

## E-COMMERCE: ACCELERATOR OF DEVELOPMENT?

### Summary

E-commerce holds out enormous promises for producers in poor countries: easier access to the markets of rich countries and higher incomes resulting from these new trading opportunities. Many studies and policy documents, however, have underestimated the obstacles to reaping these benefits. It is not just a matter of bridging the 'digital divide' that arises from poor telecom infrastructure and lack of computer-related skills. Only with improvements in the transport of material goods and in the institutional arrangements that facilitate trust can e-commerce accelerate economic development.

### The promise of B2B e-commerce

This Policy Briefing is concerned with opportunities and obstacles arising from business-to-business (B2B) e-commerce. Many development institutions hope that its spread will improve trade prospects for producers in developing countries. The expectation is that B2B e-commerce will provide:

- *better information on final markets*
- *direct access to customers - taking out the intermediaries*
- *higher incomes.*

The basic idea is simple: the Internet provides an open global network and access to this network is relatively cheap. This has led to claims that Internet-based e-commerce will grow rapidly and help producers in developing countries to overcome problems of exclusion from the world economy and improve the terms of their participation.

If the promise of e-commerce is to be realised, poor countries must improve Internet access and get 'e-ready'. This is one of the core ambitions of the Digital Opportunities Task Force that was established by the governments of the G8 countries in 2000. But maximising the benefits from e-commerce opportunities requires a broader strategy of both 'e-readiness' and 'commerce-readiness'. It also requires a healthy degree of scepticism about promises of dramatically reduced transaction costs and trade without intermediaries.

[^ top ^](#)

### E-commerce empowering isolated communities

An Internet connection set up in a Peruvian village helped the community to establish a partnership with a company in New York and expand the market for their agricultural products. It resulted in a five-fold increase of income from US \$300 to \$1,500 a month. Internet connectivity thus can provide an unparalleled opportunity to people in remote rural areas to expand their business and activities beyond local confines to a global reach ([www.undp.org/info21/e-com/e1.html](http://www.undp.org/info21/e-com/e1.html)).

[^ top ^](#)

### What is needed to realise the promise?

There are many stories about the potential benefits of e-commerce, especially for smallscale producers who are expected to be able to sell into world markets - which would have been nearly impossible in pre-Internet days. However, there is extraordinarily little empirical evidence on how the global spread of B2B e-commerce is affecting producers in developing countries. The bursting of the dot.com bubble has introduced some caution into the debate on digital opportunities, but facilitating e-commerce continues high on the policy agenda of national and international development organisations. The United Nations' High Level Panel on Information and Communication Technologies, for example, concluded in 2000 that when firms in developing countries are connected to global networks they will be able to compete on a more equitable basis. This view was echoed in the recent UK government White Paper on 'Making Globalisation Work for the Poor'.

This view of e-commerce as a great 'equaliser' takes the commercial opportunities largely for granted and focuses on resolving the digital obstacles to the spread of e-commerce. However, a key finding emerging from initial studies is that the 'digital divide' is not always the main concern of producers in developing countries. Instead, they want to learn how, and under what conditions, the technologies and services associated with new electronic ways of trading can be integrated with their existing commercial practices. The new ways of trading must be cost-effective, sustainable through time, and lead to increasing and profitable trade if they are to bring the expected benefits.



[^ top ^](#)

## Defining Internet-based B2B e-commerce

E-commerce involves the sale or purchase of goods or services over computer-mediated networks. These goods and services may be ordered over these networks, but payment for them and the ultimate delivery of the good/service may be conducted on or off-line. These transactions may be between businesses and consumers (B2C e-commerce), or between enterprises - business-to-business (B2B) e-commerce. Some B2B transactions are conducted over private computer networks, while others are conducted over the Internet.

[^ top ^](#)

## Getting e-ready

Attention certainly has to be given to bridging the digital divide. Producers in developing countries need to have Internet access that is reliable and affordable. This requires action in several areas:

**Infrastructure for telecommunication** One of the most severe constraints for producers in developing countries is limited access to the high capacity connections needed to transmit large quantities of digitised information. There are hopes that developing countries can leapfrog both copper-based and fibre-based land line infrastructure by using wireless technologies, but wireless networks capable of sustaining Internet traffic are unlikely to become reliable and affordable for some time. For small producers in remote areas, the establishment of public telecentres with dedicated Internet connections can provide early access.

**Regulation** Private sector participation is essential for generating the required investment and for providing affordable

access. The liberalisation of the telecommunication sector in OECD countries shows that where regulation promotes competition it can lead to major price reductions for user firms. This policy lesson is summed up in the box at the bottom of this page. In addition, competent public regulators with discretionary powers are needed to intervene to encourage competition and to ensure a balance between (highly profitable) provision in the main urban centres and (less profitable) outreach to distant communities.

