

UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT
Geneva

E-COMMERCE AND DEVELOPMENT
REPORT, 2003

OVERVIEW



UNITED NATIONS
New York and Geneva, 2003

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The English version of the full report is currently available on the Internet at www.unctad.org/ecommerce. Versions in other languages will be posted as they become available. Its Overview section is available at the same address in English, French and Spanish.

UNCTAD/SDTE/ECB/2003/1 (Overview)

UNITED NATIONS PUBLICATION

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FOREWORD

Few manifestations of the power of human creativity have so extensively and so quickly transformed society as the rise of the Internet and other information and communication technologies (ICT) over the past decade. Dramatic as the changes may be, the process of assimilating and learning from them has only just begun.

ICT can improve education, health, governance and trade. They are dramatically changing social and economic relationships and interactions, giving people, businesses and governments the tools with which to devise more productive, more inclusive and more development-friendly societies and economies. For the moment, however, we are still grappling with the painful reality that those who stand to benefit most from the advances of the ICT revolution are also those who have the least access to the technology behind it.

The United Nations is strongly committed to doing its part to enhance the ability of developing countries to realize the full potential of ICT in stimulating and supporting development. We are working with Governments and partners in industry, civil society and academia to bring ICT applications to education, health, natural disaster management and many other key realms of human endeavour and well-being. E-commerce and e-business are among the most promising of those applications, capable of offering new ways to participate in global markets, new possibilities for diversifying national economies, and new and better jobs for young people.

This third edition of the *E-Commerce and Development Report*, published by the United Nations Conference on Trade and Development, identifies some of the implications that the growth of the digital economy may have for developing countries. It aims to provide practitioners and policy makers with a better understanding of the options available to them in leading sectors of developing-

country economies. It is also meant to contribute to the debates at the World Summit on the Information Society and efforts to create a truly inclusive information society that serves and empowers all people. Above all, if it helps developing countries to adopt and take advantage of new digital technologies, this report will have served its purpose.

[insert Kofi Annan's signature here]

Kofi A. Annan
Secretary-General of the United Nations

OVERVIEW

It is now widely accepted by policy makers, enterprises and society at large that information and communications technologies (ICT) are at the centre of an economic and social transformation that is affecting all countries. ICT and globalization have combined to create a new economic and social landscape. They have brought fundamental changes in the way enterprises and economies as a whole function.

The importance that society attaches to ICT is illustrated by the large number of initiatives, especially at the international level, aimed at enhancing the development and adoption of ICT. This is particularly noteworthy on the eve of the World Summit on the Information Society (WSIS), the first UN summit ever devoted to ICT. This and other initiatives, such as the G8 DOT Force (Digital Opportunity Task Force), the UN ICT Task Force and a host of other regional and national ICT programmes, are evidence of the importance that society attaches to ICT. These initiatives are undoubtedly motivated by the important role of ICT in realizing the Millennium Development Goals (MDG), particularly in the area of poverty alleviation.

While there is general agreement that ICT affect all sectors of society and the economy, their role as an enabler for economic development and growth deserves particular attention. As UNCTAD's *E-Commerce and Development Report 2003* shows, there is now growing agreement about the positive contribution of ICT to productivity growth. Through the application of ICT firms will become more competitive, new markets will be accessed and new employment opportunities created. All of this will result in the generation of wealth and sustainable economic growth.

The impact of ICT on firms' and industries' performance and competitiveness is achieved through increased information flows, which result in knowledge transfer as well as improved organization. In particular, ICT have become important tools for improving productive capacity and increasing international competitiveness by reducing the transaction costs involved in the production and exchange of goods and services, increasing the efficiency of management functions, and enabling firms to exchange and access more information.

While ICT improve productivity in existing productive activities, they also make possible the emergence of new activities such as online outsourcing of services and the production of different types of ICT goods. These activities enable countries, including developing ones, to diversify their economies, enhance their export competitiveness and produce high-value-added services that boost the local economy.

