

Closing the Digital Divide in the Caribbean

A Leadership Challenge

Dr. Gillian M Marcelle,
Principal Consultant, Technology for Development and
Bureau Member UN ICT TASK FORCE
gmarcelle@worldonline.co.za

The Association of Caribbean University, Research and Institutional Libraries
(ACURIL) XXXIV Annual Conference
May 23-29, 2004
Hilton Trinidad Conference Centre
Port-of-Spain, Trinidad and Tobago.

“Electronic Information Resources in the Caribbean: Trends and Issues.”

Abstract & Biography

This paper discusses the challenges of closing the gap in access and control of Information and Communication Technologies (ICTs) in the Caribbean. It takes the view that the existing “digital divide” mirrors economic, social and political global realities and is not a phenomenon that can be explained in isolation. From this perspective, it makes recommendations for how engaged leadership at all levels can be mobilised to ensure that the digital gap is closed and that ICTs serve development needs. The paper argues that implementation of the transformative agenda, requires public leadership. However, since leadership of the ICTs and development agenda is too important to be left to a single stakeholder, governments must be made accountable to and seek the involvement of civil society including private sector, NGOs, professional associations such as ACCURIL, academic and research institutions. The Caribbean region will not realise benefits of ICTs without improving the manner in which it engages with global ICT governance and diplomacy. The paper is optimistic that Caribbean citizens, in the region and the Diaspora will rise to these challenges.

Gillian M. Marcelle
Principal Consultant Technology for Development (TfDev)
gmarcelle@worldonline.co.za

Dr. Gillian M. Marcelle is a citizen of Trinidad and Tobago who now lives and works in Southern Africa, after many years in Europe. She has been active in the ICT policy arena for the past 15 years and is currently engaged as the Special Advisor to the National Commission on ICT in Angola as well as providing strategic advisory services to a number of clients through her practice Technology for Development (TfDev.) Dr Marcelle is a Visiting Fellow at Science and Technology Policy - SPRU, Sussex University (UK), where her research focuses on innovation studies, technology capability building and learning. Her new book *Technological Learning* will be published by Edward Elgar in Autumn 2004. She serves as a Bureau member on the UN ICT Task Force and continues to be an active leader in developing and implementing gender justice strategies in the ICT sector, including as the founding convenor of the WSIS-Gender Caucus.

1. Why is the Digital Divide relevant to the Caribbean?

1.1. This paper discusses the challenges of closing the gap in access and control of information and communication technologies in the Caribbean. It takes the view that the existing “digital divide” wherein there are significant differences in levels of access and usage across and within countries mirrors economic, social and political global realities and is not a phenomenon that can be explained in isolation. From this perspective, my recommendations suggest that leadership at all levels is required to ensure that this gap is closed and that these technologies serve development needs.

1.2. In the Caribbean context, the particular developmental challenges that must be addressed include:

- Poverty
- Unequal wealth distribution
- Unequal power relations
- Unfair international trading system
- Health pandemics and limited access to social services
- Illiteracy and access to education
- Environmental sustainability

2. What are ICTs?

2.1. Information and communication technologies (ICTs) are a range of information and communication technologies and applications used for information sharing, networking and communication. ICTs include telephones, mobile phones, computers, radio, TV, the Internet and other new digital media. ICTs are used as end products and as intermediates.

3. ICTs and Development

3.1. Access and control of ICTs can provide people with many developmental benefits including: increased access to markets and information about market opportunities; more flexible access to employment and incomes; reduced social isolation; increased confidence; easier access to information about legal protection and human rights; mechanisms for political organisation across social and national boundaries; improved access to government services including social welfare grants. However, the evidence from around the world suggests that there remains a problem in ensuring that the poor are provided with equitable access to ICTs.

4. What are the main challenges in closing the digital gap?

4.1. The rest of this paper analyses why we are failing to close this gap and sets out an agenda for change.

4.2. North – South Divide

4.3. The distribution of wealth, knowledge, power and opportunity that are reflected in access and control of financial resources, trade and investment are mirrored in the ICT sector. Since the ICT sector is technologically-intensive the concentration on research and development in wealthy countries also gives rise to a barrier to access to proprietary technological knowledge and inputs. The intellectual property regime and trade related rules for intellectual property have also resulted in increasing limits on public flow of information.

4.4. There is an on-going effort to transform fundamental principles and values in the ICT sector so that these become more pro-poor and pro-development. However, the

prevailing governance regimes are dominated by large multinationals and their client states.

4.5. Developing country governments often lack the political, financial and intellectual resources required to engage meaningfully in the policy making agenda for the ICT sector.

4.6. Income Divide

4.7. Even when developing countries have made progress improving access, control and articulation of ICTs at a national level, their rural and urban poor communities are often not well serviced.