**Education and training** New skills are required by both the providers and users of Internet-based services. Constantly changing hardware and software make e-commerce a learning-intensive form of trading. Whether private providers and users are prepared to invest in generating the required skills depends less on profit calculations and more on sheer enthusiasm or the fear of being left behind. Public agencies can help generate enthusiasm by offering firms tax incentives for investment in people and by ensuring that equipment and Internet connections are available in all schools and vocational training centres. The lower the skills base, the higher the cost for the producer - and the weaker the rationale for introducing e-commerce.

Moving forward on these three fronts will help producers in poor countries to access the Internet and to obtain better information on the markets in rich countries. Such information can be of considerable benefit to developing country producers. They are typically information poor while their buyers are information rich, making it very difficult to obtain fair prices and to make timely adjustments in their product range. Redressing this information imbalance would in itself be a major step forward. But e-commerce is about more than obtaining better information. The ambition is to move towards buying and selling over the Internet.

Electronic market places provide sector-specific information and bring buyer and seller together. Some useful web addresses are given at the top of the next page. They provide an easy and practical way of finding out how this new way of trading works - or does not work. Many such e-marketplaces (often called portals or info-mediaries) have emerged and more will follow, but only some will survive. The shake out is well underway.

[^ top ^](#)

## Reform of the telecommunication sector

'A key constraint on Internet access in most developing countries is the lack of a legal and regulatory framework for a competitive telecommunications sector. Without this, there is no hope of attracting the necessary investment in infrastructure or encouraging competition needed to bring down costs. Governments need to move from state-run telecoms monopolies, with administered prices, to a regulatory environment which allows competition, including over international routes, and to cut tariffs on imported hardware.'

Department for International Development, *Eliminating World Poverty: Making Globalisation Work for the Poor*, White Paper, December 2000, p. 40

## B2B electronic marketplaces

*Agriwatch.com*<sup>TM</sup>

[www.agriwatch.com](http://www.agriwatch.com) is an Indian agriculture e-marketplace; authorised users can participate in buying and selling of agricultural commodities. Bids and offers are accepted for domestic and international markets. The site also offers information including research reports, market updates, and directory services.

*FoodTrader.com*

[www.foodtrader.com](http://www.foodtrader.com) is a comprehensive B2B e-marketplace for the food and agricultural industries. The site offers users constantly updated market prices, country profiles, logistics services, and related information. Members can buy, sell and bid for products on-line.

*GlobalNetExchange*

[www.gnx.com](http://www.gnx.com) is a B2B e-marketplace for the global retail industry providing access to a transaction hub that facilitates communication, planning, forecasting, and replenishment services to enhance collaboration.

*ecEurope.com*

[www.eceurope.com](http://www.eceurope.com) is a UK-based B2B electronic trading hub. It allows registered users to post and search B2B trade

lead messages for various types of goods and/or services that are categorised on a sectoral basis.

#### *i-Textile Online*

<http://global.i-textile.com> is a pan-Asian B2B online trading exchange for the global textile and garments markets. Registered buyers and sellers have access to numerous direct and local support services to assist in the marketing, sourcing, and trading of fabric, yarn, and other textile-related products.

[^ top ^](#)

### Getting commerce-ready

Selling goods in global markets is complicated. Firms that cannot meet the delivery and quality requirements of advanced markets will not find these any easier with e-commerce. On the contrary, participating in e-auctions or providing online catalogues requires firms to acquire new competences. And even for the most competent firms, commerce-readiness involves four significant challenges: speedy transport, efficient payment systems, confidence in the product, and the availability of redress. If developing countries producers want to use e-commerce as a means of selling to buyers around the world, transaction arrangements to support e-commerce must be in place:

**Transport** There is no point trying to sell products that cannot be delivered at reasonable cost to the buyer's desired location. For digital products this is not a problem, but most developing country exports are not digital, they are material. Electronic transactions often raise expectations for faster delivery, making the transport infrastructure even more critical for the development of e-commerce. The policy lesson is that addressing the 'old' issues of providing efficient road and rail links, port facilities and fast customs clearance is essential for operating in the 'new economy'.

**Payment systems** E-commerce requires low-cost and reliable payment systems. While various solutions to the problem of payments for e-commerce transactions are being developed, it is essential that the attributes of payment systems are not confined to criteria that can be met only by buyers and sellers in the rich countries.

**Confidence in the product** Buyers must be confident that the product being purchased meets the desired specifications. Product specifications are becoming increasingly complex as industrialised economies impose norms relating to product safety and labelling, as well as for labour and environmental standards. This makes e-commerce purchasing more hazardous for the buyer.

**Availability of effective redress** As in all other forms of commerce, customers must be confident that they can obtain redress if something goes wrong. The seller's assurance may not be sufficient. E-commerce may be enhanced by online ADR (alternative dispute resolution) mechanisms offering rapid, low-cost redress for disputed transactions. These mechanisms are not intended to replace (slow and expensive) court adjudication, but to supplement it.

