

HERE COMES THE DOT FORCE!

The New Cavalry for Equity?

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Abstract / This article examines the DOT Force, a G8 initiative that aims to bridge the digital divide in developing countries. The DOT Force, announced in Summer 2000, has culminated in a set of recommendations released at the G8 meeting in Genoa in 2001. After a brief overview of the DOT Force objectives and the ‘Genoa Plan of Action’, this article looks at the role of ICTs in development, the role of the World Trade Organization in fostering telecommunications reform in developing countries and concludes with suggestions for a more open process for consultation of the role of ICTs in development.

Keywords / communication and development / developing countries / digital divide / DOT Force / Internet / World Trade Organization

Governmental and industry discourse about the Internet positions it as a necessary information and communication tool for the knowledge-based economy of the 21st century. Networking tools provide ‘Solutions for a Small Planet’, as advertising for IBM claims; and a place to go beyond the mundane, according to Microsoft (‘Where Do You Want to Go Today?’). Despite the recent slump in the fortunes of many dot.com ventures and the downturn in the global economy, the Internet is still actively promoted by governments and industry.

It is now politically correct to talk about ‘bridging the digital divide’ through access to and participation with the Internet, not just in OECD countries, but also in developing countries. The G8 world leaders that met in Okinawa in July 2000 formed the ‘DOT Force’, a ‘high-level task force dedicated to swooping into developing countries to bridge the “digital divide” and transport them into the information technology age’ (Blanchfield, 2000). The Internet is being actively promoted as a tool for ‘eradicating poverty’, empowering community, creating jobs and enhancing democracy. Not everyone agrees with this cyberutopian discourse. Protestors at the G8 meeting burned a laptop computer on the beach, accusing the leaders of reneging on their promise of US\$100 billion debt relief for developing countries (the Jubilee campaign). A spokesperson was quoted as saying that ‘the fundamental cause of the digital divide is poverty’ (Blanchfield, 2000).

Clearly, such passionate debates over the information society highlight the need for critical reflections on these technological imperatives. If, indeed ‘cyber-space’ is a metaphor for community, and if digital citizenship is a precursor for

participation and engagement in society, then we need to look closely at who is being included, and who is being excluded.

This article examines the current rhetoric of the digital divide, with particular attention paid to the Digital Opportunities Task Force (DOT Force), an initiative announced in Summer 2000 as part of the G8 'Okinawa Charter on the Global Information Society', and endorsed by a broad cross-section of the US private sector (including Anderson Consulting and the Markle Foundation), the United Nations Development Program (UNDP), and the G8 governments themselves.

This article will first briefly examine what is implied by the term 'digital divide'. It will then examine the objectives of the DOT Force initiative and its final report released in the Summer of 2001, and also look at alternative voices that have been allowed in the discussion. Are there direct links between ICTs and broader development issues? The third section will briefly examine this issue through a brief examination of secondary literature, and highlight some case studies that support and refute this view. The article will conclude with a discussion about what values are being promoted in the DOT Force initiative, and ask what this means in terms of the cultural and economic autonomy of developing countries.

What is Meant by the Digital Divide?

Global imbalances in access to information and communication technologies (ICTs) must be viewed within the context of overall socio-economic imbalances, which have been an ongoing and persistent issue since the 1970s and the New World Information and Communication Order (NWICO) debates (Thussu, 2000). The term 'digital divide' reached popularity in the mid-1990s as a way for policymakers and the media to describe the disparity between those who had access to the Internet, and those that did not. Initially, use of the term took on a simplistic definition, with access defined solely as technical access (computers and telecommunication services). In the North American context, efforts to ameliorate the digital divide centred on setting up community access points for public spaces, such as schools and libraries. Later, definitions of the digital divide began to encompass more complex measures of access – not just the technical infrastructure – to include the social infrastructure. The social infrastructure includes access to education (measures include literacy rates) and content (the ability to produce as well as consume information). A variety of socio-demographic characteristics were also recognized as increasing (or inhibiting) access, including income, education, gender, race, ethnicity, age, linguistic background and location (rural versus urban) (Clement and Shade, 2000). Thus, the digital divide encompasses three main trajectories: access to ICTs themselves, access to the appropriate content and social capabilities and geopolitical aspects (Norris, 2001).

