

C A R I B B E A N

C O M M U N I T Y

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PROGRESS REPORT ON NATIONAL EFFORTS
AT MEASURING ICT

(Submitted by Barbados)

Paper entitled **Progress Report on National Efforts at Measuring ICT**,
submitted by Barbados is attached.

BARBADOS

Twenty-Ninth Meeting of the Standing Committee of Caribbean Statisticians Hamilton, Bermuda, 22-24 November, 2004

PROGRESS REPORT ON NATIONAL EFFORTS AT MEASURING ICT

AGENDA ITEM NUMBER 8.2

Introduction

Twenty-ninth Meeting of The Standing Committee of Caribbean Statisticians, Information Communications Technology (ICT) has been identified in the July 2004 issue of CARICOM Perspective (ICT - changing the face of the Caribbean) as ‘a critical component of the new thrust by the Caribbean Community to increase its relevance to the people of the Caribbean and to improve their lives in meaningful ways...’

Barbados’ efforts at measuring ICT

National Statistical Office (NSO)

The (Barbados) Statistical Service’s efforts at measuring ICT have been of a limited nature. The questionnaire used for the 2000 Population and Housing Census included an enquiry (Questions 19 (a) and (b)) into appliances /household equipment available in the household as follows:

Question 19(a): *‘Which of these appliances/household equipment does your household have?’*

Among the possible response categories were the following:

Television (TV); Cellular telephone; other telephone; Satellite TV System; Computer.

Question 19 (b) asked '*Does this household have access to the internet?*'

Tables 09.17 and 09.19 (2000 Population and Housing Census, Volume 1), were generated from the responses to these questions.

Table 09.17 reads (in part):

Occupied Dwelling Units (Household) appliances in Use –Television; Satellite T. V System.

Table 09.19 reads (in part):

Occupied Dwelling Units (Household) appliances in Use – Cellular telephone; Other telephone; Computer; Internet Access.

In addition to the Census data above, rudimentary data have been collected on telephone lines and receivers by type, i.e. lines (business; residence) and receivers in use (business; residence). These have been collected annually since 1950 from a monopoly provider. However, with the advent of additional providers in the cell-phone market and pending the introduction of new providers for land lines, data collection in this area will require some revamping.

Workshop on Information Society Measurement (ISM) for Latin America and the Caribbean.

The Statistical Service was represented recently (November 3 & 4 2004) at a Workshop on Information Society Measurement held in Santiago Chile. The purpose of the Workshop was (a) to discuss and agree on the most important indicators to measure ICT access and usage in households and business; and (b) to examine the relevance of and develop some guidelines for making a work-plan to strengthen capacities for the collection of information on ICTs in the National Statistics offices (NSOs) of the region, including experiences of exchange programmes , cooperation and technical experience.

The meeting discussed the various modes of collection of ICT data via (a) Population Census, (b) the incorporating of core questions in ongoing household or business surveys, as well as (c) through specific thematic ICT surveys for households, businesses and other sectors of the economy, e.g. education.

The Workshop adopted a proposed list of eight (8) core questions recommended for collection at the household level and five (5) core questions for businesses as follows:

Household Surveys

- H-1 Does this household have a fixed-line telephone?
- H-2a Does this household have a mobile telephone?
 - 2b How many members of the household have access to a mobile phone?
- H-3 Does this household have T.V?
- H-4 Does this household have a personal computer (PC)?
- H-5 Does this household have internet access at home?
- H-6 Where did you use the Internet most frequently in the last three (3) months?
- H-7a How often did you usually access the Internet in the last three months?
 - 7b How many hours did you access the Internet weekly over the last three months?
- H-8 For what services /activities did you use the Internet in the last three months?

Business Surveys

- B-1 How many personal computers (PCs) does the enterprise have?
- B-2 Does the enterprise have access to the following (*listed*) networks?
- B-3 Does the enterprise have a website?
- B-4 What is the share of the total number of employees using a P.C connected to the Internet in their normal work routine?
- B-5 What services /activities does the enterprise use the Internet for?

Other Sources

Information on measuring ICT has been provided under the auspices of the National Council for Science and Technology (NCST) through (1) **an ‘E-Readiness Survey’** and (2) **a ‘Survey on ICT Indicators’**.

E-Readiness Survey

A Survey to determine Barbados ‘**state of e-readiness**’ was conducted in **2003**, by **Systems Consulting** on behalf of the National Council for Science and Technology. In addition to measuring the collective population’s use and attitude

towards ICTs, the report of the Survey assessed the status of e-commerce development in Barbados.

