tch* work of 2005, in order to validate and consolidate the findings that will be summarised in the forthcoming 'European e-Business Report 2005 and which will constitute the basis for activities in 2006.
- To share the background experiences on e-business measuring and monitoring with other players in this field, with a view to further refining instruments and methodologies.

1 EU-7: Czech Republic, Germany, Spain, France, Italy, Poland, the UK.

2 Programme and major points

2.1 Introduction and overview

In his opening remarks, Director **David White** from the European Commission, DG Enterprise and Industry, stressed the importance of ICT in general, and innovation and e-business in particular, for increasing the productivity of EU companies. He referenced studies which show that the USA had a lead over the EU in achieving ICT-induced productivity effects, and highlighted the importance "*to do better*" in that respect. Mr White referred to innovation policy initiatives at European level and the related funding opportunities, stressing that e-business is highly relevant in this context, even if the term itself had 'suffered' in public recognition after the burst of the new economy bubble. Director White announced that, following the positive outcome of a recent independent evaluation, the *e-Business W@tch* will continue in its current form until the end of 2006, and that its future shape is already being developed.

- **George Karageorgos**, also from the European Commission and the project officer responsible for the *e-Business W@tch* since its inception, gave an overview of e-business related activities carried out by DG Enterprise and Industry in general and by the *e-Business W@tch*, in particular. He underlined that, in 2005, emphasis was placed not only on figures but also on a substantial number of real e-business examples presented as concise case studies across all sector reports. He highlighted the four special studies, which were presented this year for the first time by the *e-Business W@tch*, focussing not on e-business developments in a sector but on specific topics of cross-sectoral interest.

- **Hannes Selhofer** (empirica GmbH) presented the main results of the *e-Business W@tch* work in 2005, highlighting the different roles that e-business played for companies from different industries. By comparing results of this year’s e-Business Survey to earlier findings, he presented evidence that European firms are, on average, better equipped with basic ICT systems (e.g. in terms of broadband adoption, installed base of ERP systems, etc) in 2005 than two years ago.

2.2 e-Business in Construction and Services

The second session focused on developments and implications of e-business for the construction industry and for service sectors. Two members of the e-Business W@tch team presented the specific reports they prepared in 2005 and two invited discussants, from respective industries that were also studied in 2005, commented on the results of the relevant sector reports.

- **Thorsten Wichmann**, from Berlecon Research, highlighted the special role of e-business for companies from the IT services sector which continues to be the leading industry in terms of related developments and adoption. Dr Wichmann summarised the main topics studied in this year's sector reports, such as the implications of open source software and outsourcing-related opportunities for EU IT services firms.

- **Rachel Tym**, from the European Tour Operators Association (ETOA), broadly confirmed *e-Business W@tch* findings presented in the sector study on tourism. She summarised major trends, pointing out that automation, commoditisation and consolidation are the three most important which are currently driven by e-tourism and internet-based transactions. Ms Tym identified cost, legacy systems and the lack of IT skills as the major barriers faced by smaller companies in doing business electronically. She also indicated that the legislative and regulatory environment need to be reviewed and updated, since the existing framework for tourism still reflects the pre-internet era. The issue of e-tourism related employment impact was raised again in the subsequent discussion; Ms Tym argued that technological advancement has increased requirements of ICT and e-business skills, resulting in increasing the average labour costs in some sub-sectors of tourism.

- **Ulrich Paetzold**, from the European Construction Industry Federation (FIEC), challenged the sector reports on this industry and, in particular, the notion that construction would appear as a "low-tech" industry, due to its ranking lowest among the 10 industries studied by *e-Business W@tch* in 2005. Mr Paetzold explained that this should be attributed to the project-based nature of construction, which makes it difficult to use e-business applications in the way other, especially manufacturing, sectors do. He argued that the final product itself is not suitable for electronic trading, that online collaboration is difficult between companies in this sector and that most of them are very concerned with data security issues. He also stressed the industry's objections to electronic auctions, in particular electronic reserve auctions. However, Mr Paetzold confirmed that there is still potential to increase productivity by using ICT, particularly among smaller construction firms. He argued that a lack of awareness about e-business still seems an issue in this sector, with the biggest problem being how to effectively reach those that need it most.
- **Henry Ryan**, from Lios Geal Consultants, presented the special report on e-business interoperability and standards across various sectors. Summarising the main findings, Mr Ryan confirmed that, although interoperability and standards are absolutely critical for e-business, their uptake differs considerably between sectors and, in particular, companies' size-bands. The presentation raised much interest from the floor, notably the two relevant policy-making initiatives from Australia (BizDex) and Luxembourg (BUILD-IT). In the discussion that followed, there was broad agreement that standards are a requirement and a critical success factor for doing business electronically both within but, more importantly, between different sectors of the economy. It also became clear that there is great demand for further analysis in this area, as the topic is quite complex and involves many stakeholders.

