E-Government in the Caribbean

My presentation is based on our recent interviews conducted in a number of countries in the region, supplemented by background information provided to us by their officials at that time. It is also reflective of very productive discussions with senior government officials, UNDESA’s World Public Sector Report 2003, as well as on our own observations. As such, it endeavors to take all these factors into account in suggesting particular areas of development, which, in my view, ought to be specially borne in mind in the approach to E-Government within the region.

The UNDESA World Public Sector Report 2003 indicates that in respect of the implementation of e-government, the Caribbean as a region is rated as average on the overall international scale. It scores as the number two (2) region in the world in respect of the “Human Capacity Index” but less than average in respect to “Web Measure” and the “Telecommunication Index”. The two latter categories are partly reflective of levels of physical infrastructure but more importantly, they indicate just how organized we are to effectively apply Information and Communication Technology (ICT) in establishing e-government.

What this means essentially is that while the region’s population has the basic literacy to reach great heights and accomplishments, this is not yet being fully realized as it is not sufficiently organized or structured to affect this. In this regard we should not confuse a few cutting edge applications as indicative of the whole. Rather they are stove pipes which contrasts sharply with the remaining landscape and loudly proclaim the reality of the yawning digital divide.

From a political standpoint, we should bear in mind India in its recent re-election bid speaking of “India shining” referring to its consistent growth rate of over 8% in the last few years, the amazing increase of mobile telephones and the tremendous international strides of its ICT industry. Despite this however, the ruling party lost the elections because the realized prosperity was limited to one segment of the economy. Neither was this prosperity nor its ICT prowess applied outside of a limited area to reach the majority of the population as they are, where they are or in what they are doing. The digital divide which continues to increase in the region, is reflective of an economic divide and ignoring it, is not only foolhardy from a social and economic perspective but also politically. The technology is not the purview of technologist but a serious tool for social, economic and political development with a pervasive nature which must be applied as such.

My presentation seeks to look at a few issues which will indicate the sort of approach we ought to be taking, especially given our awareness that more than 80% of e-government projects fail. It seeks to take meaningful account of the reality of a currently ‘burning’ issue in the region, the fiscal constraints and the resulting dilemma given very limited funds, of our rising expectations competing against real and pressing needs. In the school systems for example, computers are not the only need—there are urgent needs like more classrooms and bathrooms, a better teacher to student ratio etc.

On a national basis, there are very urgent priorities in national security; health services etc, all legitimately requiring funding from the same limited pool of resources. My aim therefore is simply to highlight some priority areas and to suggest in some instances, alternate approaches.
Introduction

Caribbean countries are mainly small developing island states, faced with continuing if not mounting social & economic demands from many sources. Governments realize that their economies must urgently begin to record consistent growth as well as accelerated long-term employment. Being aware of the ever increasing digital divide within their countries, they are seeking to reverse that trend by ensuring that ICT development is as broad based as possible, knowing that this is so much more attainable because of the pervasiveness of the technology and its relevance for every social and economic sector. With the tremendous advances in ICT development and the resulting sophistication of their populations, governments cannot afford for any individual or categories of persons to be left behind. Governments are also aware that as the largest employer, the pace and range of development rests squarely with the public sector. The truth is that as much as the technology can forge a path of rapid development—its widespread disbursement can, if inappropriately handled, significantly frustrate the developmental efforts. The truth is that the application of the technology is confronted by a range of factors—including substantively, very human ones, which must be faced & resolved, if it is to yield positive results. The truth is that the majority of e-government projects, internationally, have been unsuccessful and therefore the approach to establishing the technology in developing countries—more so small developing states, is therefore of critical importance. Experience gained from previous efforts; strongly suggest that the framework of such an approach must be first of all, an agreed national vision supported by detailed plans for each sector.

A National Vision/Sector Plans
An agreed national vision is a unifying mechanism and its importance in many instances is regrettably, not readily accepted beyond lip service. However the idea of having a national vision is a practical one, as it can be a unifying and inclusive mechanism to promote development. The national vision together with detailed plans for each and every sector—agriculture, education, health etc

- Minimizes the possibility of overlooking any important factor in each sector;
- Ensures the maximizing of linkages within and between sectors;
- Maximizes efficiencies and cost effectiveness;
- Provides for the unified participation and ‘ownership’ of contributors within each sector and
- Reduces wastage and lost time.