This e-readiness survey revealed the following information:

- a. Internet usage in Barbados, both within the home and workplace, is on the increase;
- b. There is still evidence of the “Digital Divide” as Internet usage has still not permeated o all segments of the Barbadian society. The young, more educated individuals are the ones taking advantage of the Internet’s potential.;
- c. Dial– up via a 56K modem is the common type of Internet connection;
- d. Broadband, high-speed connections are not widely utilized: 97 per cent of home users use a 56K connection; 55 per cent of organization do the same;
- e. The majority of Internet users, both commercial and residential are generally satisfied with the reliability of their connections. However, the respondents expressed discontent with the Internet rates currently being charged by the Internet Service Providers in Barbados;
- f. Government needs to ensure that its websites are adequately publicized and marketed; and
- g. Interviewees cited the need for an overall IT strategy to guide the process;
- h. Seventy (70) per cent of organizations interviewed, with the private sector leading, currently have their own websites;
- i. Barbadians use the Internet for communication and research but remain wary of online shopping.
- j. The main reasons for the low incidence of online shopping are lack of a credit card, Internet security concerns, privacy worries, and lack of interest.

Survey on ICT Indicators

A Survey on ICT Indicators was conducted during 2004 by Systems Consulting on behalf of the National Council for Science and Technology. The Survey was focused on gathering detailed information at the household level, on several indicators of information technology. Personal interviews were conducted in each of eleven (11) parishes, at the household level with individuals aged sixteen (16) years and older.

The summary of key findings of the survey is as follows:

Computer Usage

Computer usage in Barbados is relatively high, with about six out of every ten (56.7%) individuals surveyed being users of this technology.

Home and Work are the two most frequently used sources of computer access.

On average, users spend about nineteen (19) hours/week on the computer

Among computer users, cost (61.1 %) is the primary barrier to home computer ownership, while a lack of access prohibits about one-third (32.9 %) of non-users from becoming computer proficient.

Computer Literacy/ Fluency

Overall users indicate high levels of comfort with using the computer. The computer tasks with which users are most comfortable are, using e-mail, finding information on the web and using word processing packages like Word and Word Perfect. However there is a considerable drop in comfort levels for activities like creating a website, scanning and editing images and creating a spreadsheet budget, which seem to present users with far more challenges. Even though Barbadian users indicate high comfort levels with the computer, their overall level of fluency is very low.

Internet Usage

Close to 90% of computer users also have internet access.. The main locations of online access of Internet users are at home (68.9%) or at work (33.9%).

The vast majority (98.4%) of those who use the Internet at home do so via a “Dial-up 56K” connection.

Barbadian Internet users, on average, spend 9.7 hours/week online with three quarters (77.2%) spending fourteen (14) hours or less per week. Four in five Internet users (79.2%) also have an E-mail address and spend on average 5.6 hours/week of their online time using e-mail for personal reasons and 7.3 hours/week for work/school purposes.

Users consider Information searches and E-mailing to be the two most important types of online activities.

An overall lack of accessibility either to an “in-home” computer or to the Internet is the main obstacle preventing the 12% of computer users from making their debut in cyberspace.

Internet Purchase Behaviour

Although the level of Internet usage is high, the overall level of E-commerce activity at the household level is relatively low. Clothing/Shoes/ Accessories (44.8 %), PCs/Computer Equipment (29.9%) and Books (28.4%) are the most popular online purchases.

Those who have yet to engage in online shopping cite a lack of interest/need (36%) as their main reason.

Human Relations to Technology

Barbadian youth in general, hold a more optimistic view about the computer's impact and influence. In addition, cyberspace security and privacy when conducting financial transactions remain a concern for the majority of Barbadians.

Even with the negative perceptions about the computer and the Internet , Barbadians, generally believe that computers and the Internet have a positive impact on their personal lives.

Community Building

Just over half of the respondents participate in at least one community activity. However, the majority of these groups have not yet integrated the use of websites as a means of communicating with current or potential group members.

Conclusion

Much work remains to be done to improve the collection and compilation of ICT indicators. Cooperation between NSOs and other data collectors and stakeholders will be crucial in improving the measurement of ICTs for Barbados.

The National Council for Science and Technology (NCST) has already indicated a desire to collaborate with the Statistical Service. It is felt however that the development of an ICT Strategic Plan is crucial to substantial improvement in the measurement and assessment of ICT.

The need for such a plan has been supported by recent statements which have been made by the Minister responsible for ICT, who has indicated that preparation of an ICT Strategic Plan is currently a work in progress.