

UNCTAD/ITE/TEB/8

United Nations Conference on Trade and Development

Technology for Development Series

**Electronic Commerce and
Music Business Development in Jamaica:
a Portal to the New Economy?**



United Nations
New York and Geneva, 2002

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UNCTAD/ITE/TEB/8

UNITED NATIONS PUBLICATION
<i>Sales No.: E.02.II.D.17</i>
ISBN 92-1-112566-9

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PREFACE

This paper emerged out of the findings of the Jamaican Science, Technology and Innovation Policy STIP Review (UNCTAD, 1999), which examined the National System of Innovation (NSI) in Jamaica. One important element of the STIP Review was the Jamaican music industry. Although the Jamaican music sector represents a vibrant and dynamic sector of the Jamaican economy, it does not currently possess the technological assets or capabilities required in order to produce and export the final product at competitive market prices. Electronic commerce presents a critical opportunity for expansion and development of the commercial dimensions of this sector at relatively low cost, particularly with regard to the promotion and marketing of music-related products and services. For many developing countries, including Jamaica, UNCTAD has identified electronic commerce and music as an important new trading opportunity that provides one of the fastest means of penetrating global markets.

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This work was carried out with the aid of a grant from the International Development Research Centre (IDRC), Canada. We thank the IDRC for its financial support.

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**Electronic Commerce and Music Business
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INTRODUCTION

The music industry offers important new trading opportunities for developing countries. Trade in recorded discs and tapes has quadrupled over the last 10 years, overtaking trade in many manufactured goods. In the age of knowledge-based international competitiveness, services are assuming a greater share of output of all economies. The *music sector* is among the fastest-growing export sectors of the *global service economy*. In many developing countries, the significant export earnings potential of music is increasingly recognized, in addition to employment creation and promotion of national culture. Furthermore, there are strong complementary links to other sectors, most notably tourism (a leading source of income for many countries) and the entire multimedia spectrum. This can also become a reality in the Caribbean region.

Not only is the basic resource, musical talent, abundantly available in the Caribbean region, but also regional musical tastes offer significant opportunities to establish markets for producers in the region. However, talent alone is not sufficient to build a competitive music industry, and in most developing countries this sector has suffered from weak institutional and political support, low levels of entrepreneurial capability, low value-added, overdependence on foreign manufacturing and distribution, and massive copyright infringement. But in industries where ideas and specialized assets give rise to rents, effective organization requires a variety of specialized institutions. This is particularly true of music, where the volatility of demand adds to the sizeable risks involved. Indeed, creating a successful music industry is as much related to institutional and technological capabilities as to music potential or talent (UNCTAD, 2000).

Undeniably, there are institutional and cultural constraints on the development of this sector. However, through the right mixture of policies, market incentives and specialized collective institutions, these have been successfully overcome in several developing countries, such as Brazil and India. Policies specifically aimed at the development of the music sector need to focus on the strengthening of collective institutions responsible for copyright and related rights as well as related specialized institutions (collective management societies), capacity-building (training in entrepreneurship), institutional clustering, provision of business development services, access to finance and to new technologies, as well as to electronic commerce channels of distribution, democratization of decision-making, investment and assistance with marketing promotion. The music industry can be in the vanguard of the transformation process of the Jamaican economy, bringing it into the new digital economy, loosely known as the "New Economy".

I. MUSIC AND ELECTRONIC COMMERCE

In developed market economies (DMEs), information and communication technologies (ICTs), with e-commerce¹ and the Internet, are perceived to be the main engines of economic growth in the "New Economy".² This trend is emerging only slowly in developing countries. Broadly defined, electronic commerce, or *e-commerce*, refers to all aspects of business that is

conducted over the Internet. This includes all goods and services delivered over the Internet, including music, as well as goods delivered in more traditional ways.

Internet and e-commerce will certainly transform traditional business and consumer life. Internet-based sales were estimated to total some US\$43 billion in 1998. Many analysts expect online business to be worth more than US\$300 billion in the early part of this decade, while the more optimistic projections range between US\$1 trillion and US\$ 3 trillion.

The large majority of developing countries, particularly least developed countries (LDCs), are still on the fringes of the new digitally based technological and productive economy and will not be able to compete unless they are brought into the Internet-based New Economy. E-commerce could provide these countries with a portal to the New Economy. For many developing countries, including Jamaica, UNCTAD has identified e-commerce and music as the fastest means of penetrating global markets. E-commerce offers the possibility of improving company competitiveness and reaching, communicating and interacting with global consumers at greatly reduced cost. This is truer for music than for many other activities, in particular because music, like the Internet, is global in character, and can be easily transmitted in a narrow-band environment (Kern, 1999). This option is currently possible and within the reach of most developing countries at relatively lower entry costs than for many other traditional exporting activities.

Some of the key expected benefits from electronic commerce in the global music business are the following: lower transaction costs of doing business, greater numbers of buyers and sellers, larger purchases per transaction, integration into business cycles, larger catalogues and improved customer interactions. The distribution of music over the Internet represents for developing countries a rare opportunity for technological leapfrogging and a portal into the new knowledge-based global economy.

E-commerce will not only enable developing countries to buy goods and services from around the world at advantageous prices to support their production process, but more importantly, it will also allow them to participate as vendors in the global market place in ways that were earlier impossible. New export opportunities should attract new foreign and domestic investment enhancing national economic growth.

In addition to private sector initiatives, Governments in most developing countries are actively developing programmes aimed at supporting the digital economy (ITU, 1999). This is certainly the case in Jamaica, where the Ministry of Commerce and Technology is taking the lead in this area in the CARICOM region. The music industry offers one such opportunity for the development of an innovation-based competitiveness strategy for a number of small island developing countries, such as Jamaica, with small markets and particular trading disadvantages associated with small market size (UNCTAD, 1999).

The Internet, with its mix of computing, telecommunications and broadcasting, is revolutionizing the media and publishing business. New models of delivering content and entertainment to users through networks – such as Web casting of TV and radio – have emerged.

For instance, one website (timecast.com) lists over 1,000 radio and TV stations worldwide that broadcast online.

Major new players have entered the lucrative media market for enhanced online media and information services. For instance, Internet-based America Online is a media company that has merged with the large traditional entertainment corporation Time Warner. Increasingly, the audio-visual sector, comprising music, is developing its key functions and is being treated within the broader information, communication and entertainment (ICE) cluster of information, communication and entertainment services, owing largely to the technological convergence of new digitally based technologies.

Although the media industry has been relatively quick to adapt to the Internet environment, traditional media companies and publishers have not yet been able to gain the lion's share of traffic and advertising dollars online. Instead, portal sites such as AOL, Yahoo, Excite, Lycos and Infoseek have taken the lead in stimulating traffic and advertising revenues. The power of portals, however, has not gone unnoticed by the big media players, who have been active in securing stakes in the major portal companies. The approach of many media companies has been to build comprehensive sites around specific niches and then partner with portals to promote them. Deals include, for instance, Disney's 43 per cent stake in Infoseek and Bertelsmann's US\$ 10 million partnership with Lycos to create portals in all main European markets (ITU, 1999, p. 4).