Despite the wide range of benefits that can be brought about by ICT, the development and adoption of ICT by developing countries have so far been limited. Reasons for this have been amply documented. They include lack of awareness of what ICT could offer, insufficient telecommunications infrastructure and Internet connectivity, expensive Internet access, absence of adequate legal and regulatory frameworks, shortage of requisite human capacity, failure to use local language and content, and lack of entrepreneurship and a business culture open to change, transparency and democracy.

The objective of the *E-Commerce and Development Report* is to provide information about developments in the area of e-commerce and ICT, particularly as they relate to developing countries. The report identifies areas where the application of ICT can make an impact on developing countries' enterprises and economies. By critically reviewing the latest developments in ICT and the knowledge economy and examining their implications for

developing countries, it provides an analytical and empirical basis for appropriate decision making by policy makers in the field of ICT and e-business. The report should also be seen as a contribution to the debate concerning economic development at the forthcoming WSIS.

As a premise, the report recognizes the positive role of ICT in the development process. Taking into account the constraints that developing countries face in adopting e-commerce and ICT, the report focuses on policies and strategies to address those constraints. The material presents the state of the art in e-commerce and ICT and discusses how it can be applied to developing countries. It also contains case studies of industries and other economic activities as well as regulatory issues. In all instances, specific recommendations are made to developing countries in order to enhance their understanding of the issues and their ability to adopt e-commerce and ICT.

The choice of subjects in the report is not intended as an indication of their importance relative to other issues concerning ICT and economic development. Also, the current issue should be considered in conjunction with the two previous issues (2001 and 2002). Together, the three issues as well as future ones are intended to contribute to an ongoing comprehensive study of ICT and economic development.

1. Recent Internet trends: access, usage and business applications

The report observes that revolutionary visions of the Internet's role in the economy, as well as the disappointment that followed their failure to become a reality, are giving way to a more nuanced but strongly positive assessment of the Internet's impact on business performance. Many of the promised economic benefits of the Internet seem to be materializing. Noting this, enterprises are

preparing for e-business: while overall investment in IT has decreased by 6.2 per cent since 2001, e-business budgets are estimated to have risen by as much as 11 per cent in 2002. In 2003 annual growth in e-business investment fell to 4 per cent, but this rate was twice as fast as the growth in overall IT investment

The report shows that the number of Internet users in the world reached 591 million in 2002, although the annual rate of growth slowed to 20 per cent. At the end of 2002, developing countries had 32 per cent of the world's Internet users, while North America and Europe accounted for as many as 89 per cent of the world's Internet hosts. The average African Internet user still enjoys about 20 times less bandwidth capacity than the average European user, and 8.4 times less than a North American one.

Even if e-readiness in developing countries is lower than in the high-income regions of the world, a number of relatively advanced ICT adopters have been identified in all regions of the world, and no developing country seems to have regressed in its integration into the digital economy. Public policies that support the extension of the information society are among the factors explaining the relative advantage enjoyed by early ICT adopters among the developing countries. Meanwhile, the majority of developing countries face limitations on the development of their e-economy stemming largely from low income levels, low literacy rates, lack of payment systems that can support online transactions, and cultural resistance to online trade.

The report notes that almost all official estimates of e-commerce activity refer to the high-income market economies. Quoting data from surveys compiled by the Organisation for Economic Co-operation and Development (OECD) concerning its member countries for 2000–2001, the report says that the share of Internet users buying online was highest in the Nordic countries, the United Kingdom and the United States, where 38 per cent of users had made

purchases online; it was lowest in Mexico, where fewer than 0.6 per cent had done so. The share of sales to households in total Internet sales ranged from a maximum of about 30 per cent (Finland and Luxembourg) to a minimum of about 1 per cent (Singapore). Internet retail sales remain a small part of total retail figures (around 1.5 per cent in the United States and the European Union), although many more consumers use the Internet to research purchases that they later make in stores. Estimates of total online retail sales for 2002 were \$43.47 billion for the United States (\$73 billion including travel), \$28.29 billion for the European Union, \$15 billion for the Asia-Pacific region, \$2.3 for Latin America and as little as \$4 million for Africa.

