

CARGO CULT; THE SEARCH FOR DEVELOPMENT THROUGH ICTS

Abstract

This paper examines the adoption of Information and Communication Technology (ICT) strategies in the Caribbean. It focuses on research done using Jamaica as a case study. The paper suggests that attention needs to be paid to the role of discourse and ideas that influence the perception of the centrality of ICT for development and the way in which ICT strategies are implemented and therefore their outcomes. It essentially challenges the discourses surrounding the use of ICT as a development strategy which suggests for example that developing countries will be able to “leapfrog” stages of development.

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Introduction

Many developing countries have assumed that Information and Communication Technology (ICT) is an essential tool for social and economic development. Innovations in ICTs have made it possible for services to be delivered online, resolving many of the limitations imposed by distance from the world’s major markets.

Additionally the rapid uptake of mobile phones in Africa, Latin America and the Caribbean is now transforming local markets, as farmers for example can now find out prices in the city, and thereby avoid being cheated by buyers and traders. The uptake of mobile phones has also enabled the development of new services, such as safe, accessible and reliable money transfers, as well as allowing the development of new business ideas and services. Better communications have helped to restore social networks, as families can now stay in contact even as the members disperse in search of work, and reintegrate home and Diaspora communities.

There is also a growing tendency, however, for governments to commit to ICT strategies and assume that a higher rate of social and economic development will automatically follow. This is clearly not always the case. The liberalization of the telecommunications market in Jamaica led to a very rapid surge in the level of mobile phone penetration, to nearly 100% saturation of the market, but this was not reflected in the rate of GDP growth which remained low throughout the period.

It is essential, therefore, to understand more about the relationship between ICTs and development, specifically what role ICTs actually play in development and why developing countries are adopting ICT strategies.

This paper discusses the adoption of ICT strategies in Jamaica and highlights the role of global discourse on ICTs and development as an important factor influencing this policy decision.

ICTs and Development in Jamaica?

Between 1995 and 2007 the Government of Jamaica has consistently restated the belief that Information and Communication Technology is essential to ensuring and securing social and economic development for the island. This commitment to the use of ICT as a development strategy has resulted in the adoption of two strategic policy documents specifying the vision for ICT use and providing a detailed plan of measures to be undertaken to achieve this.

In 2002, the Central Information Technology Office (CITO) of the Ministry of Mining and Telecommunications commissioned an E-Readiness Assessment of Jamaica. The objectives of the assessment were to determine the state of the technological infrastructure, policies and human resources in the public and private sectors as well as the obstacles, problems and proposed solutions for ensuring Jamaica's readiness for participation in a knowledge-based economy. The assessment found that infrastructure, cost, technological competence, knowledge and illiteracy limited ICT access and use. The capability to manufacture technological components such as computer chips, transmission and line telephony equipment did not exist and as a result the focus was on component assembly which had high import content and led to expenditure of valuable foreign exchange dollars. Additionally, the production of software is concentrated at the low end of the value chain. E-commerce was rated as low and its growth restricted by a lack of diversification in production, lack of investments in product development, lack of focus on niche markets and the use of more appropriate marketing techniques. While there has been rapid growth in bandwidth capacity, growth in fixed and mobile telephones, extensive computerization within the financial sector, moves toward liberalization of the ICT sector from a low base, the sector's contribution to the GDP and impact on the economy is somewhat marginal. Added to this is the fact the National Accounts do not identify ICT as a separate sector and the appropriate methodology has not been developed to facilitate its measurement (CITO,2002)

The commitment marked by policy and project implementation when viewed alongside the limitations in use, technological capabilities and small contribution of ICT to the GDP of the country presents an interest in understanding the commitment to the use of ICT as a development strategy for Jamaica and the evidence which supports this commitment. This interest is reflected in a desire to understand the interpretations, meanings and reasons which policy makers attribute to ICTs and the adoption of an ICT strategy for national development.

International events such as the World Summit on Information Society (WSIS) have called for the development of E-strategies and National ICT policies and support the use of ICT for social and economic development. This has given rise to a growing discourse and publications on Information and Communication Technology for Development (ICT4D) and the use of ICT strategies. Publications by the World Bank and the United Nations Development Programme are representative of the currents in thinking on the use of ICT as a strategy for development as well as its importance on the international agenda for development cooperation and action in that area. Given the presence of a broader discourse

on ICTs and development, the extent to which these interpretations are locally defined and constructed or connected to the broader discourse is also of interest.