Plans however require planners but based on observations throughout the region, [and I hope I do not offend anyone here] there seems to be, almost suddenly, an absence of planners—they all seem to have mysteriously disappeared and their places taken by technicians. We have no problems with technicians who are also planners—the important factor being that the appropriate methodology is applied, there is a vision— and linkages in all directions are identified and maximized. With proper plans in place, the technicians are better able to fully utilize his/her skills in fully planning for and meeting the technical requirements—that is where their expertise exists.
Further, both on the basis of logic as well as experience in the region, the coordination and implementation of such plans should be under the aegis of a centrally located office appropriately staffed and having the authority and recognition by all concerned in effecting its role. Optimally, given its national scope, this office is best located in a central position such as the Prime Minister’s Office or in a ministry generally recognized in a leadership capacity by all ministries, such as the Ministry of Finance & Planning or the Ministry of the Public Service—rather than it being located in a ‘line’ ministry. In any event, it must be closely identified with the national leadership

Public Sector/Private Sector Partnership
The partnership between the public and private sector is crucial to the developmental effort and has all the advantages just now mentioned—more so if it begins from the planning stage. The importance of this partnership cannot be over stated. The unification of effort and the dovetailing and inter-relationship between plans and programmes once accepted can yield enormous real progress including economic and financial benefits. One area of great importance to both the public and private sectors is the workforce—especially so, given the existing and increasingly huge digital divide between large and small businesses and also between rural areas and inner cities on the one hand, in comparison to the metropolis on the other.

Workforce.
It is quite obvious that the full potential of the technology in facilitating increased employment is not being realized. This is so as ICT is largely not being utilized to enhance the performance of tasks and increase employment opportunities as well as production and productivity. The exception has been the financial/revenue sector and this seems to be so largely because that sector not only controls the purse but also because of the comparative uniformity of procedures which makes it easier to obtain appropriate software
As a result, not only are the number of actual ICT professionals small but the majority are employed first in the IT/Telecom services, then in the general public sector [many as MIS officers in Ministries] and next in the fiscal/revenue services. The more creative areas, for example writing programmes to effect the rationalizing of services and greater efficiencies in processes and procedures are still very marginal. It is also clear in all the countries in the region, that the majority of ICT related employment are in comparatively less paying jobs, such as data entry and ‘telecenters’.

In respect of the need to weave the technology into the non-financial operations of both the public and private sector, almost all countries in the region have been slow in addressing this need. This is so despite the very apparent need—for example, they all have similar problems with “lost” files for employees—particularly so in respect of activating pension programmes for individuals. The truth is that there are many instances where pensioners die while awaiting the finding of their files to allow for payments to be made. In this and many other instances, there is a clear need for the application of software programmes to enhance efficiency and effectiveness. Such remedial efforts will also obtain useful public profile and ‘buy in’.

1 In T&T for example, the number is 3,000 thousand IT professionals
The use of ICT for the enhancement of productivity within the social and economic sectors -- such as farming, or small businesses within sectors--- such as the manufacture and marketing of say--craft items, or even individual self-employment--- such as a cobbler for example, is neither being explored, consistently and realistically attempted nor realized

**Government**
Governments are all quite excited by their understanding of the use of the technology and this is demonstrated not only by impressive commitment speeches from the political directorates but also by the numerous instance of ministries and departments in government, having their own web sites and increasingly offering the public basic information, forms and some interactive services.

Increasingly governments are seeing in the technology, a real opportunity to assist them to deal more effectively with a whole range of economic, social and political issues. Encouringly, the technology is being viewed as a means to help them to really transform the operations and processes of government, while enhancing its interaction with the public and facilitating its commercial and official relations.

Threatening these broad aspirations of governments and in the midst of increasing globalization and competition, is a particularly serious concern in that the continuing economic limitations throughout the region urgently require the substantial reduction of budgetary deficits and the ‘rationalizing’ of governments.

As such, the size of governments and its relating budget is today in most countries in the region a critical issue in the struggle to survive and support realistic social and economic development. The emphasis of CARICOM on Public Sector Modernisation Programmes over the past five years has been in part, a response to the call for more transparent, efficient and cost effective governments. The success of such programmes we know can quickly become apparent through the effective use of the technology.