The OECD describes the digital divide as 'the gap between individuals, households, businesses and geographic areas at different socio-economic levels with regard both to their opportunities to access information and communication technologies (ICTs) and to their use of the Internet for a wide variety of

activities' (OECD, 2000: 4). The fundamental barrier, the OECD contends, is access to basic telecommunications services, with trade liberalization and increased market competition for telecommunications services the mechanisms to overcome the digital divide. According to the OECD, trade liberalization has increased the demand for communication services, and has led to an increase in the growth of access lines – both fixed and mobile, alternative access technologies, Internet access and use, and lower bandwidth prices.

However, this reliance on measuring the digital divide in terms of its technical infrastructure is flawed, as social issues must be considered and faults or lacks thereof rectified in order to ensure that digital divide issues can be addressed. Mansell emphasizes this point when she calls on us to consider and adopt a social capabilities approach: 'these capabilities include general education and technical competencies, the institutions that influence abilities to finance and operate modern organizations, and the political and social factors that influence risks, incentives, and personal rewards including social esteem' (2001: 56).

Digital divide studies were initially conducted in the North American context¹ where the international promotion of electronic commerce and a liberalized telecommunication sector led to the recognition that the digital divide is between and amongst countries. So, although the 1990s witnessed a fantastic penetration rate of the Internet in most regions of the world, other countries, such as Central and South America, have lagged behind. In Africa, growth has been 'negligible' (OECD, 2000). For instance, 88 per cent of all Internet hosts reside in North America and Europe, while Africa has a minuscule 0.25 per cent of Internet hosts (OECD, 2000).

From Okinawa to Genoa

The Okinawa Charter on Global Information Society was unleashed with much fanfare at the annual G8 summit held in Japan in Summer 2000. There, the G8 leaders formed the Digital Opportunities Task Force, and extended the invitation to 32 members of governments of developing countries, representatives of international and multilateral organizations, private industry and nonprofits, to join the DOT Force in an international effort to bridge the 'international information and knowledge divide'. Citing innumerable positive aspects (both economic and social) for ICTs, the DOT Force listed as their objectives:

1. the facilitation of dialogue and discussion with a variety of stakeholders: developing countries, international organizations, NGOs;
2. G8 coordination of ICT programmes and projects;
3. the promotion of policy dialogue and education and awareness programmes;
4. examination of private sector inputs; and
5. reporting of findings and activities before the next annual meeting in Genoa.

Four priority areas were elucidated:

1. fostering policy, regulatory and network readiness;
2. improving connectivity, increasing access and lowering costs;

3. building human capacity; and
4. encouraging participation in global e-commerce networks.

The consultative process for DOT Force activities has been largely a top-down process. Designated representatives from government, industry and NGOs have set up various consultative mechanisms (e.g. online forums, face-to-face consultations). International and multinational organizations (notably, the United Nations Development Programme and the World Bank) are observing the process and providing a secretariat. Government representatives are mostly from the G8 developed countries (Japan, the USA, Canada, France, the UK, Italy, Germany and Russia) although representatives from the developing world have also been invited to contribute (notably Bolivia, Brazil, China, Egypt, India, Indonesia, Senegal, South Africa and Tanzania).

Various activities have been initiated to support the DOT Force initiative; for instance, a inventory of ongoing digital divide initiatives by government, NGOs, multi-lateral organizations has been compiled (DOT Force, 2000). In Canada, several background papers and consultative documents have been prepared for Industry Canada in support of Canada's DOT Force contributions. For instance, *Fostering Policy Regulatory and Network Readiness* examines Canada's experience in this area, along with a description of Canadian-supported development projects that have focused on ICTs (Gilbert et al., 2001). *Building Human Capacity* provides examples of Canada's domestic experience with providing distance education, tele-health, and networking public institutions and communities – schools, libraries, and community centres (Judy Roberts & Associates, 2001).