To some extent, new e-commerce relationships are already providing some of the solutions to support transaction arrangements. E-commerce portals that bring together buyers and sellers are providing an increasing range of services - from secure payment systems to links with logistics providers, insurance providers and customs clearance services. There are also new private certification agencies developing online certification schemes addressing international quality standards and environmental and employment standards (ISO 9000, ISO 14000 and SA 8000, respectively). Certification schemes are being developed by intergovernmental organisations such as the European Union and the UN agencies as well as by producer associations in developing countries (see box below). Some service providers even offer to collect samples from potential suppliers and dispatch them to potential customers. Although such solutions are beginning to become available, their reach is likely to be confined to large producers in developing countries whose operations are based in large urban centres.

[^ top ^](#)

### Certification of horticultural products

The Kenya Flower Council (KFC) is a consortium set up by six of Kenya's largest producer exporters in 1994. These exporters came together to develop a code of practice to ensure that accepted international standards of environmental protection and worker welfare are adhered to in Kenya and are fully recognised in European markets. Membership is open to all producers, exporters and propagators of cut flowers, but is open only to those that comply, within a 12-month

period, with a minimum set of labour and environmental standards. The Council currently has 29 members that account for over 60 per cent of total cut flower exports.

The KFC Code of Practice was drawn up in close co-operation with Kenya's Ministry of Agriculture, the Horticulture Crops Development Authority, the Ministry of Labour and the Pest Control Products Board. KFC members are subject to an external audit of their practices; those that pass the audit are permitted to display the KFC 'environment friendly' logo on all their products, packaging, and promotional material.

[^ top ^](#)

## What to do and where to start?

In spite of the fact that there is little systematic research in developing countries, we know that e-commerce is spreading more slowly than was expected initially. There are still obstacles to overcome. It is not sufficient to address only the new problems arising from the digital divide. Efficient transport and payment systems as well as institutional arrangements that facilitate trust are essential for developing e-commerce.

The message for policy makers and practitioners is not that all the old and new problems must be resolved simultaneously. This is rarely possible. A more realistic vision is that the removal of one set of barriers will create pressures to remove others. Once this dynamic is underway, the market will often resolve the problem of slow growth of e-commerce.

Firms offering e-commerce portal services and other private sector organisations are expected to offer a range of services that will facilitate e-commerce. At this early stage, however, state intervention is critical and support from technical assistance agencies can be particularly valuable. State intervention is necessary for two reasons: first, setting the rules for the market's operation is a state prerogative. Second, at the early stage, the risks of e-commerce are high and over-reliance on the market leads to under-investment.

So, where to start? What are the priorities? First, the obstacles facing producers in poor countries seldom arise only from the digital divide. Second, the configuration of problems varies enormously between and within developing countries. A 'one size fits all' prescription is not useful. In most instances, it will be best to find out from those engaged in e-commerce what obstacles they encounter in a region and sector and then to make a judgement on priorities. The most promising approach will include relevant stakeholders in both the analysis of the problems and the formulation of new initiatives. The stakeholders include the local enterprises that use, or intend to use, e-commerce, the business associations, Internet service providers, telecom companies, relevant government agencies, and perhaps the main foreign buyers of local products. Key to the approach is that the relevant actors deepen their understanding of the problems and own the recommended solutions. Outside consultants are not superfluous in this process, but they do need to work in a participatory way.

This type of participatory approach will work best when the focus is on particular sectors and locations. Policy makers and practitioners who are concerned about getting 'their' regions and sectors ready for e-commerce will need two resources:

- *funds to conduct an appraisal of e-commerce opportunities and obstacles*
- *expertise for co-ordinating the appraisal and establishing priorities for action.*

This is where foreign assistance agencies can help. They can create a fund that local policy networks can draw upon and make available experts with experience in rapid participatory appraisals. Methods for such appraisals exist but they must be adjusted to diagnosing and resolving e-commerce problems. This approach can be applied to identify the specific configurations of old and new obstacles and to implement measures that are relevant to the users.

[^ top ^](#)

## Further reading

Mansell, R., Issues Paper, OECD Emerging Market Forum on Electronic Commerce, Dubai, January 2001. Available at

[www.oecd.org/dsti/sti/it/ec/act/dubai\\_ec/products/Dubai\\_issues.pdf](http://www.oecd.org/dsti/sti/it/ec/act/dubai_ec/products/Dubai_issues.pdf)

Goldstein, A. and O'Connor, D., 2000, 'E-commerce for Development: Prospects and Policy Issues', **Technical Paper No 164**, Paris: OECD Development Centre. Available at [www.oecd.org/dev/publication/tp1a.htm](http://www.oecd.org/dev/publication/tp1a.htm)

UNIDO and Ericsson Consulting, 'Industry at the Edge: Electronic and Mobile Business for Industrial Development', December 2000. Available at [www.unido.org/doc/351428.htmls](http://www.unido.org/doc/351428.htmls)

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[^ top ^](#)

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[^ top ^](#)

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