A. Music, e-commerce and small and medium-sized enterprises

The main beneficiaries of expanded e-commerce trade are likely to be small and medium-sized enterprises (SMEs) in the Jamaican music sector. The music business in Jamaica is made up exclusively of domestic SMEs, which are facing a highly competitive trading environment (relative to large-size firms and TNC affiliates) and are not able to compete in the global market place. Yet in the global music industry, this SME-based sector has been characterized by dynamic entrepreneurial activity and high levels of innovative output. The music sector (closely related to new media activity) in some DMEs, such as the United States and the United Kingdom, is especially dynamic and innovative in the area related to high-tech transmission and distribution of music. Since the SME sector tends to be supported and nurtured in DMEs, this sector needs to be assisted and supported in the developing world. This is generally done through policies designed and tailored specifically for SME development. Policy and market combined are needed to stimulate and nurture the growth of this sector. SMEs can compete successfully via e-commerce in DMEs; they have proved to be very successful in many DMEs. Niche products such as music can help SMEs to become competitive in global markets through specially designed and well-tailored programmes. Policies aimed at enhancing SME competitiveness should include the music sector and e-commerce, especially in the informal sector. The largest part of the music industry in the Caribbean region remains in the informal sector. Successful experiences can also occur in countries such as Jamaica, with a small but well-educated professional cadre that is familiar with international business standards and practices.

Currently, there are no major supply-side constraints on increasing exports of these types of services in most developing countries, even in the LDCs. The unique feature about music online (in contrast to many other media products) is that broad-band technology is not required in order to transmit and sell the music product. Although most developing countries are equipped only with narrow-band technologies, they are not prevented by their technological constraints from increased exporting of music online. However, the profitability of electronic commerce and the music business will depend on the efficiency of existing technological infrastructure and related services that exist in Jamaica. SMEs form the bedrock of entrepreneurship in ICT-based industries. Jamaican SMEs are ideally suited for electronic-commerce-type activities. These types of firms make up the highly innovative and dynamic music industries in most DMEs, such as the United Kingdom, the United States and Canada as well as in other EU member States.

Despite the lack of formal structures and institutionalized support systems, the music product, aptly described as Sounds of Jamaica³ (spearheaded by reggae), has established itself in international markets as a viable export product. After tourism, the music product has the potential to become Jamaica's most successful export. There is now growing interest in music particular to a geographical, ethnic, political or social location. This is beginning to challenge the trend towards creation of global personalities who communicate across multimedia and are the homogeneous product of global media and communications networks. Reggae music is in the fortunate position of being able to "cross over" between its ethnic and mainstream markets, but at present lacks a cohesive framework to develop and maximize this capacity. The music product is simultaneously a traditional and a non-traditional export of Jamaica with vastly untapped economic, social and cultural potential; and the economy stands to benefit significantly from realizing its full potential, in terms of employment and revenue generation, leading to accelerated capital accumulation. This industry offers significant employment potential, especially in terms of opportunities for self-employment, which is particularly significant for the under-30s segment of the population, with its very high rates of unemployment – 59.3 per cent (UNCTAD, 1999).

Over the last decade, phenomenal technological advances in digital technologies have enabled the Internet to become an efficient medium for accessing music – both by downloading it directly and indirectly, and by acquisition of CDs and cassettes from online retailers. Such new developments in media and entertainment services pose a serious threat as well as opening up many new opportunities for established artists and music companies. At the same time, these developments represent major new trading opportunities for smaller producers and artists from the developing world with limited financial means. The revenue potential of music online is significant, as more and more Internet users listen to and acquire music online. Such opportunities are already being recognized and seized by the music pirates. Legitimate online music providers in the developing countries can capture increased revenues and greater market shares. Music online offers multiple tangible benefits, such as (i) reduced risk (it requires no immediate, upfront investment for the music companies); (ii) provision of additional distribution channels on the WorldWide Web; (iii) promotion of sales of music at low cost; and (iv) provision of an important additional marketing vehicle by promoting artists online, as well as

other music-related merchandise. In order to capture the potential benefits offered by the new digital economy, music companies in the developing world will need to prepare themselves for digital transmission and distribution of music as soon as possible, with the objective of becoming globally competitive players. Music industry specialists predict that in the next 10 years, up to 25 per cent of total music transactions will be conducted online.

Although technological developments related to e-commerce are predominantly taking place in the DMEs, e-commerce-related activities are not limited to those economies and are very much within the reach of most developing countries' present technological capacities. Developed countries stand to gain more from the digital revolution in music than do developing countries, largely owing to a much higher incidence of Internet users in the DMEs and to their greater purchasing power.

B. Developing countries' participation in e-commerce in the global music trade

The current global trends clearly demonstrate that the share of developing countries' participation in e-commerce-type activities in global trade is minuscule, but is likely to increase (UNCTAD, 2000; ITU, 1999; COMTRADE, various years). However, all the indicators are on the increase, especially in the area of music, owing to the following unique characteristics of the music products and services:

- (a) Music is universal, with fewer languages and cultural barriers than any other tradable product; hence it lends itself easily to transmission and distribution over the Internet;
- (b) Music can be relatively easily transmitted (compressed and transmitted, even in a narrow-bandwidth environment) in order to obtain good-quality CD musical sound);
- (c) The global demand for music is on the increase worldwide, associated with the proliferation of cable and media channels in broadcasting (UNCTAD, 2000);
- (d) The future of musical transmission is direct digital downloading from the Internet to the MP3. Such "customized listening" is already very common in DMEs, and is spreading rapidly to many developing countries;
- (e) Increasing acceptance and use of e-commerce as an additional channel of distribution by global music consumers.⁴

Digital music can be stored, transmitted and consumed without deteriorating in any way. E-commerce in music represents the culmination of a long-term cumulative process of innovation and technical change in ICTs. The easy dissemination of digital music, a relatively recent event, has already occurred and will continue to profoundly impact on the music sector. For example, the use of the Rio – a portable device allowing consumers to transfer MP3 files for their private purposes on to portable digital players – represents an important new format in the contemporary music recording industry.⁵ The advent of e-commerce has been facilitated by technologically advanced developing services (on new formats, such as online music, with high audio quality – in addition to the traditional ones, such as radio and TV broadcasting).

The trend in the evolution of new recording technologies is irreversible. New Internet-based recording technologies, such as the MP3 (which enables free downloading of music) and the Napster website (which permits uncontrolled file swapping among fans for free), represent

cases of evolving technologies, or alternative and additional modes of product delivery. While some big established business interests perceive them as threats to their current profit margins and established practices, others, such as the Grateful Dead, perceive these new technologies as having a beneficial impact and a tremendous potential as a marketing tool for the musicians themselves. The new technologies have an ambiguous effect from a business point of view (*Financial Times*, 17 May 2000). They have a great potential for marketing and providing global exposure in global markets (marketing costs are generally prohibitively high for most small producers and record companies). However, new anti-piracy encryption systems for playing music legally on the web already exist but are not generally used.

The global music market is worth approximately US\$40 billion, and this sector employs approximately 600,000 persons in the European Union alone. Policy makers in developing countries can no longer afford to remain uninterested in this important economic activity, which is a potential earner of foreign exchange and an untapped source of revenue.