The final report, *Digital Opportunities for All: Meeting the Challenge*, was released in May 2001, with a nine-point 'Genoa Plan of Action'. Priority areas for action were elucidated, along with guiding principles for the introduction and implementation of ICTs in developing countries. The DOT Force emphasized that ICTs 'cannot of course act as a panacea for all development problems but by dramatically improving communication and exchange of information, they can create powerful social and economic networks, which in turn provide the basis for major advances in development' (DOT Force, 2001: 3).

The report stressed the varying needs of different countries with respect to how they will seek to use and adapt ICTs, and argued that countries must become producers of content and information, not mere consumers. To support this goal, the report reinforced the crucial role of community-based organizations and NGOs. The use of other more traditional technologies (broadcast technologies-especially radio) in concert with ICTs was also highlighted. Incorporating a gender perspective was also emphasized:

Special efforts should aim at enhancing the level of connectivity among the poorest, women and children and less densely populated areas of the planet. The power of ICT to address gender issues cannot be underestimated and should be used to its full extent. Appropriate efforts in the direction of the Least Developed Countries should help diminish the overall level of digital inequality. (DOT Force, 2001: 11)

The nine action points include:

1. Establishing and supporting developing country and emerging economy national 'eStrategies', including 'eGovernment' and 'eGovernance' initiatives. EStrategies 'should commit, in particular, to the establishment of an enabling, pro-competitive regulatory and policy framework as well as the associated institutional policy-making and regulatory capacity, including self-regulatory mechanisms' (DOT Force, 2001: 13). An *International eDevelopment Resource Network* will be launched, to consist of regulatory, policy and strategy expertise from developed and developing countries.
2. Improving connectivity through an increase in access and a reduction in cost. This includes establishing multiple access points across a variety of sites – post offices, elementary schools, Internet cafés, telecentres and community multimedia centres. National and regional Internet backbones should be deployed, and local Internet Exchange Points (IXPs) should be created, 'especially through private investment' (DOT Force, 2001: 15). As well, national network information centres (NICs) and infrastructure support for domain name services is to be encouraged.
3. Enhancing human capacity development, knowledge creation and sharing, particularly through educational initiatives: wiring up schools, providing teacher training, increasing network literacy and providing opportunities for young girls. Encouragement of various 'eLearning' initiatives, fostering collaborative research amongst educational facilities, creating networked 'centres of excellence', and 'encourag[ing] companies worldwide to offer a portion of the working time of their skilled human resource base to training developing country civil society in ICT-related subjects' (DOT Force, 2001: 16) was also recommended.
4. Encouraging economic and entrepreneurial activities for sustainable economic development. Ways to achieve this include private sector mentoring, the creation of an 'International Entrepreneur Resources Exchange', private–public partnerships – all in a pro-competitive and regulatory environment.
5. Supporting universal participation in policy and governance issues arising from ICTs, including identifying and including developing group stakeholders in these various forums.
6. Establishing initiatives for Least Developed Countries (LDC). This includes support partnerships, joint stakeholder initiatives and 'Encourag[ing] telecommunications equipment and service providers to work co-operatively with least developed countries to aggregate demand and reduce costs' (DOT Force, 2001: 18).
7. Promoting ICT for use in healthcare applications, particularly in the fight against communicable diseases, such as HIV/AIDS, through an 'ICT for AIDS' programme. The utilization of appropriate media – not just the Internet, but community radio and other broadcast media was recommended.
8. Creating local content, through open source software, the localization of software applications, digitization of local content and content aimed at

‘eGovernment’ initiatives. Involving developing countries in intellectual property debates, particularly at the WIPO level.

9. Prioritizing ICT initiatives across the G8 and multi-sectoral organizations.

Alternative Voices

A few initiatives to gauge the public’s ideas and opinions about the DOT Force initiatives included the ‘dotciv’ workspace provided as part of the Canadian Civil Society Consultation process, and The Public Voice, an initiative of the Electronic Privacy Information Center (EPIC) based in Washington DC.