4.8. The majority of people in developing countries live in rural settings (for sub Saharan Africa 70.5%) and women make up the majority of rural populations. However, as a result of uninformed and uninspired public policy, these communities are often not well served by access to ICTs even when they can afford. There are often neither incentives nor regulations to prevent ICT network providers from designing networks that concentrate on providing connectivity to large corporates and wealthy households leaving persons in shantytowns and informal settlements without access.

4.9. Gender Divide

4.10. In many countries there is also an unacknowledged divide between the rate at which women and men are able to access and control ICTs. In developing countries, high incidence of female headed households under the poverty line exacerbates lack of affordability. In addition, rural women's communications needs are not well understood and are not considered to be important enough to require specific interventions. There is also a lack

of relevant information content in ICT applications. When women are not in control of their time and financial resources, even when public facilities are made available, they may face specific problems in gaining access to facilities and training opportunities. In those countries where governments have not implemented commitments to provide equal opportunities for education to girls and women, the levels of computer literacy among this group is far lower than that of boys and men.

- 4.11. There is some anecdotal evidence to suggest that in the Caribbean, the gender divide in access to ICT may be negatively affecting boys and young men.

5. Why are we failing to align ICTs with development?

- 5.1. If it is possible to identify these key challenges, then it should also be possible to formulate responses that meet them head-on. However, these solutions require a frank acknowledgement that these gaps will never be solved by relying only on market orientated solutions.
- 5.2. While it may not have been popular to make this claim in a world that was infatuated with the Washington consensus, I trust that recent disaffection with globalization has improved the context for discussing pro-development public sector leadership.
- 5.3. The North-South, income and gender divides that characterize access and control of ICTs result from supply conditions that are market driven. The patterns of diffusion of ICTs illustrate a case of classic market failure where private benefits that accrue to the providers of ICT equipment and services greatly outweigh the social benefits.

- 5.4. The opportunity costs associated with this market failure and the absence of creative public sector leadership are tremendous. It means for example that developing countries such as the Caribbean are not benefiting from the cost savings that would result from intensive use of ICTs in the delivery of education and health services. It also means that the direction of ICT policy in the Caribbean is narrowly focused and does not attempt to increase the multiplier effects of lower prices and improved quality for the enterprise sector including cultural entrepreneurs. It also means that the opportunities to use ICTs to stimulate participatory government at all levels, including within local communities have not been seized.
- 5.5. The agenda for Caribbean ICT policy, such as it is, appears to be a connectivity agenda rather than a developmental agenda. This is not surprising since the suppliers and client governments who set this agenda are likely to reap significant returns associated with projects that regard providing broadband connectivity to multinationals operating in the Caribbean, and ensuring that the elite have access to new generation mobile technology at outrageous prices as useful and beneficial.

6. What Can Be Done?

6.1. It is possible to transform ICT policy and implementation in the Caribbean toward a pro-poor and pro-development agenda. To make progress on this path, it will be necessary to avoid the latest fads of ICT policy that originate from well-meaning or self interested outsiders. It will be necessary for the Caribbean to develop home grown strategies and to build the necessary intellectual, policy making and diplomatic capabilities needed to implement these strategies. The region should avoid strategies that focus on creating ICT enclaves (free trade zones by another name) and programmes that result in wider access to ICT equipment and services only for the elite

6.2. I suggest the following seven key components for this effort:

- Promote widespread use of ICT applications
- Facilitate local design and adaptation of relevant applications
- Participate in globalised production of ICT equipment and services
- Provide cost-effective ICT enabled social services (health, education, political participation, community management)
- Ensure greater participation in decision making in ICT governance
- Make public investment in the public interest
- Balance diverse interests

6.3. To implement this transformative agenda, it will be necessary for the Caribbean to define its public interest in the Digital age and this requires public leadership. However, leadership of the ICT and development agenda is too important to be left to a single stakeholder. Governments must be made accountable to and seek the involvement of civil society including private sector, NGOs, professional associations such as ACCURIL,

academic and research institutions. It is also likely that Caribbean governments will be successful if they are able to design and manage partnerships with the international community.

6.4. In summary, it is necessary for the Caribbean to design and implement an agenda for ICT and development built on a foundation of creative public sector leadership. This strategy should involve a programme of actions by

- Public decision makers
- Technology suppliers
- Financiers and donors

7. An Agenda for Caribbean Leadership in ICT for Development

Public Sector

7.1. The Caribbean region is a 'latecomer' to telecommunications liberalization and efforts to align ICT with development. Policy makers and regulators should pay careful attention to avoid short-cuts and being seduced by maximisation of license fee revenues and tax payments. The long term benefits of ICT will accrue by using this sector as a catalyst for broader growth and development.