As regards business-to-business (B2B) e-commerce transactions, official US statistics show the dominance of B2B transactions in the total of e-commerce. In 2001, annual B2B online sales in the United States amounted to \$995 billion, or 93.3 per cent of all US e-commerce. Private-sector estimates of the value of B2B trade in the European Union put it at between nearly \$185 billion and \$200 billion for the year 2002. In Central and Eastern Europe, some projections show that B2B e-commerce will amount to around \$4 billion in 2003. In the Asia-Pacific region, it should grow rapidly, from about \$120 billion in 2002 to around \$200 billion in 2003 and \$300 billion by 2004. In Latin America \$6.5 billion worth of online B2B transactions are forecast for 2002 and \$12.5 billion for 2003, although far more optimistic estimates are also available. According to 2001 forecasts, African B2B e-commerce in 2002 was expected to amount to \$0.5 billion in 2002 and \$0.9 billion in 2003, with South Africa accounting for 80 to 85 per cent of these amounts.

Broadband Internet access may accelerate the growth of Internet traffic and change the way people and businesses use the Internet. In the business-to-consumer (B2C) arena, broadband subscribers are more likely to engage in e-commerce; they therefore tend to account for a fast-increasing share of traffic and online expenditure. From the

point of view of broadband's influence on the organization of enterprises or on B2B transactions, although a number of initiatives aim at building new business models around broadband, no application of it has emerged with an impact on the functioning of markets or the management of companies that is substantially different from the effects of earlier commercial applications of the Internet. However, businesses buy much more online content than consumers do, and broadband makes such content more accessible, easier to use and therefore more sellable, especially to small and medium-size enterprises (SMEs). Broadband allows several users to share an Internet connection, which can reduce the cost of every individual connection, an important consideration for SMEs. For larger enterprises, the ability to centralize data and applications in a single storage facility while enabling many users in distant locations to access and use sizeable amounts of information may facilitate the adoption of new forms of organization.

The report suggests that as e-business becomes part of the everyday experience of the majority of people, security in all its dimensions is becoming crucially important. Security concerns affect developed and developing countries alike. Reasonable protection against Internet-generated risks can be obtained through a combination of software, hardware and risk management strategies that take into account all potential sources of liability.

The report also discusses the development of Web services, a technology that allows automated interaction over the Internet between computers managing different business processes. Web services represent a major emerging trend whose potential for becoming an important factor of change derives from the fact that it lies at the junction of several developments, some of which are changing business organization and interaction and others which could give a new direction to the future of computing.

Web services can have a dramatic impact on the efficiency of processes such as inventory control and routine purchasing. They can also be extremely useful for the integration of disparate IT systems. For this potential to materialize, the interoperability of Web services developed on competing platforms is essential.

However, despite their potential to improve the efficiency of business transactions, Web services cannot substitute for human intervention in the creation of business relationships. While simple Web services can be put in place at relatively low cost, large-scale implementations can be challenging with the technology's current degree of maturity. In the medium term, Web services will introduce considerable changes in the way businesses use IT, but this will not happen as a one-off revolution. Rather, it will be a cumulative, if fairly rapid, process through which the technology will permeate the structure of enterprises and industries.

2. ICT, the Internet and economic performance

The report suggests that the world economy is becoming an ICT-based economy. By lowering transaction costs, the Internet removes distance-related barriers that have traditionally determined the location of service providers and goods producers. At the same time, available evidence on productivity gains related to the use of ICT is still highly concentrated in a small group of developed countries, led by the United States, and in selected emerging economies like Singapore and the Republic of Korea. Even in those countries, the debate about the size of the impact of ICT on productivity is still continuing. The discussion on the impact of ICT on productivity and economic growth rates, particularly in the United States, has far-reaching policy implications in both developed and developing countries.

The report reviews the literature on the economic impact of ICT and indicates the range of views on the subject. Many studies conclude that the impact of ICT on capital deepening, labour productivity and total factor productivity is positive and even considerable, and that it underpins the continuation of productivity growth in the United States and other selected countries with a high level of penetration of ICT and particularly the Internet. The impact of ICT has been examined at the firm and industry levels, with studies covering samples of large firms, industries and different time periods, as well as various countries and regions.