The Canadian Civil Society Consultation Process was sponsored by Industry Canada and IDRC (International Development Research Centre) and hosted by Bellanet, an initiative of IDRC. Its goal was to ‘solicit opinions and foster dialogue amongst Canadian civil society organization for input into the DOT Force’ (dotciv). It included an online forum and various resources, such as draft discussion papers, and links to relevant publications and online sources.

The Public Voice’s goal was to promote NGO participation in various international decision-making bodies that address Internet policy. For the DOT Force activities, it worked with the APC (Association for Progressive Communication) in coordinating an online discussion space addressing many of the DOT Force consultative questions. One month of consultation created ‘thirty-three comments from residents of nine different countries on three different continents’ (The Public Voice, 2001: 2). Had there been more resources for translation, and a way to incorporate the voices of those in developing countries without Internet access, a more sustained discussion could have been generated. One of the more interesting recommendations, in terms of strategies for overcoming the digital divide included ‘wider availability of translation services, development of wireless networks, providing better content and use of free or open-source software’ (The Public Voice, 2001: 6).

Are ICTs Appropriate Technologies for Development?

Whether or not ICTs are an appropriate tool for development is a controversial topic. The arguments are fractured and splintered between ‘cyber-enthusiasts’, who firmly believe that ICTs are necessary to implement, and ‘cyber-sceptics’, that question the role of ICTs as an effective development device.

Enthusiasts claim that ICTs are the way for developing countries to break into the modern world and become full participants in international decision-making. Even though many countries in the South have yet to deploy a telephone network, enthusiasts contend that these countries will be able to leapfrog into the industrial age: ‘Imaginative use of emerging technologies and the creation of partnerships or cooperative approaches that combine the skills of major corporations with the growing strength of civil society can accelerate development in even the poorest regions and reverse many of the most worrisome trends’ (Hammond, 2001: 97).

Sceptics argue that ICTs merely exacerbate social and economic divisions. They argue that access requires a considerable amount of investment in key

infrastructures (such as telecommunications), but should not be done at the expense of other more important and valuable social infrastructures, such as adequate food, housing and education (Atkinson, 2001).

Most likely a balance should be struck between the overly optimistic scenarios and the dire pessimistic cries. The 2001 UNDP Human Development Report stressed the need to look at technology as ‘a tool for, not just a reward of, growth and development’ (UNDP, 2001: 27). They believe that ICTs can be used to break barriers to human development by delivering information to all, regardless of socio-economic status, creating vital communication networks for civil society movements and creating the potential for developing countries to use ICTs for economic growth – expansion of exports, creation of jobs, economic diversification.

Einsiedel and Inness write that ‘it is important to examine how these technologies have been used in development activities before discussing what lies ahead for communication and development’ (2000: 258). They cite several programmes made possible with funding from international donor agencies (in Canada, the Canadian International Development Agency (CIDA) and the International Development Research Centre (IDRC); in the USA, the US Agency for International Development (USAID)). They emphasis three areas that are crucial to address in aligning the development process onto the ICT trajectory:

1. although universal access is a notable goal, achieving this requires the complicity of the private sector, state and NGOs;
2. connectivity costs remain high and limited to academic and state organizations and NGOs with international connections – rural and remote areas often are not able to partake at the same level as their urban counterparts;
3. appropriate training in both the technical and the social uses of the technology is imperative.

The discourse on the DOT Force is relatively uncritical; as in previous debates on strengthening communication systems for developing countries, current discussions are concerned with the ‘how and when to “connect” communities in the South instead of with the why, who, under what conditions, and with what implications’ (Einsiedel and Innes, 2000: 263).

In many instances, access to ICTs in developing countries is maintained by the powerful economic and political elite, while ‘access by less powerful people . . . is limited by cultural and economic factors’ (Credé and Mansell, 1998: 39). These factors influence how and why ICTs are used. For instance, mundane uses – communication between family members in another village – can be the most motivating rationale for frequenting the local telecentre.