ICTs and the Global development discourse

Innovations in technology have become the new engines of growth for developed economies and have redefined the global economy and resources for the accumulation of wealth by countries. There is a significant body of literature which attempts to understand what the implications for these changes are globally as well as the dynamics which created this change (Bell, 1973; Castells, 1996; Mansell and When, 2000;). It is thought that from the period leading to the industrial age, economic development has been determined through the acquisition of capital resources; in the new economy it is determined through the access to knowledge. These authors recognise the existence of a knowledge economy and information society as the product of the global reconfiguration. This has given rise to the present concentration on Information and Communication Technology for Development (ICT4D). Information or knowledge becomes the key characteristic for the new economy and economic development concerns have to be located within a consideration of the reconfigured economy as well as social development needs must consider the use and applications of these technological innovations

International Development agencies have been the lead proponents of the debate on the use of ICTs as a strategy for development. This fact is mainly reflected through an examination of the literature on ICTs and development. The main strand of the literature which threats with using ICTs for development is to be found in the international development agencies such as the World Bank, the United Nations (UN) and the International Telecommunications Union (ITU).

For example in the 1998 World Bank Report, “Knowledge for Development” the opening assertion is that;

“Knowledge is like light. Weightless intangible, it can easily travel the world, enlightening the lives of people everywhere. Yet billions of people still live in the darkness of poverty- unnecessarily. Knowledge about how to treat such a simple ailment as diarrhoea has existed for centuries but millions of children continue to die from it because their parents do not know how to save them. Poor countries and poor people differ from rich ones not only because they have less capital but because they have less knowledge. Knowledge is often costly to create, and that is why much of it is created in industrial countries”.
(p.1)

Therefore addressing “knowledge gaps and information problems” and the impact that these have on development become an important consideration on the development agenda.

The enthusiasm for ICT4D is reiterated in another 2001 UNDP publication “Cooperation South” the assertion being that

the potential that Information Communication Technologies offers to developing countries is real; the ability to leapfrog decades, to recapture lost ground, to redeem long-standing promises of prosperity is achievable. Some countries of the south have already moved boldly and imaginatively to do so- to participate in the international economy, to exploit emerging technologies for the betterment of their citizens, to modernize institutions and markets.

These successes are not surprising. Development cooperation and ICTs, especially the internet, are about stimulating wider participation, exchanging experience, communicating ideas, transmitting knowledge, sharing new findings and best practices and facilitating the development of communities of practice and new modes of cooperation, allowing Diaspora communities to contribute in new ways with the potential to turn brain drain into brain circulation. Development cooperation, at its best, is also about permitting access to a range of options so as to make informed choices and to allow countries to participate in the process of devising solutions adapted to their circumstances (p.2)

The World Bank 2006 Information and Communications for Development “Global Trends and Policies” publication in a similar vein to previous publications purports that in the past few decades, information and communications technology has transformed the world and assesses issues such as investment, access, diffusion and use, country policies and strategies and targets and monitoring and evaluation which are seen as essential to using ICTs for development.

The main assertion about ICTs is that;

...it's potential for reducing poverty and fostering growth in developing countries has increased rapidly. Mobile telephones provide market links for farmers and entrepreneurs. The internet delivers vital knowledge to schools and hospitals. Computers improve public and private services and increase productivity and participation. By connecting people and places, ICT has played a vital role in national regional and global development, and holds enormous promise for the future.(p.3)

In the volume “E-Development from Excitement to Effectiveness” there is the recurrent assertion that;

information and communications technologies are increasingly being recognized as essential tools for development- tools that can empower poor people, enhance skills, increase productivity, and improve governance at all levels. The success of ICT- enabled development or E-development will thus not be measured by the diffusion of technology, but by advances in development itself: economic growth and ultimately, achievement of the Millennium development goals. (p.13)

What becomes apparent from these policy texts are the consistent themes of enthusiasm, high expectations and the idea that there is the ability to “leapfrog” to developed status by using ICTs.

National ICT Strategies

UNCTAD research has shown that as of June 2006, out of 181 developing and transition countries and territories, 80 (44%) had already adopted a national ICT Plan and 36 (20%) were in the process of designing one.

