

Information and Communications Technology (ICT) as a Vehicle for Economic Development: Challenges Facing the Caribbean Common Market (CARICOM) States

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INTRODUCTION

This paper proposes to examine the potential of information and communications technology (ICT) as a vehicle for promoting the economic objectives of the Caribbean region and specifically those of the Caribbean Common Market (CARICOM) member states. Among the expressed objectives of CARICOM is “the strengthening, coordination and regulation of economic and trade relations in order to promote accelerated, harmonious and balanced development.(Palmer 2002)” Understanding and appraising the nature of the challenges to be faced in leveraging the potential of ICT for the economic development of the region is a critical contribution to this cause. The current standing members are: Antigua and Barbuda, The Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname and Trinidad and Tobago.

Just over 200 years ago, the Caribbean Archipelago was the economic cockpit of the world, supply European industries with the vital raw materials from cash crops such as cotton, sugar, tobacco, cocoa, coffee and spices. The island of San Domingue (Hispaniola), now comprised of the Republic of Haiti and the Dominican Republic, held center-stage then, as the most prosperous European colony of the New World(Williams 1970). The Hispaniola of old is no more, now a landscape of economic stagnation that stands testimony to the economic despair that has gripped the region since the heydays of the eighteenth century.

The island is now comprised of the Spanish-speaking Dominican Republic, occupying the eastern two-thirds and Haiti to the west, which still retains a very strong French influence. Haiti became the first black republic, following a slave revolt in 1802 that won its independence from France. Today Haiti holds the unenviable status as the poorest country in the Western Hemisphere and among the poorest in the world (Verner and Egset 2006). The juxtaposition of these two divergent cultures that comprise the land mass of Hispaniola characterizes the challenge to be surmounted in attempting to foster economic cooperation.

Once jealously guarded by their colonial rulers, these former pockets of economic opportunity for European investors have since been plagued by persistent economic stagnation. Recent international trends such as globalization and the outsourcing of light industry to the Far-East have greatly exacerbated the spiral. Each island is a truly unique and complex micro-state bearing the distinct imprint of its European colonial heritage. This proposal outlines a path of future study to use ICT as a vehicle for development in the region.

ICT AS A VEHICLE FOR DEVELOPMENT

Information and telecommunication technology (ICT) holds many promises as a vehicle for addressing the economic and other challenges faced by CARICOM member states. Clearly fostering internal economic cooperation in this Galapagos-like setting would pose a phenomenally rich setting for research. On the surface it may seem that the cultural and ethnic divergence of the region is not unlike

the challenges faced by other similar efforts at economic cooperation, such as the European Union. But there are profound differences. Steeped in a legacy of economic dependency, geographically and otherwise fragmented, the island nations of the Caribbean possess their own litany of challenges. In this paper we propose to address these issues, drawing parallels from other successful efforts at regional cooperation, but mindful of those issues that can only be fully comprehended when framed in the historical and social legacy of the region. We propose to examine the potential for ICT applications in the following functional areas as they relate to the fifteen member states of the Caribbean Community (CARICOM), as briefly outlined below:

1. **Economic Development and Cooperation:** Limited size and resources makes economic cooperation an imperative for the future economic viability of the region, especially in the face of globalization (Byron 2004). The problem is compounded by the fact that the economies of the region are by definition open and export-oriented, each island possessing closer economic ties with the European mother-country and very limited intra-regional trade. The concept of *supply chains*, which is firmly grounded in the application of modern information technology to foster economic collaboration across industries, is a fitting example of how ICT can promote economic cooperation in the region. Other possible applications will be explored, taking cues where possible from successful regional projects elsewhere.
2. **Education:** The proverbial “brain drain” is yet another persistent problem of the region. For many of its inhabitants who are afforded advanced education the urge to migrate, beckoned by the prospect of higher wages and living standards abroad, is overpowering. For those left behind there are the dim prospects of a lifetime of underemployment and lack of access to the few skilled jobs available. There exists an unending spiral: migration of skilled workers depletes labor reserves, which in turn reduces the ability to attract investments. Could ICT provide the means for mitigating this problem?
3. **Tourism:** ICT could assist in the development of the tourism industry, facilitating better planning and resource utilization at a regional level. For example, e-markets and e-changes could potentially assist in the marketing of fresh produce, fruits and vegetable to support the hotel industry, yet another problem that characterizes the region.
4. **Other dimensions of cooperation:** E-health, e-government, regional security; these are all aspects of Caribbean life that can be potentially addressed through the applications of ICT-based solutions.

SUMMARY

The task of charting a path for economic development can be aided by learning from efforts pursuing similar economic objectives elsewhere. The case of the European Union immediately comes to mind. There may be several parallels, but the unique historical and political legacy of the Caribbean demands that the application of ICT, while holding significant potential as a vehicle for development,

1410 2007 IRMA International Conference

should be tempered by other relevant concerns that may not be readily apparent to the researcher. This paper proposed an insight into the nature of Caribbean societies addressing those issues that could have a significantly impact on ICT related projects.

REFERENCES

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