The development of digital public goods is a way for ICTs to be used for sustainable development. Local e-commerce applications are one potential emerging market, such as using the Web to promote and export artisan handicrafts, providing services for diasporic communities, and developing regional hubs for Internet software and services development (Rao, 2000: 13). More social uses of e-commerce should be encouraged (bringing it down to the community, or village, level) rather than merely promoting it for small- and

medium-sized businesses. Telecentres are a venue that can encourage such uses; for instance, Robinson describes using telecentres to link microbanks. This is a complementary venture, as telecentres offer 'communication services, IT and other skills training and continuing education for local professionals who staff local institutions' (Robinson, 2000: 24).

The creation of public interest information and communication services (e.g. services that support civic life, increase communication with government entities, provide valuable health and educational information) also needs to be encouraged. How to do this free from a Western sensibility is a challenge. Mazrui and Mazrui talk about 'islamizing the Internet', in order to create a technology 'free of influence from existing systems of economic, political, and social inequality' (2001: 54).

DOT Force Discourse: Modernization 2.0?

The Internet galaxy has opened unexpected and valuable opportunities for alternative expression, allowing many voices that are not the echoes of power to broadcast their messages. But access to the information superhighway is still the privilege of developed countries, where 95 percent of users reside, and commercial advertising is doing its all to turn the Internet into the Businessnet. (Galeano, 2000: 274-5)

Modernization theories, as conceptualized in developed countries post-World War II, became one of the more prevalent paradigms for development. Its discourse, as Escobar (1995) relates, became institutionalized through the creation of institutions and project structures that pushed a particular, yet very Westernized, sensibility of 'development'. Modernization theory holds that communication and media are the conduits for the spread of modernization (defined as things Western and therefore 'good' or 'better'). Political and economic reform is one such goal, with the transformation of 'traditional societies' to 'modern' societies as the impetus. Melkote and Steeves (2001) document the origins of development communication through a critical analysis of the work of Daniel Lerner, Wilbur Schramm, Everett Rogers and Lucien Pye, commenting on its ethnocentrism, absence of gender theories and lack of participatory approaches. As Latin American scholar Luis Ramiro Beltran (1976) commented, early modernization theories relied on US models of communication research, particularly the effects model and the functionalist orientation. Beltran criticized assumptions that 'communication by itself can generate development, regardless of socio-economic and political conditions' and that 'increased production and consumption of goods and services constitute the essence of development' (1976: 108). As well, he questioned whether technology and technological innovation was the key to increased productivity.

Early development projects emphasized the use of 'mass media' such as radio and television as facilitators for social marketing campaigns. Diffusion models, developed in the West, were applied to developing countries to ascertain how technological innovations 'trickled down' to the masses. However, such a model privileged the individual over the community, and did not account for socio-economic variables such as the differences between urban and rural

communities, and the important role of women in the development process (Melkote and Steeves, 2001: 268–9).

A cursory look at the discourse of the DOT Force reveals its allegiance to the modernization paradigm. Technology is equated with development, with the Okinawa Charter sounding as if it were a ‘call to arms’ for the global information society. Adopting the discourse used to describe the benefits of the Global Information Infrastructure (GII),² the Charter proclaims that ICTs are one of the most ‘potent forces’ affecting daily life, leading to ‘revolutionary’ impacts. ‘Seizing’ the benefits of ICTs is important for developing countries so that they can increase productivity, create and sustain economic growth and jobs, and ensure global competitiveness.

The role of the private sector is reinforced throughout the Charter and in the Genoa Plan of Action. Governments, however, are there to create the most conducive atmosphere for private-sector initiatives: an unregulated and thus ‘IT friendly’ environment, the promotion of competitive and open markets, the protection of intellectual property rights, the cross-border facilitation of e-commerce, the continued liberalization of the telecom industry and related services through the promotion of a strong World Trade Organization, the protection of consumer trust through OECD guidelines and privacy protection and international efforts in fighting cybercrime.

Several suggestions have been made as to the role of the private sector. Hammond advocates a new development model, where businesses provide basic services, either directly or in partnerships with governments or NGOs (this is because, he contends, governments in developing countries are too inefficient or corrupt): ‘The right strategies can enable the poor to become customers and pay for the services they receive, services that will improve their quality of life and increase their productivity’ (Hammond, 2001: 98).