7.2. Regulatory authorities should provide incentives to operating companies to encourage increased provision of ICTs in rural areas and to the urban poor through licensing, universal service funds, and other mechanisms. Appropriate arrangements should be put in place to facilitate development of community owned and run ICT facilities

7.3. Caribbean governments working with international partners should provide public access to ICT facilities, and in particular should explore community

radio, multimedia centres and telecentres as means for promoting rapid access to ICT training and support of entrepreneurship.

- 7.4. As a matter of urgency, Caribbean governments, in partnership with regional development and research institutions should undertake a thorough evaluation and assessment of how the region can increase social and economic benefits of ICTs. The findings from this study should be widely disseminated and used to inform practice.
- 7.5. Governments should work in partnership with civil society and other stakeholders in the definition of the agenda and in its implementation.

Private Sector

- 7.6. Technology and service providers should look beyond short term profit maximising. In this regard they should undertake investment in learning and capability development and improve their ability to innovate in rural applications.
- 7.7. Private sector companies should investigate and implement technology adaptation. If these firms were to develop applications that met the specific needs of the urban poor and rural women they would reap benefits of developing and growing a future market.

Financial Sector and International Community

- 7.8. The international community including financial institutions, development banks and bilateral donors should reduce the fragmentation and poor allocation of funds in the ICT for development sector.
- 7.9. While there has been an increase in funding for ICT related projects, there has been a great deal of duplication and many projects are only able to support small scale pilots.
- 7.10. The financial community should evaluate and measure the social benefits of ICTs projects over a sufficiently long time horizon and should set requirements for targeting rural women and the urban poor when providing funding to national governments and NGOs.

Civil Society

- 7.11. Caribbean civil society, including research and academic institutions, professional bodies, NGOs, trade unions etc need to become much more actively involved in advocacy on ICT and development issues.
- 7.12. The library and information management community, including associations such as ACURIL and the national library associations can play an important leadership role in ICT public policy formulation and implementation.
- 7.13. The Caribbean has a mixed record in the extent to which governments engage in consultative and participatory policy design. Many still do not understand the positive contribution that the professional bodies can make and prefer to rely on external consultants. Caribbean civil society need to be more pro-active and professional in their direct lobbying and strategic advocacy and to use every opportunity to demonstrate the value of their

contextual understanding and experience. The key component of a forward looking advocacy strategy would be to focus on the extent to which Caribbean civil society can deliver on the public interest objectives.

- 7.14. In addition, public libraries, and national libraries in particular, are valuable test sites for experimentation with public access technologies and applications.

Regional

- 7.15. CARICOM has recognised the need to promote awareness of the benefits of ICT and should be supported to move more quickly into programme implementation.

- 7.16. The ICT for development agenda needs to capture the imagination, hearts and minds of Caribbean people. Without this breakthrough it is unlikely that ICT projects will move beyond the current status and the region will not reap potential benefits. We should develop flagship programmes that meet the following criteria: develop ICT research and training capability, provide links to knowledge and production networks; develop human resource base; involve civil society; demonstrate benefits of active public sector; encourage private sector participation and stimulate and promote innovation. My short list of large-scale regional flagships would include:

- **E-commerce/e-tourism projects for the ICC Cricket World Cup 2007**
- **Disaster preparedness and environmental awareness network**
- **Cultural entrepreneurship skills development projects**
- **Participatory e-government projects at community level**

- **Wireless access connectivity projects**

Engagement in the Global Arena

- 7.17. The WSIS Declaration of Principles and Action Plan agreed in December 2003 take explicit account of the burden of structural inequality in access and control of ICTs and urge the international community to use access to ICTs to promote development, in particular to contribute to the achievement of the Millennium Development Goals (MDGs). The WSIS Declaration and Action Plan also recognised the specific needs and requirements of small island states, a result won through active lobbying and advocacy of the Pacific Islands.
- 7.18. There is also increased support for regional co-operation and multilateralism in solving the problems associated with the 'digital divide'. On the occasion of the World Summit, the European Union and the African Caribbean and Pacific States signed an accord which seeks to stimulate greater co-operation.
- 7.19. Development financial institutions such as the Inter American Development bank and bilateral donors have committed funds to various projects that aim to strengthen institutional capability in the ICT sector.
- 7.20. The United Nations and its specialised agencies including UN-DESA, ITU, UNESCO and UNDP are actively promoting and supporting ICT for development initiatives. The United Nations Conference on Trade and Development (UNCTAD) in its upcoming general congress UNCTAD XI will include a focus on the role of ICT in promoting trade and development. The

current chair of the United Nations Commission on Science and Technology for Development, Dr Arnaldo Ventura of Jamaica is a committed advocate for the articulation of Science and Technology with development and has a keen interest in stimulating ICT sector development in the region.