The report concludes that, while there is still little systematic empirical evidence regarding the economic consequences of ICT in developing nations, these countries can learn a great deal from the available evidence. The discussion on the impact of ICT makes suggestions that reinforce recommendations contained in other chapters of the report. In particular, it is suggested that Governments foster an improved understanding of best practices in the use of ICT so that optimal choices can be made regarding the most efficient use of ICT. Also, Governments should support the development of infrastructure that will provide greater access to low-cost, high-bandwidth Internet connections and the use of affordable software and should play a leading role in addressing skill deficiencies in the workforce through training and education. The report also recommends the promotion of collaboration in addressing the development and adoption of ICT, including public-private partnerships, alliances and consortia.

3. ICT strategies for development

The report observes that, despite the positive trends, and despite the important opportunities that the knowledge economy offers for developing countries' growth and development, most enterprises in developing countries are still excluded for the reasons mentioned

earlier. As a result, the gap between developed and developing countries' use of ICT remains wide.

In order to tackle these difficulties, since the late 1990s, an increasing number of developing countries have followed the example of developed countries and launched their own national ICT programmes and strategies. These cover a broad range of policy areas, such as awareness raising, infrastructure building, telecommunications deregulation, education and labour force training, changes in legislation, and e-government. In this connection, UNCTAD has organized a number of workshops and conferences to address the subject of national policies and strategies for the development of ICT and e-commerce in developing countries.

The report draws from the various inputs provided to these meetings, describes key areas and sectors of policy action, looks at best practices based on experiences from developed and developing countries, and makes suggestions regarding the implementation of these strategies. Thailand's national ICT strategy is presented as an example of a developing country's strategy for developing its information society.

The report introduces a model framework for the formulation of a national ICT strategy, outlining all concerned sectors and policy areas. Within this general framework, it focuses primarily on e-business policies and certain crosscutting policies – such as those related to developing telecommunications infrastructure or IT literacy and skills – that affect the information economy and the adoption of ICT by the business sector. This focus is based on the understanding that ICT as an enabler for economic development and growth deserves particular attention in national development frameworks. Through the application of ICT, firms will become more competitive, new markets will be accessed and new employment opportunities created. All of this will result in wealth generation, thus ensuring future sustainable economic growth.

The report suggests that experience from countries has demonstrated that elements and priorities of national ICT strategies might differ between developed and developing countries. In many countries, there is still widespread lack of awareness about using the Internet in business. Therefore, enhancing awareness and public understanding about the benefits of ICT is often an important starting point in a developing country's policy planning. Other priority areas for developing countries are basic access to ICT, low-cost hardware and software, and the use of local-language Web sites. Furthermore, in many developing countries a lack of local Internet content leads most people to purchase online from foreign sites (mainly in developed countries) rather than local or even regional sites.

Formulating and implementing national ICT strategies is perhaps the biggest challenge policy makers face. Given the complexity and cross-cutting nature of ICT, a holistic approach is essential to a national e-strategy, as far as both sectors and stakeholders are concerned. It is difficult to create awareness at the political level or to adopt a state-of-the-art regulatory framework unless the elements of an ICT strategy are rooted in the reality of the national economy. Therefore, stakeholders from all areas of society and economy should be involved.

Developing the right policy framework for the deployment of ICT involves many difficulties. People must be trained on how to use ICT and exploit commercially the information and knowledge they make available; regulatory frameworks need to be established to provide enterprises and consumers with confidence in the security of the Internet; financing needs to be available, both for infrastructure (including foreign direct investment) and SME development; and local content needs to be created in order for small businesses and underprivileged people to go online. While awareness raising is important, in some countries e-business will take time to establish itself, and people will start using the technologies only when they

have experienced their immediate benefits. In places with a management or business culture that is open to and ready for change, the use of new tools and the digitization of business processes will advance more quickly.