Opportunities generated by Internet-based electronic commerce include those arising from better availability of information, lower transaction costs, and production and distribution costs, facilitating market entry, improved customer service and extended geographical coverage. As in trade in other types of services, it is expected that these will be translated into significantly higher profits owing to lower costs of production and increased introduction of innovative new products and services. In turn, these will be expected to lead to increased economic growth and welfare for all concerned, and most of all for the consumers (ITU, 1999).

However, many challenges remain. The unregulated nature of the Internet environment has serious implications for trade expansion. Most significantly, piracy or illegal transmission of music without adequate copyright payments, or pricing policies, represent immediate challenges. The World Intellectual Property Organization (WIPO) is currently working on the harmonization and development of new international treaties in the area of international licensing in a new digital environment. However, the national treatment of copyright infringement over the Internet remains uncharted.

Within the framework of the World Trade Organization (WTO), the Agreement on Trade-Related Aspects of Intellectual Property Rights (the TRIPS Agreement) which came into force in 1996 for developed market economies (and is currently under review in the WTO for developing countries), directly relates to the development of copyright regimes in these countries. Subsequently, under the aegis of WIPO, further development of international rules has taken place in the field of copyrights and neighbouring rights, which resulted in the conclusion of the WIPO Copyright Treaty and the WIPO Performances and Phonograms Treaty respectively.

Interested policy makers need to address the following:

- (a) Regulation of the Internet (i.e. international licensing); e-commerce, while being market-led, needs to be protected against copyright infringements and piracy;
- (b) Appropriate payment systems: provision of credit card support systems, e.g. credit card transactions, alternative mechanisms for credit card-holders' transactions (through

government banks or providing loan guarantee schemes, etc); banking transactions: offering viable supportive infrastructure to e-commerce through government banks or by offering insurance for e-commerce costs through public sector guarantee schemes or insurance incentives and favourable tax regimes; security – data protection: online payment systems in relation to the security and privacy of transaction;

- (c) Financial and fiscal policies, and taxation policy;
- (d) Market access issues: universal Internet access, reducing the cost of access, regulatory trade framework of a regional character (import tariffs, taxation, import duties); facilitating access to, and training for, personal computers for all; training and entrepreneurship in e-commerce and music;
- (e) Legal regime: legal implications of e-commerce and music transmission (i.e. international licensing); or intellectual property protection on copyright protection, credit card arbitration; enforcement issues;
- (f) Content regulation in relation to the protection of language and local culture (content regulation is designed to foster cultural identities and stimulate the growth of indigenous industries).

II. THE POTENTIAL IMPACT OF ELECTRONIC COMMERCE ON THE DEVELOPMENT OF THE MUSIC BUSINESS IN JAMAICA: THE JAMAICAN PERSPECTIVE

A. Background and objectives

This section discusses the potential impact of electronic commerce on the development of the music industry in Jamaica, from a Jamaican perspective. It has the following objectives:

- (1) To delineate how electronic commerce is expected to affect the structure, operations and profitability of the Jamaican music industry over the next five years, including composition, training, production, performance, marketing and sales;
- (2) To assess how these expected impacts will present opportunities for SMEs in Jamaica, to grow, prosper and contribute to national development;
- (3) To identify the capacity in Jamaica for handling these issues;
- (4) To assess the interest of Jamaican researchers, industry and public sectors in working together to carry out the necessary research and take action that will result in development benefits, and their ability to do so.

B. Methodology

Interviews, online searches, and the examination of local and international presentations, papers, articles and studies on the music industry, electronic commerce and copyright and other related matters were the principal means used to gather the information provided in this section. (For the list of persons interviewed see annex I.).

C. The Jamaican music industry

Jamaica is the home of the world famous reggae music and has exported many internationally successful singers, composers and musicians, the most successful of whom being Bob Marley. Others include Monty Alexander, Buju Banton, Dennis Brown, Jimmy Cliff, Dianne King, Beenie Man, Yellow Man, Shabba Ranks and Peter Tosh. Although reggae is the most recognized genre of Jamaican music, the latter also includes the following types of music and the best-known performers associated with them:

Dance hall:	<i>Shabba Ranks, Buju Banton, Beenie Man</i>
Rock steady:	<i>Jackie Mitoo, Lloyd Brevet, Toland Alphonso</i>
Ska:	<i>The Skatallites</i>
Folk music:	<i>The Jamaica Folk Singers, the University Singers, the Carifolk Singers and the National Dance Theatre Company (NDTC)</i>
Jazz:	<i>Monty Alexander, Ernie Ranglin, Sonny Bradshaw, Dean Fraser, Myrna Hague, Karen Smith, Arturo Tappin</i>
Gospel:	<i>Grace Thrillers, Claudine Stewart, Lisa Johnson</i>
Mixed repertoire:	<i>Alpha Boys Band, Jamaica Military Band, National Chorale of Jamaica</i>
Calypso and mento:	<i>Byron Lee & the Dragonnaires, Fabulous Five</i>

The export potential of the Jamaican music industry is well known⁶ and music is considered to be one of Jamaica's most important cultural products. The Government of Jamaica's National Industrial Policy formally recognized the entertainment industry and "its importance as an expression of the richness of its national culture, and its incorporation as an integral element of the national effort to promote growth and development of the Jamaican economy and society". The National Industrial Policy seeks to target this sector of the economy as a sector to be given support by all the components of the National Industrial Policy (Jamaica Information Service, 1996, p. 128).

D. Electronic commerce

The International Telecommunication Union has identified the following eight main categories of contemporary electronic commerce: *subscription and usage-based telephony, online, and Internet access services;*⁷ *subscription or transaction-based information services and software sales;*⁸ *consumer retail sales;*⁹ *business-to-business wholesale and retail services and sales;*¹⁰ *advertising and marketing services; financial services and transactions;*¹¹ *Government services and information; and ancillary functions contributing to business/commercial*

activities.¹² There are many potential advantages of e-commerce for developing countries, such as:

- The opportunity to integrate much larger segments of the population into the mainstream economy, reducing poverty and increasing growth, through commercial activities directly and also through related applications such as distance learning, telemedicine and electronic democracy;
- Prospects for much wider national and international awareness and distribution of indigenous products and services, with drastically reduced marketing and sales costs;
- Information services and software development can be produced virtually anywhere, as factors of natural resources, population size, economies of scale and investment capital are rendered less important than intellectual skill and creativity;
- Location, proximity to major trading partners, and transit routes are of less significance as well, further enhancing prospects for equalising trade imbalances.

The Government of Jamaica has also identified electronic commerce as an engine of economic growth and transformation of the Jamaican economy. It has recognized that it has an important role to play in the formulation of appropriate policies and the establishment of a legal and regulatory framework which is conducive to the development of electronic commerce in Jamaica. To fulfil this role, the Ministry of Commerce and Technology, with its responsibility for electronic commerce, has established a joint public-private sector Committee to advise it on the necessary incentives, as well as on the legal and regulatory framework which must be in place to allow Jamaica to benefit from electronic commerce.

In addition, Jamaica currently chairs the WIPO/Caribbean Electronic Commerce Committee and Intellectual Property Committee,¹³ which is mandated to make recommendations to the meeting of Caribbean Ministers responsible for intellectual property. The following are some of the recommendations which arose out of the first meeting of that Committee (held in February 2000), and which have direct relevance to this report.