2.3 e-Business in Manufacturing

- **Brigitte Preissl**, from DIW Berlin (German Institute of Economic Research), summarised the findings of the sector studies on the machinery and equipment industry. She highlighted interesting trends and dynamic developments in this industry, in particular in the field of customer service: as machines are increasingly sold in combination with service packages (e.g. after-sales services), online service delivery has gained importance in this industry since the sector studies of 2003. In addition, the diffusion of ERP systems and related applications seems to have increased in the machinery and equipment industry during the last couple of years. In terms of sector-specific policy implications, Dr Preissl stressed the importance of customised support packages to companies on their e-business project planning, skills improvement and development of product classifications through public private partnerships (PPPs).
- **Elena Gaboardi**, from Databank Consulting in Milan, presented the e-business profiles of the food and beverages industry and of the textile industry. Although both sectors are not among the intensive users of e-business (compared to other manufacturing industries), the situation has changed compared to 2-3 years ago. In the textile industry, the use of ICT among large companies has significantly increased, but infrastructure and integration still appear to be low among the smaller firms. This indicates that a digital divide is emerging within this industry. In the food industry, quality assurance is the 'hot topic' of the time and ICT tools could play an important role for food safety and quality assurance in the future. Applications such as RFID facilitate tracing food products on an item-by-item basis throughout the complete value system (from producer to the end customer).
- **Jesús Galván**, from the Schiller International University (Madrid), was invited to discuss findings on the publishing and printing sector. Starting with comments on the two respective reports, he continued with his own views on how ICT and e-business developments affect this entire industry. He argued that developments (e.g. coding systems or new distribution channels affecting the entire supply chain) fundamentally change the industry's business models. He pointed out that changes like these also create new opportunities for this industry's firms,

especially if cooperation between SMEs is encouraged. He also highlighted challenges arising for policy in various areas, such as standardisation, copyrights, advertising, end customers' rights or tele-work.

2.4 International e-Business Monitoring

- **Stefano Tarantola**, from the European Commission's Joint Research Centre (JRC), presented results for the eEurope "e-Business Readiness Index" (based on Eurostat survey data for 2004) and used this example to discuss the strengths and limitations of composite indicators (CIs). JRC has tested the robustness of the e-Business Readiness Index and has recently published a "Handbook on Constructing Composite Indicators"[2] with recommendations on how to construct CIs. Some differences with findings presented by *e-Business W@tch* raised questions during the discussion that followed: the eEurope Index points at a digital divide between large firms and medium-sized enterprises, while *e-Business W@tch* data suggest that medium-sized companies are closer to large firms with regard to several important indicators (e.g. ERP use, e-commerce activity). It was suggested that this difference might be attributed to a large extent to the different country samples, since the Eurostat survey covers all Member States. It is, therefore, likely that in the less advanced countries medium-sized firms would not be at the same level in terms of e-business maturity as their counterparts in (most of) the EU-7 countries included in the *e-Business W@tch* sample.

- **Sheridan Roberts**, from the OECD, presented the latest work on the new OECD model questionnaire for surveys on ICT use by enterprises. The first OECD model survey was agreed at the end of 2001 and was not revised until 2005. As a result, it had not kept up with changes in policy needs and in technology development, especially since even defining e-business during this period seemed like a moving target. Ms Roberts pointed at some key challenges which are currently being discussed in the respective working groups, for example definition issues, how to cope with emerging technologies, issues of weighting and adequate cut-offs. A particular challenge is how to measure impacts, which was also raised in the subsequent discussion. Some experts have a preference for asking about perceived impacts, while others favour econometrical approaches by linking data from different sources.

3 Conclusions

Some general conclusions on the emerging picture of e-business developments in Europe can be drawn from the presentations and the lively discussion at the *e-Business W@tch* Event 2005:

- Electronic business has **matured into a day-to-day activity** for many firms. Companies are, on average, better equipped with basic systems (e.g. broadband, ERP systems) than in 2003. However, there are still disparities between firms, in particular between different sectors and size-bands.

- In **manufacturing** industries, business-to-business transactions are increasingly conducted via computer-mediated networks. This trend is expected to continue and even intensify. While the focus in the past few years was on procurement-related processes, companies are now turning to sales-related processes and customer service.

- In consumer-oriented **service sectors**, such as tourism or publishing, communication with customers and a significant proportion of the selling processes are rapidly migrating to the internet. This has significant business implications for individual firms and, in the long run, possibly for the whole value system. Disintermediation and re-intermediation are drivers of these developments. Notable examples are new online intermediaries in tourism, and competition

[2] http://www.olis.oecd.org/olis/2005doc.nsf/LinkTo/std-doc(2005)3

between publishers and firms from other sectors (e.g. search engines) in the field of online publishing.

- **New technologies**. New applications, based on emerging technologies such as wireless technology have gained momentum. Related systems (e.g. RFID) could soon play an important role for various applications in sectors such as the pharmaceutical industry, textiles, or food and beverages.
- **Interest in international comparisons**. The annual Eurostat survey on ICT use in enterprises, and the work of *e-Business W@tch* since 2002 have greatly improved the evidence on e-business activity in EU enterprises. Increased attention is now being paid to international benchmarking studies and on measuring the impact of ICT on business performance. However, the different methods used in e-business monitoring make comparisons of findings difficult. OECD efforts to develop standardised survey instruments can help to improve the situation, but cannot fully solve the non-comparability issue.

In his closing remarks, Mr **Costas Andropoulos** stressed the importance of continuing and further strengthening the exchange of 'good practices' across the EU to narrow the gap between early and late e-business adopters. Similar to the *e-Business W@tch*, which provides such a lively forum at the monitoring and sectoral level, the Commission's e-Business Support Network (eBSN) is an excellent platform for such exchanges between policy makers at national, regional or even local levels.

Mr Andropoulos concluded by inviting everybody to the forthcoming e-Business Conference, which will be held in Cambridge (UK) on 5-6 December 2005, where these and many other related topics will be discussed further.

4 Further information

Workshop proceedings (agenda, presentations, list of participants) are available for download at the ***e-Business W@tch*** website (www.ebusiness-watch.org). For further information, questions and input you are welcome to address:

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