The report recommends that Governments in both developed and developing countries play an important role in promoting and facilitating the development of the information society and economy. Above all, Governments should lead by example by adopting e-government practices. Experiences show that in many developed countries that have enjoyed fast growth in ICT, government has been closely involved in promoting ICT development. Governments play an important role as leaders, especially at the earliest stages, by providing vision, raising awareness and making ICT development a national priority.

Governments should play an active role without substituting for private-sector initiative; instead they should focus on facilitating the entry of smaller, underprivileged players into the marketplace. Government intervention is particularly needed for connecting rural and remote areas, which are usually left out by the private sector, and in areas related to education and legal and regulatory issues. Governments also have a role to play in integrating SMEs into the information economy.

Notwithstanding the important role of government in initiating and implementing national ICT strategies, experience shows that the private sector has been the most innovative player and the major driving force behind e-business and ICT deployment. An ICT strategy that combines public intervention with private-sector initiative in a mutually supportive manner is the only viable option.

Finally, an important aspect of ICT strategies and programmes is the need for a comprehensive approach that integrates ICT into the country's broader development strategies and policies. Linking ICT

policies with other development policies (e.g. in the areas of education, trade and investment) yields benefits from synergies between different elements and ensures a more broad-based diffusion of ICT.

4. Free and Open-source software: implications for ICT policy and development

Examining a relatively new subject, the report notes that a significant development facilitated by the Internet has been the growth of free and open-source software (FOSS). This development challenges preconceptions about how software should be produced and distributed and has important development implications.

FOSS is software whose source code has been made public. The source code is the instructions that constitute a particular software application, such as a word processor or a database. The report argues that opening the source code to public scrutiny is much more than a technical issue: it allows collaborative development in software production, easier integration with other programmes that can be produced by independent programmers, and customization of software to meet the commercial, regulatory, cultural and linguistic requirements of users. By contrast, closed-source or proprietary software requires a significant upfront investment in license fees and is not always adaptable to local concerns. Also, its use may not adequately support the development of local ICT skills. FOSS should be seen as more than simply a different kind of product. It is a different kind of process for building, maintaining and changing the rules that govern information flows. It changes the perception of how software is written and who can change it under what conditions, and the freedoms and responsibilities associated with this process. FOSS not only enables but, more important, empowers peoples and nations to manage their ICT development.

The report shows that FOSS offers many other benefits to developing countries. Experience so far has shown that open-source environments often produce reliable, secure and upgradable software at a comparably low cost to users. FOSS provides an improved approach to security issues and to the need for public and open standards. It can eliminate the national-level economic loss resulting from duplication of software development.

The use of OSFS can have an anti-monopolistic effect on the IT market and industry in a country and globally. Its anti-restrictive nature allows anyone to provide IT services and thus reduces barriers to entry. While some FOSS programmes may acquire a dominant market share, no particular institution or business can use them to build a monopoly market position for itself. FOSS may help create a better-qualified IT industry and more skilled employees, which leads to job creation. The increasing adoption of FOSS by major corporations and institutions in the developed world is creating export opportunities for customized software from nascent IT industries in developing countries. Finally, FOSS may provide an improved approach to security issues, because FOSS code applications are transparent: if a security flaw is found it, can be linked to the code causing it and fixed.

To take advantage of these benefits, the report recommends that developing countries consider adopting FOSS as a means of bridging the digital divide. To implement the adoption of FOSS, developing countries should formulate and implement appropriate policies on human resources development and training and e-government in the area of software development and related fields.

5. Business process outsourcing services for economic development

The report examines the opportunities offered by business process outsourcing (BPO) to developing countries. The expansion of BPO services in developing countries is a result of the development of ICT in these countries combined with increasing demand from enterprises in developed countries (mainly the United States and in Europe) wishing to outsource non-core business functions at low cost. Outsourcing involves contracting a service provider to completely manage, deliver and operate one or more of a client's functions (e.g. data centres, networks, desktop computing and software applications). The report discusses trends and issues, and it highlights key prerequisites that enable developing countries to attract and sustain outsourced services.