Perspectives on the public policy framework for National ICT strategies in developing countries appear to be consistent in the priorities mentioned and areas of focus on the international development agenda. Mansell and When (2000) support this observation and state that “key trends in governance activities of international organizations are setting the framework for the development of national and regional ICT strategies” (p.226). Primary areas of concern for national ICT4D policy as outlined by Mansell and When (2000) are: producing and using ICTs for social and economic advantage, developing human resources for effective national ICT strategies, managing ICTs for development, assessing ICT networks, promoting and financing investments in ICTs, creating and accessing scientific and technical knowledge, monitoring and influencing the rules of the game (p.233)

The role of Discourse in the adoption of ICT strategies

National ICT strategies therefore represent the vision of countries for entry into the information society. They are a signal of government’s systematic approach to utilising ICTs to enable human development moreover they reflect government’s decision to comply with prescriptions for development through ICTs but it is also a reflection of the nature of the contemporary context of policy making.

The policy literature outlines that while factors affecting the determination of national policy have increased the issues faced by governments and policy makers in developing countries have also increased leaving governments with the challenge of solving growing domestic problems with the limited financial and human resources available. What has resulted from this developing conundrum is that policy makers are now searching for a range of options locally and internationally to address development challenges while simultaneously being presented with policy prescriptions and priorities shaped on the local and global development agenda (Evans,2004).

These approaches in the literature are important for understanding the adoption of National ICT strategies by governments as well as the relationship between ICTs and development because its gives attention to how ICTs get considered as a national strategy for development within the context of the government searching for and borrowing ideas globally to solve national development problems; as well as the obligation internationally to adopt particular development solutions. Additionally there is the fact that there might be the presence of particular policy ideas represented through discourse which drive the adoption of ICTs strategies. That is to say the use of ICTs might become more attractive development options based on how they are represented and also what they could offer to a country given what it considers to be its development needs.

Why ICT strategies?

One of the central questions which the research sought to answer was why do policy makers use ICT as a strategy for development. The objective was not only to provide a list of reasons but to derive a sense of how ICTs were understood as important to development and therefore understand the interpretations which policy makers gave to using ICT as a strategy for development. In the public policy literature Schmidt,2002; Hay,2002 and Campbell,2002 agree that it is important to understand the role that ideas and discourse play in determining policy because of the dynamics of the policy process and the way in which ideas can influence action.

The research found that policymakers principally attached three reasons for the use of ICTS as a strategy for development; using ICTs to enable people, using ICTs to empower people and using ICTs to create a knowledge based economy. These meanings were all common representations of ICTs found within the international development discourse on the use of ICTs for development. These meanings were therefore connected to the reasons for the adoption of ICT as a development strategy in Jamaica. These reasons were considered in three broad areas; It is able to drive development; It is “necessary” government action, and a response to global developments.

There were disagreements to the adoption of an ICT strategy but this was not to be found among the majority of policy makers interviewed. Consideration was given to these views however as it represented what could be considered as a counter discourse to the dominant discourse on ICT strategy adoption in Jamaica. The two main points which were considered were; the Gap in Science and Technology Development in Jamaica and the state of the Telecommunications infrastructure and appropriate legislation in Jamaica. Not only were these alternatives to the main discourse on the adoption of ICTs as a strategy for development, they also showed the issues related to the successful implementation of ICT strategies in Jamaica.

In considering the local drivers for ICT strategy adoption in Jamaica the research found that a political and policy space in Jamaica for a discussion and implementation of National ICT strategies was created through the liberalization of the telecommunication sector; and the adoption and use of ICTs as a development strategy became a part of the development agenda in Jamaica as a result of two events the liberalization of telecommunications in Jamaica and the World Summit on the Information Society(WSIS). Policy Circles, Policy Networks and institutional and political culture in Jamaica play a key role in understanding how ICT become a part of the national development agenda as they are formed by practitioners or academics that have a vested interest in promoting the ICT4D agenda.

The content of both ICT strategies reflected a focus on **the following areas**; Education and training, Network readiness and Infrastructure Development, E-Government, E-business and ICT industry development, Research and Innovation, Cultural Content and Creativity, Legislative and Policy Framework, and E-inclusion. These were to be the main areas of concentration for achieving development through the use of ICTs. The research also found that the strategy documents were designed to provide a general framework that would be adapted by respective ministries and CITO was the main organization responsible for following up on this.