- 7.21. The United Nations ICT Task Force remains committed to catalyzing and supporting programmes in the region, including activities that aim to link the Caribbean non-resident Diaspora with their counterparts in the region. The Latin America and Caribbean regional network of the UNICT TF has a pro-development focus and will be intensively involved with promoting links between Caribbean island states and other sub-regions.
- 7.22. To take advantage of the increasingly propitious and accommodating international context requires the commitment of Caribbean political leadership and strategic effort from technical specialists and diplomats.
- 7.23. It is possible with committed and creative leadership to make best possible use of ICTs to solve Caribbean development challenges. Time is of the essence!
- 7.24. This paper has outlined a strategy for transformation of the Caribbean response to the challenges of the Digital Age. It has argued that there is no need for cognitive miserliness. We should neither rely on hackneyed slogans nor borrowed ideas. Rather, what is required is that we confidently draw on the innate creativity of Caribbean people to secure the benefits for ourselves and the generations to come.

Selected References

1. Barbara Blake-Hannah, Impact of ICTs on Jamaican Music Industry 2002.
www.dgroups.org/groups/icacaribbean/docs/ICT-MUSIC-JAMAICA.doc
2. Caribbean ICT Stakeholders Virtual Community (CIVIC), (2003) *Towards a Vision of a Caribbean Information Society A Contribution to the WSIS* unpublished advocacy brief dated February 2003. www.dgroups.org/groups/icacaribbean/docs
3. Commonwealth of Learning (COL) 1999, *Identifying Barriers Encountered by Women in the Use of Information and Communications Technologies (ICTs) for Open and Distance Learning in the Caribbean*, Sponsored by The Commonwealth of Learning, November 24, 1999 Bridgetown, Barbados.
4. Commonwealth Policy Studies Unit and Commonwealth Secretariat, (2003) *Fostering Competitiveness in the Commonwealth through Electronic Commerce: Experiences and policies adopted in four Commonwealth countries*, report dated March 2003.
5. ECORYS (2002) *Caribbean Perspectives on Trade, Regional Integration and Strategic Global Repositioning*, report prepared in October 2002 for the European Commission, Rotterdam.
6. John, S. (2001), A Review of Government Information and Communications Technology Policy and Services in selected Caribbean countries, ECLAC Subregional Headquarters for the Caribbean, LC/CAR/G.676 Report dated 30 November 2001.
7. Leonard, Josanne (2002), *Report on Media and Culture recommendations to CARICOM Ministers with responsibility for Information, Technology and Communications* by Josanne Leonard, mimeo dated May 14 2002.
8. Marcelle, G. M (2002) “*What Can the Caribbean Learn from a Decade of Telecommunications Policy reform in Africa?*” featured presentation at the Caribbean Development Bank CDB Special Discussion Seminar Series, Barbados, June 2002 available on www.caribank.org/downloads/Forum5.pdf
9. Nurse, D.A. Digital Diaspora Network for the Caribbean and ICT Development in the CARICOM Countries, discussion paper prepared for the 1st meeting of the UN ICT Task Force Digital Diaspora Network for the Caribbean, January 24th 2003. available at www.unicttaskforce.org
10. Singh, Alwyn Didar and Roger DePeiza A Regional E-Trade Report for the CARIBBEAN COMMUNITY, Joint International Trade Centre and Commonwealth Secretariat report dated December 2002
11. Stirton, Lindsay and Martin Lodge, (2002), *Embedding Regulatory Autonomy: The reform of Jamaican Telecommunications Regulation 1988-2001*, Discussion paper published by the Centre for Analysis of Risk and Regulation at the London School of Economics and Political Science, London 2002.
12. UNCTAD, synthesis report on the CSTD panels on Technology Development and capacity-building in a digital society, E/CN.16/2003/2, 20 March 2003, UNCTAD 2003.

13. UN-ECOSOC High Level meeting on ICT and development
<http://www.un.org/esa/coordination/ecosoc/itforum/expert.html> [last accessed June 1, 2003.]
14. United Nations Conference on Trade and Development. 2003. Science and Technology Diplomacy. Concepts and Elements of a Work Programme. New York, New York, USA: United Nations. http://www.unctad.org/en/docs/itetebmisc5_en.pdf.
15. Wiltshire Forde, Jacqueline (2003), *Towards Caricom Connectivity Agenda 2003 & Platform For Action, Executive Summary*, mimeo dated March 2003. www.caricom.org

Websites

http://portal.unesco.org/en/ev.php@URL_ID=8840&URL_DO=DO_TOPIC&URL_SECTION=201.html
<http://www.canto.org>
<http://www.citel.oas.org>
<http://www.eclac.cl/portofspain>
<http://www.ectel.org>
<http://www.iadb.org>
<http://www.icaamericas.net>
<http://www.idrc.ca/lacro>
<http://www.oecs.org>