Outsourcing has existed for decades, especially in manufacturing, as a way of reducing costs. The earliest outsourcing ventures, principally by large enterprises, were in the area of IT services. Now, with advances in network technology, high-speed data networks, and increased bandwidth capacity, outsourcing has expanded to include a wide range of management services, so that enterprises are now able to offload entire business functions. BPO services are available in areas such as finance, insurance, health care, human resources, mortgage, credit cards, asset management, customer care and sales and marketing.

The report shows that the market for BPO is expanding, with some sources projecting that the value of BPO will reach the range of \$300 to \$585 billion in the next two years. Almost half of the Fortune 500 companies are known to be outsourcing services; most of these companies are located in the United States or Europe. While India is a leading provider of outsourced services, other examples of countries providing such services are Bangladesh, Brazil, China, the Philippines, Romania, Russia, Singapore, Thailand, Venezuela and Viet Nam. The report quantifies some of the benefits that India, for

example, derives as a supplier of BPO. It also gives case studies of BPO service providers in several developing countries, including least developed countries. In this connection it is noteworthy that some BPO services are transacted between developing countries.

The report notes that BPO services vary in terms of their complexity, ranging from basic administrative functions such as data entry or billing services to more complex tasks that require decision making and problem solving. The level of skills required to provide BPO rises as the complexity of the task increases.

The report identifies a number of factors that are critical for the success of BPO in the service-supplying country. These include the availability of adequate Internet infrastructure and access, political stability, strong government support, adequate investment resources, the availability of an educated and skilled labour force and proficiency in the client's primary language. Other factors include compatibility in culture and mindset between the client and the service supplier. Geographical proximity is also important, as it allows the client to make regular physical contact with the service provider.

The report states that, in order to attract BPO services, developing countries need to ensure that these critical factors are present. Enterprises and Governments should strive to provide training to meet the demands of BPO services. To enter the BPO business, enterprises should start with basic, low-risk services and then move into more complex services as they accumulate experience and skills. BPO service providers need to have an Internet presence, and they should establish offices in clients' countries and develop partnerships with major global outsourcers in order to establish themselves in the business. Governments in developing countries should promote the growth of BPO services by facilitating the provision of an adequate telecommunications infrastructure and access, establishing a supportive legal and regulatory framework and providing fiscal incentives.

6. Marketing developing-country agricultural exports via the Internet

The report examines the scope for using ICT and e-commerce in the marketing of agricultural commodities exported by developing countries. Using coffee and tea as case studies, it addresses the following key questions: Is use of the Internet to market agricultural products a viable business model? What are the relevant real-world experiences? What are the experiences and lessons learnt so far in developing countries? What specific recommendations can be made to developing countries?

Agricultural exports play a key role in the economies of many developing countries, as sources of both income and employment. The prices of these commodities tend to be quite volatile and have occupied the attention of many developing countries and, indeed, the international community. The commodities' marketing chain involves many intermediaries, with the result that the export earnings are shared by a multitude of traders and processors, and producers receive only a small share of the final consumer price.

One way to improve producers' earnings is to reduce the number of intermediaries. It has been thought that use of the Internet can enable producers to obtain more information about markets and to arrange direct marketing that would bypass some of the intermediaries. Also, the Internet can allow producers to reach global markets at reduced transaction costs. The Internet is already being used to trade agricultural commodities in a number of developed countries, especially in the United States, where it is used to trade products such as cotton, grain, meat and dairy products, to name a few. The Internet has also been used in developing countries to market commodities such as coffee and tea, although still on a small scale.

The report observes that various types of online marketing models are used for agricultural commodities. E-markets and online auctions

are widely used in agricultural export marketing. In the past few years, e-markets have been established for a wide range of commodities such as cotton, grain, soybeans, wood products, cattle, dairy products and a variety of other food products. While online auctions follow the same basic procedures as floor-based offline auctions, they provide benefits over the traditional format in terms of convenience, flexibility and cost reduction.

Some developing countries have taken the initiative in using ICT and e-commerce to market their agricultural exports. For example, the online auctions for speciality coffee held annually in Brazil, Guatemala and Nicaragua illustrate the successful integration of ICT and traditional marketing to achieve improvements in export marketing for coffee. The pioneering efforts of Kenyan entrepreneurs in organizing online auctions for coffee have proved that online marketing can be done using fairly inexpensive technology. Internet-based marketing of tea has started in India, although it is still in a very preliminary stage.