As promising however as all this seems to be in meeting the stated goals of governments—there are limiting factors which we need to consider, particularly so in small developing island states. As necessary as the speedy reduction in the size of government is, given its negative political implications, this will not be seriously attempted without us first of all ensuring the broadest application of the technology to maximize the creation of jobs, the increase of viable business possibilities—including small and individual self-employed businesses and the general enhancement of community development. This is “key” to the participation of civic society in governance. In other words, we ought to ensure that the political directorate presides over a situation where the reduction of the size of government on the one hand is counter balanced with a real broadening and deepening of employment opportunities.

In brief, what is required as a fist priority is a properly structured and planned approach for the effective introduction of the technology across the board, rather than the present circumstance of unstructured sporadic technically directed development based on the rise [by chance] of a ‘champion’ in a particular sector, Ministry or Department.

**The Sectors**
**Education.**
Education is pervasive and underpins development—it is the hinge on which the door of development hangs.
All countries are very aware of the importance of ICT in enhancing the attainment of knowledge through education. Yet the reality of “under development” and the resulting financial limitations in contrast to the multiplicity of perceived government and societal needs clearly shows the dilemma of these countries. As such, the result is that in the majority of schools across the region, there is a very poor student to computer ratio, with the rate of direct access to a computer being less than 5% in most countries. Further, access to the Internet is currently low—[9% is a high point in a few countries] and still quite expensive—even where ‘concessionary’ terms are offered and as a result, only a few schools are equipped with internal networks. These factors become real and urgent challenges to all educational institutions, especially when we face the fact that in some countries the cost of an adequate computer is more than the per capita Gross Domestic Product—as is the annual cost of Internet access. Nonetheless in all countries there is a very fervent drive to rapidly increase both the number of computers available to students and the student’s ability to utilize the computer and Internet access. Nonetheless in all countries there is a very fervent drive to rapidly increase both the number of computers available to students and the student’s ability to utilize the computer and Internet access. This is an expensive activity but done in the belief that it will pay significant dividends educationally, both in the medium and long term. While no figures are yet available showing the regional expenditure on computers for education, we have no doubt that it is already a considerable sum. Despite the size of such expenditures to date, yet the number of students with direct access to a computer is still abysmally low—well below 10% in the CARICOM countries in the region. At this rate it will likely be some considerable time before an acceptable student to computer ratio is attained.

Surely there must be an alternate approach!

We are not minimizing the importance of computer and Internet access for students—for the record, these are critical. Surely the research possibilities for students, to name one, are enormous.

But certainly the primary goal of the education programme in the schools in the region is the delivery of the curriculum which itself is designed to advance social and economic development. ICT is readily applicable to facilitate especially this and has internationally proven its value outside the region in this specific regard. This therefore is a higher and more urgent priority, being also a much less expensive approach which can be quickly implemented. It seems to me that this ought to be our priority at this time, while we endeavor to work away at improving the access to computers and the Internet and the reduction of the cost of both.

**Community Development.**

The development of rural and urban communities is, or ought to be, of crucial importance both to the advancement of E-Government, [which requires ever increasing inter-activity between government and the citizen], as well as to national development. In both contexts, it is the point at which all streams of social and economic activities meet. It is in the community that innovative projects can be implemented, linking for example, the farmer through access points such as the schools, with on-line [local and export] marketing facilities as well as with the agriculture extension office for analysis of digital field photographs of crop diseases etc.
It is in the community that micro and small businesses—the bases for development can be fostered and from which commercial activities can be nurtured. It is from the community that the citizen can best be connected to all the services offered by government. It is in fact with the community that governments seek electronically to have the greatest inter-activity.

Important as the community is, yet the approach to its development is crucial for its success. A study of the actual approach adopted in most small states is the traditional one usually referred to as “top down”—i.e. we borrow funds, rent or acquire a small building or rooms in a building in a number of towns, purchase five computers, two printers and a scanner for each town and endeavor from this to organize computer classes for those who are interested. We do not seek to minimize this approach but its track record is not very good and at best it takes considerable time to show meaningful results.

Again we acknowledge the great importance of persons in the community becoming computer literate and being able to take advantage of the amazing possibilities available on the Internet. The problem is the length of time and the considerable expenditures that would be required by this approach, when primarily what is being sought is the immediate enhancement of job opportunities, production & productivity.