- Caribbean Governments should enter into strategic partnerships with IP stakeholders to combat piracy and, in particular, digital piracy. Furthermore, Governments should consider a regional approach to combating piracy;
- Caribbean Governments should seek WIPO's assistance with the promotion of and preparation for accession to the WIPO digital treaties;
- Caribbean Governments should request from WIPO targeted training for persons in the public and private sector in the converging area of IP and e-

commerce. In this regard, distance learning and the development of a training module which can be used within the region should be considered;

- The Committee should develop a pilot project with public and private sector participation that would demonstrate the role which e-commerce can play in the successful dissemination of local products and services.

These recommendations, if implemented, could have a positive impact on the growth of e-commerce in Jamaica, especially if the pilot project chosen is in the music industry.

E. Potential impact of electronic commerce on the Jamaican music industry

1. Impact on the structure, composition and operations of the Jamaican music industry

Given the nature of traditional trade and commerce in Jamaica, it is reasonable to assume that it is through digital distribution of music, and the development of appropriate software to showcase reggae music sites, that Jamaica will be able to capitalize on the opportunities created by the unique convergence of e-commerce and music. Today, most of the websites related to music in general and Jamaican music specifically do not yet permit digital diffusion of music in the full sense, since records can be ordered on the net but physical delivery is made by post. Most music websites are extensions of traditional merchant stores and chains. Most Internet websites that promote and sell Jamaican music are not hosted in Jamaica for the following reasons:

- (a) The high cost of setting up a domestic website;
- (b) The perceived unreliability of the Jamaican mail system;
- (c) The absence of local bank facilities which would permit the processing of online credit card transactions;
- (d) Scepticism regarding the amount of up-time local sites would have given the existing telecommunications infrastructure with inadequate bandwidth;
- (e) The fact that the music, while created in Jamaica, is generally sent overseas for packaging and distribution, and that it is therefore considered cost-effective to simply run the website in the country where the music is distributed.

Greater competition in the telecommunications infrastructure in Jamaica could contribute to reducing the costs involved in hosting websites. However, given the Government of Jamaica's agreement with the dominant telecommunications carrier not to introduce competition in the fixed telecommunications network and in international telecommunications for the three years from March 2000, it is unlikely that there will be a shift towards the hosting of Jamaican websites in Jamaica before the end of the three-year period. However, it is in the digital creation and distribution of music, regardless of the physical location of the website, that electronic

commerce and the deployment of information and communication technologies can offer Jamaica significant rewards.

Although the structure of the Jamaican music industry is evolving, it remains characterized by fragmentation, under-capitalization and informal sector transactions. The industry comprises many stakeholders, who for the most part act independently or without forming any alliances with one another.

Electronic commerce can transform, and is slowly beginning to transform, the character and modalities of the Jamaican music industry through the following:

- Introduction of new contributors to the refinement and presentation of the music product – namely, software developers, information technology specialists and telecommunications service providers (these contributors bring to music more organization and formal operations);
- Greater synergies between musicians, producers, promoters and software developers, and telecommunications providers;
- Formalization of business arrangements to allow online marketing and distribution of the music product;
- Implementation of new business models geared towards the digitization of music and its distribution in a digital environment;
- Increased importance of multimedia as a method of delivery of music and music content, and greater technological awareness;
- Equipping musicians and their business counterparts with the means to control various aspects of music production, promotion, marketing and sales.

F. Likely impact on the profitability of the Jamaican music industry

For many prominent musicians, producers and promoters in Jamaica, the music business is already a profitable venture. However, there is no doubt that the potential profitability of music in Jamaica is largely untapped and that the margin for persons who profit from the industry is slim. In addition, some of the “profitability” has come through tax evasion and piracy, so that the national economy and the primary creators of music have benefited the least.

Electronic commerce and the deployment of information and communication technologies have the potential to significantly increase the profitability of the Jamaican music industry by:

- Facilitating greater control over the distribution of the musical product, which could eliminate middlemen and associated expenses;

- Reducing the costs of marketing, promotion, advertising, and distribution of the product;
- Reducing costs attendant on traditional trade and commerce, e.g. transportation, shipping, storage and other overheads;
- Phenomenally increasing the market size and the targeted consumer population; and
- Improving the quality of the end product (this would relate to the improvements in portable players, such as the MP3 format and technologies used for digital downloads).

Lower overall costs will make it possible for the volume of products to be increased in order to fulfil the increasing demand for those products. However, the challenge of copyright piracy through e-commerce remains a major threat to the profitability of the music industry.

G. Impact on training in music

Training in music in Jamaica is both formal and informal. In Jamaica, the Edna Manley School of Music trains musicians in the use of instruments, songwriting techniques, arrangements and the various genres of music. Stephen “Cat” Coore from Third World, and trombonists Dwight Pickney and Dean Fraser are examples of commercially successful Jamaican musicians who have been trained at the Jamaica School of Music. Music is also taught at the Music Unit at the University of the West Indies (UWI). Some Jamaicans have also accessed formal music training through the Royal School of Music and hold music degrees; however, a large number of these trained musicians remain non-commercial. Very limited training in music is accessed by popular reggae artistes who often have not been through any formal educational system beyond primary school level. This has arguably affected the quality of the dancehall and dub music being produced in Jamaica. Another Jamaican educational institution is the Jamaica Cultural Development Commission (JCDC). It fulfils its mandate through the organization of annual competitions in 14 subject areas, including dance, literature, photography and three categories of music, namely music (choral works, instrumental), popular music and traditional music. During the period leading up to the competition finals, the JCDC provides training through workshops for singers, songwriters and arrangers who enter the national song contests. The JCDC also offers scholarships to the Jamaica School of Music (a tertiary institution) to successful participants in the competitions.

The Jamaican Government, through the Copyright Unit and JAMPRO, facilitates training in the basic rudiments of copyright and its application to the music business. Increasingly more lawyers are receiving postgraduate and other training in intellectual property and are practising in the area in Jamaica. The Sounds of Music Directory lists 14 entertainment lawyers (JAMPRO, 1999).

Electronic commerce, in its broadest sense, provides many new opportunities for the Jamaica music industry in terms of training and education, for example:

- To market the musical product online;
- To form alliances with similar interest groups worldwide;
- To engage in “distance” learning in the technical aspects of music creation and production; and
- To increase the choice of options in terms of training institutions.

In this regard, a critical challenge for Jamaica, however, is access to computers and Internet connectivity. A great deal of music is still being created in Jamaica using analogue tapes or analogue modes. The music thus created is then “burnt” onto CDs. There are, however, a few artistes who are already digitizing the recording of their music on digital tapes (DATs). Currently there is only one CD manufacturing plant in Jamaica; recorded music products have to be exported and then reimported into Jamaica. Since the change in the Jamaican music industry from vinyl records (which remain extremely popular in Jamaica) to analogue tapes and CDs is only just occurring, one could reasonably assume that the industry would be slow to embrace digital technologies in production.