Use of the Internet to market agricultural commodities such as coffee and tea in developing countries is a relatively new business model. The marketing structures of both tea and coffee demonstrate that concerted efforts need to be made to address the possible obstacles created by market domination by large multinational companies – domination that prevents farmers from accessing importers directly and thus using the Internet for direct transactions with them. Governments, international organizations and donors can provide the support that is essential for providing the initial resources and trust required to establish online marketing ventures. At the regional level, farmers need to be organized into cooperatives or trade associations that will provide the capacity and critical mass for supporting online marketing.

7. Online dispute resolution: e-commerce and beyond

The report explores online dispute resolution (ODR), a regulatory development that is assuming increasing importance. It looks at the history of ODR, its nature and use in different contexts, and the role it can play in fostering the trusting relationships that are necessary for e-commerce to grow in developing countries. In addition, it considers the growth of ODR adoption in new environments such as government and other arenas where new tools are needed for responding to more complex multi-party disputes.

One of the main challenges facing e-commerce is how to resolve cross-border disputes in the electronic business environment. Distances between parties, linguistic and cultural differences, difficulties in determining the applicable law and competent jurisdiction, and enforcement of judgements are among the main obstacles that can significantly increase the cost of doing business online. Given that traditional dispute settlement mechanisms may not provide effective redress in e-commerce transactions, there is a need to consider alternative dispute resolution (ADR) mechanisms that can provide speedy, low-cost redress for claims arising from online interactions. When ADR takes place using computer-mediated communication in an online environment, it is referred to as online dispute resolution. Both e-disputes and bricks-and-mortar disputes can be resolved using ODR.

The report identifies the main forms of ADR – arbitration, mediation and negotiation – as processes effective in settling disputes out of court and in a manner that is less formal than litigation in court. During the past two decades, use of ADR has greatly expanded. Indeed, in commercial disputes ADR processes are used much more often than court litigation.

The report observes that e-commerce is an arena that has already demonstrated both a need for new dispute resolution approaches and the fact that new approaches are possible. Just as offline business is supported by an infrastructure that provides dispute resolution options when disputes occur, the online environment is building an infrastructure with an array of dispute resolution options that take into account the special qualities of cross-border transactions in which much of the exchange is electronic in nature.

The Internet, by being both disruptive and facilitative, is the source of the problem and also the source of the solution. All the numerous and novel ways of interacting online in commercially productive ways allow disputes to occur, thus heightening the need for dispute resolution systems that can assist disputants who may be at a great distance from one another.

The report concludes that, because ODR is a process that can contribute to building trust, it is particularly needed in situations where new relationships are being formed and existing institutions for legal recourse are lacking or inefficient.

Early online marketplaces assumed that users would not require anything beyond heightened convenience and lower costs and prices. It has now become apparent that the presence of dispute resolution is an asset that users will also consider as they assess the risks of participating in a new marketplace or environment. This is particularly important when the location or identity of the seller is unfamiliar or the item being sold lacks a well-known brand. Dispute resolution, as a result, is a process to which countries focused on expanding emerging e-commerce activities should pay particular attention.

The report observes that, although ODR is still in its infancy and/or non-existent in a vast majority of developing countries, it has the potential to grow and to provide fair and inexpensive adjudication of

disputes arising out of online transactions. The report recommends that developing countries wishing to promote and facilitate ODR as an alternative to national litigation consider on a priority basis the question of education and awareness building among merchants and consumers regarding the impact and increasing importance of ADR/ODR in resolving commercial disputes. Countries should also ensure that national legislation recognizes the validity and enforceability of electronic transactions and facilitates the use of out-of-court dispute settlement schemes. Countries should consider acceding to the 1958 New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards, which allows the enforcement of foreign arbitral awards. Countries are also encouraged to promote voluntary adherence by e-businesses to trustmarks and reliability programmes, and to give attention to cultural and linguistic differences affecting the provision of ODR services.