However, we need to ask whether developing ICTs for development in such a climate which emphasises competition and pro-market values will be tenable. Hamelink reminds us that ‘as long as ICTs are embedded in the institutional arrangements of a corporate-capitalist market economy, the equal entitlement to information and communication resources will remain a normative standard only’ (2000: 93). There are models that originate from the local expertise and knowledge of developing countries. Ayisi Makatiani, founder of the pan-African ISP Africa Online, believes that Internet solutions for Africa are totally different than from the West: ‘... pressing concerns like basic communication and business transactions mean that the Internet won’t be used just for entertainment. Rather, it will be a useful tool, an alternative to a nonexistent phone system’ (Marsh, 2001: 60).

Graham critiques the DOT Force draft final report for seeking ‘to “capture” indigenous knowledge. The “initiative,” whatever it accomplishes, won’t ever become developmental if it serves to commodify and appropriate knowledge as property’ (2001). It is interesting to reflect, then, upon a new firm, EthicVillage.com, started by ‘a group of high-minded, successful French entrepreneurs and bankers’ (Cukier and Faucon, 2001: 65) that is branding goods created by various microfinance enterprises and selling them over the Internet. Many of the goods will come from certified fair trade cooperatives,

and an 'ethical label' will be attached to them. One of the founders talks about a new form of overt (and presumably North American and European consumerism): 'Customers want products that tell a story – what is the culture behind the product; what is the person behind the product' (Cukier and Faucon, 2001: 70).

Should ICT development in developing countries, then, be left to the vagaries of the marketplace? Graham also remarks that 'countries need effective capacity to understand the culture of the Net on their own terms, not those imposed by external intervention. Development questions are not merely economic. They are also socio-cultural and political' (Graham, 2001). It is therefore important to look at the role of the World Trade Organization (WTO).

Under the auspices of the WTO, an agreement on liberalization of market access for basic telecommunication services became effective in February 1998. The WTO 1997 Basic Telecommunications Agreement – which 'brought to the world the procompetition principles of 1996 US Telecommunications Act' (Barshefsky, 2001: 139) guarantees market access for telecom providers (the right to offer local, long-distance and international service through any type of network services, including the Internet). It also supports the development of a global telecom infrastructure. Former US Trade Representative Charlene Barshefsky (2001: 139) exudes enthusiasm for the WTO Agreement: '[it] is immensely important to some of America's leading exporters. It also helps provide a source of new technologies and modern infrastructures for countries in the developing world'.

The WTO agreement opens up the market for foreign investment, with the US, EU and Japan reaping the most benefits. There are some exemptions for developing countries, but developing countries that wish to take advantage of ICTs will be pressured by the WTO to liberalize their telecom sector. Estimates are that the liberalization of the telecommunication sector will lead to cumulative gains in benefits and cost-savings for low-income developing countries equal to US\$177 billion; for high-income industrialized countries, approximately US\$523 billion. Because governments and development agencies are working with the private sector, 'the right balance needs to be achieved between creating a conducive environment for large direct investment and ensuring that the benefits accrue without excluding people' (Credé and Mansell, 1998: 29–30).

E-commerce is the next frontier the WTO is looking at. The USA is pressuring the WTO to address e-commerce: '[the] WTO should therefore find global consensus on a set of general principles for Internet trade . . . ensuring that current WTO agreements and basic WTO concepts of nondiscrimination, national treatment, and most favoured-nation status apply to e-commerce as well as to conventional trade' (Barshefsky, 2001: 141–2). Barshefsky talks about the international importance of ameliorating the digital divide, the need for 'practical work . . . sustained commitment to technical assistance and capacity-building', but only for governments 'that have committed themselves to competition and market-based economics' (2001: 145).

This last statement almost reads as if it were a threat, or at least a new type of structural adjustment policy for developing countries that wish to invest in ICTs. Primarily, this is an American-led discourse, where most benefits, despite

the rhetoric, will seemingly flow to transnational corporations. The US promotion of a free-flow e-commerce agenda privileges the ‘already considerable advantages the American communication industries now possess against existing or potential rivals . . . couched in the language of freedom’ (Schiller, 2000: 79).