Overall the focus of the use of ICTs is on newer ICTs such as mobile phones and Internet and computer technology. The level of interactivity and interoperability which new ICTs possess is also seen as an advantage and a reason to use these as opposed to older ICTs.

Not many policymakers could identify areas in which there has been success in using ICT as a strategy for development. There was no clear idea about how success was to be measured and the time frame within which results were to be expected. There were a number of difficulties and challenges identified in using ICT as a development strategy; It's potential to further the digital divide within the country and therefore benefit only a few, It will erode cultural values, and access to critical information such as data and research about the ICT sector in Jamaica is very limited or absent.

It was felt that the success of ICT as a development strategy will be limited by low levels of human capital in some of the critical areas and the fact that there is not a capital goods sector in developing some of these technologies. There are serious difficulties with implementation from the level of the government agency that is given this responsibility for this. All the policy makers agree that CITO (Central Information Technology Office) suffers from two challenges it is seriously under resourced and it is not located within government where it has the ability to make decision and therefore carry out its job effectively.

Demonstrating the outcomes of the ICT strategies proved to be most challenging as monitoring and evaluation of implementation by CITO was poor to non-existent. Adequate data could not be attained to make an assessment of the outcomes of the strategy and the research had to utilize secondary analysis of the outcomes of the National IT Plan to derive a sense of overall implications and outcomes of the strategy.

There are **three** focus areas in the strategy documents which are most developed. These are also the **three** areas referred to most by policy makers as examples of how ICTs are currently been used in national development. These are ; the use of ICTs in Education through the E-learning project, the use of ICTs in Community development through the Community Access Point initiative to achieve Open Access to ICTs and Participation in a Knowledge-Based Society, and the use of ICTs in Government and for Governance through the E-government component.

Analysis of these three focus areas were considered in order to support the understanding of the outcomes and implications of the strategy.

Despite several initiatives by the Ministry of Education, ICTs in education initiatives have failed to yield the expected results. More importantly the research found that there were very few monitoring and evaluation mechanisms to test the outcomes of ICT use in schools. The thrust of the ICT initiatives in education can be summed up as an infrastructure focus where equipping schools with computer labs has been the primary focus.

One initiative which has been well received where it has been implemented has been the integration of computer facilities into the community. It is seen as providing the community with a useful facility that did not exist before. In some instances it is believed that the development of community access points can provide an alternative means to bring income to individuals within the community. However one of the common difficulties faced by community access points is their sustainability and the adequacy of the equipment.

E-government initiatives are centred on the use of the internet or the creation of websites which are referred to as “online portals”. However these have been limited because they have primarily focused on facilitating payment rather than facilitating communication with the Government and the population.

While there have been some benefits from the National IT Plan, the first national ICT strategy, these benefits have mainly come from “unplanned achievements”. The rate of mobile phone penetration in Jamaica has been a clear success of the liberalization of the telecommunications sector; identifying other successes outside of this are less clear.

Conclusion

The introduction of ICTs on the development agenda has raised questions as to its ability to deepen the development divide and to detract financial resources and efforts away from other development areas. While there are some benefits to be gained from the use of ICTs the concern is that there needs to be more attention to the creation and implementation of ICT strategies in developing countries from the perspective of the “perceived” or “real” need to do so and the manner in which this is done. In addition to this the vision, philosophy and actors influencing the creation of ICT strategies is of critical importance.

Despite this, research on ICTs and development has not given much consideration to the need to understand how policy makers view the use of ICTs as a development strategy or rather the ideas which shape the adoption and content of ICT strategies. Political science research (Hay and Rosamond; 2002, Campbell,2002; Schmidt;2002) has demonstrated that particular interpretations give rise to and shape specific policy ideas and it is therefore important to understand these interpretations to derive a more comprehensive understanding about policy decisions.

More importantly policy is not made in isolation from the global political economy and the adoption of ICT strategies need to be considered from a perspective of the influences in the global political economy. That takes into consideration a specific examination of policy determination which has not figured prominently in the existing research.

There has essentially been a paucity of literature and critical analysis of the introduction, impact and challenges of the use of ICT for development in Caribbean despite the wide spread implementation of projects and the design of strategies and plans expressly stating the use of ICTs in development.

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