H. Impact on performance

Jamaican musicians earn their living primarily from live performances at festivals both locally and in foreign countries. Most of the popular Jamaican “musicians” are not composers or songwriters, i.e. copyright holders, but performing artistes. Only a minority (for example, the late Bob Marley, Monty Alexander, Third World) are composers as well as performers. Thus, many Jamaican performing artists without exclusive rights in their performances similar to an author’s copyright have focused their energies on shows and concerts to obtain one-off payment for their performance rather than on deriving long-term earnings through copyright royalties. The reach of the performer has thus been limited by the cost of travel and touring around the world and by the number of concerts and shows a promoter can secure for him or her.

In Jamaica, although Dance Hall shows abound in night clubs, there is a dearth of high-quality performance venues and few popular events have been able to draw crowds of thousands from home and abroad. Such events include *Reggae Sun Splash Festival*, which has suffered from inconsistency in promotional support and inappropriate venues, and the *Sumfest Festival*, which has succumbed to a similar fate. Recently, the James Bond Beach, located on Jamaica’s North Coast, has been developed into an attractive venue which drew thousands to the Bob Marley Concert and also to the recent Air Jamaica Jazz Festival. But only a select few Jamaican artists ever get the opportunity to perform at events of this kind. The Internet, with audio-visual capabilities, offers less well known as well as popular Jamaican performing artists the opportunity to interact and perform online through web-casting and live streaming performance, and to reach a much wider audience. Use of the Internet for performances could, for example, increase the artist’s performance revenues; eliminate some of the costs of travel and touring; reduce costs associated with traditional advertising (including publishing promotional brochures

and posters, although some of this will still be necessary); and reduce the costs of broadcasting and cable-casting.

I. Impact on marketing and sales

The marketing of Jamaican music products involves the marketing of recordings, programming, facilities, services and merchandise that is carried out by various public agencies, the Jamaican media and private promoters. The Internet's most important role is in the area of marketing. The Jamaican music product has suffered from inadequate marketing, largely because of prohibitive costs and lack of indigenous business exporting skills. Traditionally, promoters and artists had to choose, owing to financial constraints, where and how to market. The Internet significantly reduces the costs of marketing while making the product easily available to the massive global market.

The Jamaican Film and Music Entertainment Commission, a division of JAMPRO, has tried to utilize its website as a marketing tool. JAMPRO offers numerous marketing services related to music.¹⁴ However, JAMPRO's website is only in the embryonic stage and does not yet have the necessary links to musicians, promoters or other entities in the Jamaican music industry. In the private sector, examples of marketing by the media are to be found in the activities of IRIE FM and examples of marketing by promoters can be found in the *Sumfest Festival* website. The world's first 24-hour all reggae radio station (IRIE FM) was launched in 1990. The management of this radio station has actively marketed and developed the reggae music product through the provision of studio facilities¹⁵ and annual reggae festival "bashment". IRIE FM is now on the Internet and provides 24-hour live programming using streaming audio technology. *Sumfest.com* is the website, developed by the Promoters of the Jamaican Reggae Festival Sumfest, to market the Festival. As the use of the Internet becomes more prolific, the marketing of music online will become an expertise that must be mastered by persons within the industry. Since the online audience is not necessarily the same audience as the offline one, appropriate targeting is just as critical online, as it is offline. While the advances in digital technology make the promotion and distribution of Jamaican music much simpler and less costly and create new audio-visual opportunities for creators, traditional means of advertising will need to buttress marketing initiatives even in the online environment. Forrester Research estimates that Internet companies spent US\$2.7 billion in advertisements in 1999, two thirds of which was in the offline "real world" environment. It further estimates that by 2004, US\$2.2 billion will be spent on online advertisements while US\$6.3 billion will be spent offline.

The volume of sales of recorded music being produced, licensed, manufactured, sold or distributed in Jamaica is unknown. Non-registered transactions and tax evasion are characteristic of this industry. It is only recently, with the articulated demand by the industry for duty concessions, that more information has become available on the industry's activities in terms of manufacture and sales. Electronic commerce will offer the music authors, producers and performers greater opportunity to track the distribution and sales of their Jamaican music product at relatively low cost and may also direct the industry into greater transparency. Electronic commerce should also have a positive impact on the volume of music products sold as a result of:

- Reduced costs of marketing, promotion and advertising, production and distribution of the product;
- Lower costs attendant on traditional trade and commerce;
- A significantly larger market size/consumer population;
- Improved quality of the end product;
- Lower marketing and distribution costs.

J. E-commerce, small and medium-sized enterprises and the Jamaican music industry

The Jamaican music industry is made up exclusively of SMEs. In Jamaica, SMEs will have unprecedented opportunities through the application of digital technologies, and the export of the music product online, the local software development companies, music promoters and record companies can benefit from the following factors:

- (1) Increased efficiency through lower costs of production and distribution and the reduction in time spent processing and fulfilling demands for the music product;
- (2) New customers due to expansion of market size, global visibility and access to a large potential customer base as well as an enhanced value proposition (through new, technology-based multimedia music products and services);
- (3) Overcoming of language barriers by multilingual electronic interfaces;
- (4) Enhancing responsiveness, i.e. faster reaction times to customer needs; and
- (5) Removal of distance-related barriers.

Some Jamaican examples of private SMEs which promote reggae music on the Internet include Caribbeat Entertainment Limited,¹⁶ Reggae Ambassadors World-wide¹⁷ and the Music Ambassadors Internet site. A leading Jamaican company in the area of e-commerce and music is the private software company Vilcomm International Limited, which has developed a Window-based reference software targeted at reggae musicologists. A cartoon animation of Bob Marley serves as the guide, providing users with biographical data on singers and the genesis of reggae music through text, reggae music clips and photographs. In February 2000 the company launched a multimedia website for Jamaican products (in English, Japanese and German). Music will also be soon available for direct downloading.

To ensure that SMEs maximize the potential advantages of electronic commerce, it is important that the Government build up SMEs awareness of the potential offered by e-commerce, facilitate training programmes for SMEs in the new web-based environment, create and implement expeditiously a comprehensive legal framework, and adopt policies which stimulate investment in the music industry.

K. Knowledge and institutional gaps in the area of e-commerce and music

Significant knowledge and institutional gaps, which hinder the development of e-commerce as a tool for wealth creation in the Jamaican context, have been identified in the following areas: (a) the economic contribution of copyright-related earnings to the national economy; (b) the economic contribution of the music sector; (c) the impact of piracy on the music sector; (d) the specific components of the music sector in Jamaica; (e) the appropriate legal framework for E-commerce in music and digital distribution; (f) demographics of the online music audience; and (g) e-commerce music sales for Jamaican music and related products.

Whereas the economic importance of copyright has been quantified in a number of developed countries, including the United States, the United Kingdom, Canada and the Netherlands, the economic importance of copyright is unknown in Jamaica. No valuation of the contribution of the music industry has yet taken place. While many persons in the music industry believe music is a major export product for Jamaica there are no data to support this belief. There is a need for the collection and collation of data related to the music industry so that meaningful forecasts can be made regarding the industry's commercial potential. The joint UNCTAD/WIPO research project entitled *Developing Countries Becoming a Global Player: Opportunities in the Music Industry* is currently being carried out in Jamaica with the aim of filling this gap. Intellectual property rights provide the bedrock for the economic exploitation of music by its creators and owners.