In contrast to the “top down” approach, there is an encouraging example being evidenced by the pioneering “Paymaster” initiative in Jamaica which has implemented an earlier recommended model approach [though not new] which in our view is very suitable to be adapted for community development in small developing states. This system, which has rapidly been integrated throughout Jamaica’s cities and towns, brings the electronic payment of [initially] utility bills to the “door step” of the population by way of a computer operator with Internet access, working from the local supermarket and/or petrol station etc. Here the current reality of the limited Internet access and the inability to use it and the computer by the majority in the community is successfully met by providing access through a competent and equipped operator. It serves to present a valuable and needed service conveniently to the public and in a dramatic way, increases the public’s awareness of the personal benefits available. At the same time, it engenders most importantly, trust in the technology and a genuine desire—even eagerness to personally acquire the skills. In this case a needed and immediate service has been offered to members of the community, where they are, at what they are doing, conveniently and affordable.

Schools and Libraries located in the community can adequately provide a wide range of such services at very moderate or subsidized rates and they can be able to do so in a short time and at a more economic cost.

**Commerce.**
While there is increasing use of the Internet by businesses, the major incidence is still e-mails and research. The fact is that ICT has still not been integrated into the actual culture of commercial operations. As mentioned earlier, the focus has more been on the acquisition of computers rather than the addressing of the core requirements—the weaving of the technology into the work process to enhance efficiency and cost effectiveness.
There has been for the same reasons, a continuing limitation of Internet based transactions in the commerce and government sectors. And this is not peculiar to these sectors as actual transactions by the public, are even more restrictive and are largely in books, magazines, computer items, music, movies and airline tickets. Invariably in all countries, the largest incidence of electronic commerce activity between businesses [B2B] is to be found in the financial and banking sectors. This again for the very reasons mentioned earlier in respect to government operations in the region. While there is universal acknowledgement of the importance and urgency of updating laws to make them more relevant to the pervasiveness of the technology—progress in this regard, does not seem to have been either uniform or accelerated in any of the countries.

Management of Change.

In all that I have said so far, the foundation for everything is the crucially important management of change. The resistance to change—to anything new, the fear it engenders, both personal as well as positional and status wise, the human and financial waste that it has and continues to engender, the wastage of time, cannot be over estimated and must be seriously taken into account.

Most of the technology can be purchased off the shelf or obtained through consultancies—except the actual exercise of managing change. If there is one single area that is the key to success—it is the management of change—the very human factor. It represents an enormous problem and is capable of generating severe repercussions, which no country can afford—least of all small developing states.

We are encouraged therefore to note that both Barbados and St. Lucia are aware of how critical the management of change is and are resolutely tackling the problem through training and institutional arrangements.

This human factor in itself is such an endemic problem that it emphasizes and reinforces the need for proper central planning supported by the required authority in the utilization of ICT.

Conclusion

In conclusion, it is obvious that in most countries in the region in the absence or with the ignoring of a proper planned approach—national and sectoral, to guide the ICT development, individual ministries of government have elected to proceed on their own path. The lack of such plans together with the absence of a planning authority centrally located and with the necessary planning ability and experience as well as authority to plan and coordinate the overall ICT based development, further hampers progress. The current trend continues to be wasteful, resulting in uncoordinated development with ‘cutting edge’ advancement in narrow areas and no progress in the remaining areas. There is therefore no maximizing of linkages ----- and the economies to be derived thereby, nor are there economies of scale in procurement. In this latter regard for example, purchases are based on narrow or ministry needs rather than based on a comprehensive-- in time and intent, or a government wide approach.

Much of the perceived insufficiencies we have referred to earlier, have been reflective of this lack of proper central and sectoral planning. In fact a fundamental concern observed in most countries has been the penchant to place overall ICT development units and programmes into the hands of technicians rather than that of experienced planners. The analogy is the design of a hotel, which to be built is
best done by an Architect not only because of the need for the aesthetics but also more importantly because of the importance of functionality. On the basis of this design, the Engineer or Technician is better able to plan for and implement the technical requirements of the building. These are two distinct yet complementary functions and ought to be recognized as such. Failure to do so to date has been expensive, has restricted broad based progress and assisted in the continuing widening of the digital divide within each country.

The challenge for respective countries and the region lies in our collective hands. The reality of our economies and the aspiration of our people must be centrally borne in mind as we seek to make our contributions as meaningful as possible. My presentation has been based on these realities. I commend them for your serious consideration.

I thank you!