Conclusion: ICTs for the New World Order

The DOT Force process still has a long way to go; although the July 2001 meeting adopted the Genoa Plan of Action, much more work needs to be done, particularly in coordinating countries, civil society groups and donor agencies. At the 2002 meeting in Kananaskis (Canada), the strengthening of developing countries’ ‘e-readiness’ was emphasized; in particular, the e-model for improving the efficiency public administration. As well, the New Partnership for Africa’s Development (NEPAD) was initiated, with one focus the enhancement of digital opportunities for Africa through the implementation of universal access mechanisms, and the encouragement of private–public partnerships to fast-track ICT development in the areas of entrepreneurship, education and health (Government of Canada, 2002).

Perhaps then, there is more time to promote a more bottom-up approach to the DOT Force machination. Sustained public consultation should be initiated. The Public Voice recommended that the DOT Force utilize an “online suggestion box” that will allow easy participation in the public consultation process by organizations and individuals around the world who may not be formally affiliated with the G-8’ (2001: 2). This, of course, includes those countries not in the G8 – and who will presumably be affected by any such ICT action agendas, including women and other disenfranchised members of society. And, although there is mention of main-streaming gender issues into technology policy and implementation, the voices of women and young girls also needs to be incorporated into the consultation process.

Participatory design measures, where ICT development and design is driven by specific developing country demand, where youth and women become integral in digital opportunities, and where content creation is left in the hands of the creators themselves, needs to be a primary guiding ethos of any DOT Force initiative. Design also extends to the technical – and this is why exploration should extend towards integrating open-source software into ICT ventures.

A critical stance on the role of ICTs in development is desperately needed in both policy and in media coverage. For instance, is the Internet a truly appropriate technology for developing countries? A recent report in the *Wall Street Journal* highlighted how solar-powered community radio is being used in Niger to promote health and education initiatives, such as AIDs awareness, farming tips and household sanitation. Said one woman, ‘As soon as a child gets an illness that can be spread, the radio puts out the information . . . now we have fewer epidemics than before. Fewer children are dying’ (Thurow, 2002: A2). Ironically, this article is positioned on the same page as one looking at the disappointing market share of recently merged media Goliaths whose dreams

of Internet and broadcast synergy have tumbled since the 2001 dot.com decline (Orwall and Peers, 2002: A1).

Public policy needs to consider a social capabilities approach which, as Mansell says, ‘means investing in people . . . finding new ways of creating an attractive and sustainable environment for investing in the skills base that is necessary for conducting social and economic activities in electronic or ‘virtual’ environments’ (2001: 57).

As Wilkins (2000) argues, development communication discourse needs to account for power in both theory and practice. Justifying intervention via the ICT ‘technological fix’ and the motivations of various stakeholders is necessary. Institutional practices, such as those of donor agencies, multi-lateral agencies such as the World Bank and WTO, and the role of NGOs also need to become more transparent. The legitimization of global capitalism as a natural and vaunted state of affairs needs to be questioned, particularly when the discourse of the DOT Force posits that citizenship and human development entails participating in a global commercial system. The DOT Force discussion – and so far there have not been any public debates on the role of ICTs in development – remains, by its very assumptions, an apoliticized initiative led by blue-chip technology and media firms. But the DOT Force is a very politicized attempt to serve the needs of the private sector over the needs of those countries and citizens that it will presumably serve.

Notes

1. In the USA, the Department of Commerce issued a series of reports on the digital divide entitled *Falling Through the Net*. In Canada, Statistics Canada has issued yearly surveys of Internet use, and the Public Interest Advocacy Centre has released several reports on the digital divide, notably *The Dual Digital Divide*, by Andrew Reddick (2000), available at www.piac.org. For a current overview of digital divide research, see the September 2001 issue of *Computers & Society*.
2. The GII was initiated by then US Vice President Al Gore in the mid-1990s as the international component of the National Information Infrastructure (NII). Coming right before the 1996 Telecommunications Reform Act, which promoted a market-led and deregulated telecommunications environment, the GII sought to expand the US pro-competition and anti-regulation attitude to other countries, notably Canada and the European Union.

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