These gaps, in part, account for lack of support for the music industry by the local political authorities in Jamaica, which have been slow to appreciate the relationship between the success of Jamaican music internationally and the economic contribution of music to the national economy. This is slowly changing with the recognition that value realized in the international markets is capable of contributing to the national economy.¹⁸ However, most music industry participants remain mistrustful of government's claims. There are social and long-standing historical reasons for these views (UNCTAD, 1999, chapter 2). Without information on the economic importance of copyright and the potential net contribution of music-related activities to the economy, the banking sector and financial institutions have had no basis on which to support music industry activities in Jamaica.¹⁹ The critical policy and financial support, which could transform these music-related activities into a viable industry, have thus far been lacking. There have been various attempts to determine and quantify the components of the music sectors in Jamaica.²⁰ Although it is understood that Jamaican copyright law has to be amended to afford better protection of musical products over the Internet, little work is being conducted on the appropriate legal and regulatory framework which needs to be implemented in Jamaica to ensure the safe digital distribution of copyright material and confidential information such as credit card numbers. Further research needs to be carried out in this area.

L. Capacity and interest of Jamaican researchers

The paucity of data and information with regard to music-related activities in Jamaica is glaring, and can only be addressed through focused studies, research, surveys and projects in the local context. In Jamaica, there are a number of initiatives through academia, government and international organizations which are providing a meaningful start to the process of addressing

the gaps in this area. This includes the UNCTAD/WIPO project in the Caribbean music industry.²¹ A number of academic institutions have been identified as potential research sites.

1. University of the West Indies

In 1995, the University of the West Indies (UWI) established the Reggae Studies Unit as a division of the Institute of Caribbean Studies. It is a specialist teaching and research unit whose objectives are to provide consultancy services to practitioners in the reggae music industry (both local and foreign), who have a vested interest in understanding, explaining and promoting reggae music both in Jamaica and internationally. The Reggae Studies Unit, guided by an Advisory Committee of members with relevant expertise, is appointed by the Institute of Caribbean Studies. The Unit's support base is multidisciplinary and expertise is drawn from within and outside the University. The researchers in this unit are well placed to carry out research in areas related to electronic commerce and music in Jamaica. The Institute has identified the following subjects and related academic departments in the University as target areas:

- (a) Technical studies in music and sound synthesis and reproduction (Computer Sciences and Physics);
- (b) Business and management aspects of the reggae music industry (Management Studies);
- (c) Reggae music in the mass media;
- (d) Physical-psychological factors in the development of the reggae music syndrome (Faculty of Medical Sciences);
- (e) Legal aspects of the reggae music industry (Faculty of Law);
- (f) Documentation and dissemination of research findings (Library Studies & the Library System).

The Reggae Studies Unit provides a lecture series on reggae music and develops training sessions for industry players on various topics.²² It is currently developing a four-week teaching module on reggae and intellectual property jointly with the Ministry of Commerce and Technology. It is also exploring topics of mutual interest with the University's Economics Department. The extensive activities and research that the Reggae Studies Unit would wish to foster and encourage are severely hampered, however, by insufficient financial resources.

2. University of Technology

The flagship training laboratory for electronic commerce of the University of Technology (UTech), is its Multimedia Centre. The strategic plan for the Centre for 2000–2004 includes enabling technology on and off campus and digital teaching and learning. Additionally, the Multimedia Centre is engaged in the research on new technologies.

3. The Institute of Law and Economics

The Institute of Law and Economics, established in June 1999, seeks to bridge the gap between the fields of law and economics. The Institute's plans for 2000 include the launching of an associate membership campaign to create a pool of legal and technical resource persons who will work with the Institute on research assignments in the joint fields of law and economics and in pursuance of relevant research assignments.

4. Institute of Management and Production

The Institute of Management and Production, which is another tertiary-level institution, provides diplomas and certificates in all aspects of business. It offers a course on the business of entertainment, covering topics such as entertainment law and copyright. This course is taught by an entertainment attorney and is geared to all persons involved in the music business. Research relating to electronic commerce and music is currently being considered.

5. Private sector involvement

The Private Sector Organisation of Jamaica, together with the Caribbean Association of Industry and Commerce, jointly conducts seminars in areas relating to telecommunication and entertainment, including e-commerce and music. As reflected in these and other initiatives, there is a growing interest in Jamaica in pursuing research and exploring at the academic level a myriad of issues concerning electronic commerce and music. Multidisciplinary and collaborative research activities are actively being pursued by all four institutions and should be commended and encouraged by the Government. Since the capacity to carry out the necessary research exists, financial restraints appear to be the only significant impediment.

M. Issues to be addressed in the field of e-commerce and music

In addition to the knowledge and institutional gaps, there are issues relating to access to the Internet, data security, confidentiality and intellectual property, which need to be addressed if any electronic commerce initiative is to have a positive impact in Jamaica. They are described below.

(1) Access to computers, telecommunications infrastructure and services

Less than 1 per cent of Jamaicans have access to computers and the Internet. Computers and Internet access are prerequisites for the deployment of electronic commerce. Musicians need to be trained and to be comfortable in the digital environment. The Government has a major role to play in this area through the articulation of policies that encourage investment in the information technologies (IT) sector and seek to ensure that all schools in Jamaica have computers. It is essential that connectivity to the Internet is fast, reliable and inexpensive if Jamaica is to fully participate in the online experience. The Jamaica Computer Society should collaborate with the Ministry of Education to put computers into all secondary level schools; and the Ministry of Commerce and Technology and private sector businesses should ensure that all post offices are equipped with computers that offer Internet access to the public.

(2) *Data security and confidentiality*

Jamaican businesses and Jamaican musicians need to be sure that their data and their music are protected online. Also, online consumers need to feel confident that the sites to which they provide their credit card numbers are reputable and safe from online theft. Accordingly, since Jamaican banks have been reluctant to facilitate online credit card transactions primarily because of the absence of online credit card verification companies, the Government could facilitate the process by entering into dialogue with the banking sector and business community.

(3) *Intellectual property and the Internet*

Intellectual property is the bedrock of the music industry. Richard Constant, General Counsel to PolyGram, one of the largest global distributors of music, in a speech to the European Parliament's Legal Committee, said that "The music business is utterly dependent on copyright legislation. Without the appropriate laws to protect our rights, all the creativity in the world, all the very best music we can find and record, will earn us nothing" (EU, 1998). Widespread piracy of Jamaican music has been a perennial problem for the Jamaican music industry and this issue needs to be expeditiously addressed if the benefits of the convergence of music and electronic commerce are to be achieved and the full potential of the music industry is to be maximized.

For e-commerce to become a viable channel of distribution, a supportive legal and regulatory framework needs to be created that will protect copyright owners against infringement in the new digital environment. Currently, Jamaican copyright law does not afford record producers and performers explicit copyright protection for interactive services, Internet radio and digital broadcasts and other forms of digital delivery, nor does the national performing rights society, JACAP, grant licences for online distributions. Although Jamaica has not yet signed WIPO's new Internet treaties, the Minister of Commerce and Technology recently announced that Jamaica would soon become signatory to both the WIPO Copyright Treaty and the WIPO Performances and Phonograms Treaty.

(4) *The choice of law and the Internet*

The global reach of the Internet has raised legal concerns regarding the choice of law to be applied to Internet business transactions between persons of different countries and legal jurisdictions. When music is distributed globally, issues arise as to which law should govern such transactions.²³ The Government of Jamaica will need to play an active role at the international level in finding solutions to these issues.

(5) *Financing e-commerce and music products*

Jamaican artists and record producers have traditionally been unable to raise funds from Jamaican commercial financial institutions for various reasons, including the absence of the required collateral, the absence of venture capital funds and the apparent inability of financial institutions to confidently value intangible property. This has led Jamaican-based e-commerce, businesses to provide the musical product outside Jamaica. If Jamaica is to benefit from e-commerce, there needs to be an infusion of long-term capital for all aspects of the music business

and the financial institutions will have to start to serve SMEs and adopt a different attitude towards electronic business. Moreover, alternative sources of funding will need to be earmarked to promote and facilitate music-related activity over the Internet.

III. ELECTRONIC COMMERCE AND THE CARIBBEAN MUSIC INDUSTRY IN CANADA

A. Caribbean music in Canada

As in the Caribbean, the Caribbean music community in Canada is rich and vibrant. Every summer, Toronto blazes with the excitement of calypso, thousands of elaborate masquerade costumes, and dozens of trucks carrying live soca, calypso, steel pan, reggae and salsa artists from Trinidad and Tobago, Jamaica, Guyana, Brazil, the Bahamas, Antigua, St. Vincent, Grenada, St. Lucia, Barbados, Dominica, Guadeloupe, Martinique, Haiti, Nevis, St. Kitts and Cuba during the annual Caribana Festival. Other keynote events include the Junior Carnival Competition, the King and Queen of the Bands Competition. Created in 1967 as a community heritage project for Canada's centennial year, the annual Caribbean festival has become North America's largest multidisciplinary festival, showcasing outdoor concerts of Caribbean music, calypso harbour cruise parties, glamorous dances, arts and crafts, fashion and food. Staged by the Caribbean Cultural Committee, the Caribana Festival is a complex hybrid, inheriting African, East Indian and European festival traditions from the Trinidad and Tobago Carnival. Attracting hundreds of thousands of revellers from other parts of Canada, the United States, the Caribbean and various countries around the globe, Caribana is estimated to have an economic impact of over \$200 million. Reggae music has been present in Canada, specifically in Toronto, since the early 1970s; however, it is not growing but is in fact "stagnant", according to graphic artist and music promoter Ato Seitu. As he explained in the survey conducted for this report, the Caribbean music industry in Canada is still emerging compared with the United States, where Caribbean music is heavily promoted in cities such as New York, Miami and Washington DC. The English-speaking Caribbean community in Canada is heavily concentrated in Toronto. The second largest Caribbean population is located in Montreal, but the community is French-speaking (the majority are from Haiti and to a lesser extent Trinidad); thus, the spread of English-speaking Caribbean music, i.e. reggae, calypso, soca etc., is not as wide as that of Toronto. Much smaller English-speaking Caribbean communities are located in Edmonton, Calgary, Winnipeg and Vancouver.

Although the Caribbean community has thrived economically in Canada, the music industry has unfortunately not shared equally in this prosperity. Some of the reasons put forward in the survey are the following: (1) Caribbean music was traditionally restricted to the grass-roots community level, playing in a few urban and Caribbean-owned clubs; (2) Caribbean music is primarily played on multicultural and community-based radio stations owned and operated by universities and colleges; mainstream radio stations rarely play Caribbean music; (3) the five major music labels (Polygram, Sony, Warner, BMG and EMI) that dominate the entire global industry have not shown much interest in the Caribbean music industry in Canada; and (4) the

economic potential of the Caribbean music industry in Canada is not recognized by the mainstream music industry, a problem that is compounded by the fact that there is no independent Caribbean-owned radio station. Since the 1970s, however, elements of Caribbean music have explicitly crossed over into mainstream markets and have cross-fertilized other types of musical genres, such as rap, soul, R&B, jazz, rock'n'roll, easy listening and more recently Latin music.

Traditionally, Jamaican music has been more successful commercially in Europe than anywhere else in the world. While not as lucrative as in Jamaica and in Europe, the Caribbean music industry in the United States of America has been much more prosperous than that in Canada. Even Canadian-born singers have to travel to the United States to achieve success in their musical careers. Hip hop and rap are doing much better in Canada than reggae because both young black and white youths are big consumers. Canadian rap music (also called hip-hop) tends to fare better economically than reggae music. The major labels are in the early stages of developing urban departments to market and promote this genre. The first Canadian rap artist to get a United States major label release was Choclaire, whose album *Ice Cold* achieved gold in just 35 days. The consensus is, however, that Canadian hip hop has an underexploited market.

B. Electronic commerce and the Caribbean music industry

Electronic commerce presents many business opportunities for the Caribbean music industry in Canada, but the realization of these opportunities hinges on accessibility to computers, proper technological structure, knowledge of the workings of electronic commerce and related technologies, appropriate policy support and proper organizing. Without appropriate strategies for development, becoming active in electronic commerce can generate tax implications that are as painful and difficult as those of large transnationals. There are 30,000 tax jurisdictions in the United States alone. With proper planning, the tax implications of doing international electronic business are manageable, uncertainties minimized, pitfalls avoided and planning opportunities identified.

As in other parts of the world, electronic commerce is gradually growing in the Caribbean music industry in Canada. Access to the Internet is greater in Canada than in most countries in the world, and producers, promoters and distributors are therefore taking advantage of this opportunity by setting up websites to market and promote their products and artists instead of waiting for mainstream media and distributors to handle their merchandises. Another area of interest is Internet radio. Radio has been an influential force in the promotion of music in Jamaica. For instance, IRIE FM in Jamaica is the only radio station in the world that plays reggae music for 24 hours. The community radio stations in Toronto play more Caribbean music than anywhere else in Canada. Thus, with the evolution of electronic commerce, producers in Canada are looking to capitalize on this revolution by setting up Internet radio stations to promote music, radio dramas and host talk shows.

C. Data collected from the Canadian questionnaire

Thirty electronic mail messages were sent out to Canadian universities, colleges and the various list serves. There were 10 responses to the questionnaire, expressing interest in working

on projects of the International Development Center (IDRC). The researchers were from York University, the University of New Brunswick, Dalhousie University and TransActive. TransActive, an e-commerce consulting company, has in-depth experience in building e-commerce-based businesses, including the capability to assess/research markets, understand/define business models and implement electronic commerce solutions. It has established partnerships with companies with excellent reputations in electronic commerce application development and transaction processing. In addition to this, it is well versed in the issues impacting on the music industry as a result of technological evolution and can apply this knowledge to defining appropriate successful business models for developing countries. One of its partners has researched and defined a specification for launching a music-oriented portal, one that could form an integral part of any effort to market music from developing countries, including Jamaica.

D. Expanding links with Jamaica through electronic commerce

Establishing links with the Jamaican music industry through electronic commerce would be of great benefit to Jamaican-based promoters and producers as well as to the people in the music industry (such as the artists and musicians) who usually receive inadequate financial rewards from their investments. Such links provide opportunities in international marketing, distribution and record labels, and access to international copyright information, thus making it easier for artists to acquire information on royalties, copyrights and wider exposure for artists and their products.

The Caribbean music industry could benefit tremendously by tapping into the Canadian Government's mandate on electronic commerce. The Government has adopted the goal of making Canada a world leader in electronic commerce. It is committed to allowing the private sector to lead the development of electronic commerce, minimal regulation, hard and soft goods being treated equivalently, government being model users, accelerating the adoption of electronic commerce by business and consumers, and working with business on the framework by adopting key infrastructure for electronic commerce.

E. Main survey findings

It is estimated that by as early as 2003, one tenth of the world's business will be conducted over the Internet. The Internet has proved to be a prime economic growth enabler and a source for future economic prosperity in a world economy that is driven by knowledge. The Canadian Government has declared its intention to see Canada become a leader in electronic commerce, but the reality is that two thirds of Canadian businesses have not yet realized that the Internet cannot be ignored in their future business strategies. For the Caribbean music industry to grow, it needs to take advantage of this window of opportunity being offered by the Canadian Government. The potential in cost savings, reduced overheads and increased sales is staggering. Caribbean-born, Canadian-based business people have shown an interest in investing in businesses back home in order not only to help strengthen the economy of the Caribbean but also to have some kind of financial security in retirement if they choose to return home.

CONCLUSIONS AND RECOMMENDATIONS

The global market that is emerging is a digital market and the digital revolution that is occurring in the global music industry has far-reaching implications for all music industry players, both consumers and the producers. Technical change in digitally based media technologies is occurring at an unprecedented rate. This is especially evident in the field of music. Indeed, the music sector is at the forefront of technical change in the emerging digital economy. Developing countries have an opportunity to be at the forefront of digital revolution with e-commerce and music.

While the expansion of e-commerce will undoubtedly lower transaction costs in trading and hence offer greater opportunities for increased revenue from this sector – up to now untapped by most developing countries – it will also signify increased competition owing to easier access for all industry players. Lower prices will most likely lead to benefits for global music consumers, who will be able to enjoy more and have greater choice. This implies that on the production side, size (and economies of scale) will no longer determine competitiveness or the location of production, but premiums will be placed on creativity, innovation, entrepreneurship and know-how.

The findings of the report confirm those of the STIP Review (UNCTAD, 1999), namely that the music sector in Jamaica is highly fragmented, underdeveloped and informal. Electronic commerce in Jamaica in general and in relation to music specifically is in its infancy and is hampered by obstacles such as limited access to computers and the Internet, an inadequate legal and regulatory framework, and the absence of adequate financial, technical and commercial support. In addition, there are significant knowledge and institutional gaps with regard to the music industry which prevent it from maximizing its potential.

There are, however, incipient attempts which seek to address the knowledge and institutional gaps, remove the obstacles and provide legal, financial, technical and institutional support. The use of electronic commerce in Jamaica can provide the Jamaican music industry with a unique opportunity for accelerated growth and development. If Jamaican music is to compete successfully internationally, and make a significant contribution to the country's economic performance, the stakeholders in the Jamaican music industry should expeditiously embrace e-commerce. Advances in digital technology are revolutionizing the way people communicate and are breaking down barriers created by distance. Music, a universal means of communication, and the businesses which support it, are being transformed and redefined. Undoubtedly, given the pace of innovation in technology, if the Jamaican music industry is slow to participate in the sale and distribution of music online and slow to protect the rights of copyright owners in the digital environment, within a few years reggae music online may be controlled by persons outside Jamaica with minimal returns to the country. For the music industry in Jamaica to evolve into a more formal and defined structure as e-commerce activities become more common for musicians and their business counterparts, certain critical issues must be rapidly addressed.

The obstacles created by limited access to computers and the Internet, an inadequate legal and regulatory framework and lack of adequate financial, technical and commercial support will

need to be tackled by public policies, private sector initiatives and joint public–private sector partnerships, which support both electronic commerce and the music industry. Electronic commerce will more than likely become a way of life for Jamaican music businesses when it becomes a norm in other forms of businesses in Jamaica. Significant knowledge gaps must be filled and music industry players should be encouraged to make strategic alliances and change their business practices so as to ensure certainty and transparency in the operations of the industry and increase profitability. The commendable initiatives already in place to address the above issues both at national and international levels should be encouraged and supported so that the convergence of e-commerce and Music will result in the anticipated benefits of economic growth and wealth creation for the Jamaican music industry over the next five years. Among the actions, which need to be taken include:

- (a) The creation of a joint strategic partnership between public and private sector stakeholders to develop a policy framework for the promotion of Jamaican music online, and other music-related activities;
- (b) The creation of a legislative and regulatory framework conducive to electronic commerce in general;
- (c) The funding of research projects in the areas where there are knowledge gaps surrounding electronic commerce and music, such as the IDRC-funded project and; the UNCTAD/WIPO project for the Caribbean music industry;
- (d) The encouragement of small and medium-sized businesses to exploit opportunities in electronic commerce and music by facilitating their access to computers and to the Internet;
- (e) The organization of workshops for Jamaicans involved in the business aspects of music on the use of digital technologies to improve the quality of the musical product and better distribute the product internationally;
- (f) The collaboration of the private and public sectors in a public education campaign about the value of the Jamaican music industry, and the need to fight the piracy of online music.

NOTES

- ¹ Electronic commerce has been defined as “all forms of commercial transactions involving both organisations and individuals, that are based upon the electronic processing of data, including text, sound and visual images. It also refers to the effects that the electronic exchange of commercial information may have on the institutions and processes that support and govern commercial activities” (OECD, 1997).
- ² The new economic paradigm is characterized by extensive use of information technology (IT), fast productivity and output growth, low inflation and low unemployment (Rowthorn, 2000).
- ³ The STIP Review defined the “Sounds of Jamaica” to include reggae, ska, dance hall, rock steady, mento, nyabingh, fusion and instrumental/dub musical genres (UNCTAD, 1999).
- ⁴ The artiste Prince sold 15,000 albums over the Internet in the first week after his latest album became available online (*Financial Times*, 24 June 2000).
- ⁵ By the end of 1999, there will be one million users of portable players, (Forrester Research, 1999). Most of the majors are already developing their own portable players or are planning to do so shortly (RIAA, 1999).
- ⁶ In 1999, the United Nations Conference on Trade and Development (UNCTAD) published a Science Technology and Innovation Policy (STIP) Review of Jamaica in which it stated the following with regard to the Jamaican music sector:

The most dynamic segment of Jamaica’s entertainment services is unquestionably its world-famous music industry. This industry employs 15,000 Jamaicans. Although this sector represents a vibrant and dynamic segment of the Jamaican economy, it does not currently possess the technological assets or capabilities required to manufacture and export the final product at globally competitive market prices....the industry’s contribution to the economy could be considerable. Funds are derived from public performance and mechanical royalties to local songwriters and music publishers, royalties and fees to record producers and artists, and income from concert tours and sale of ancillary products. However, at present time its contribution is insubstantial, as most of the value-added is being made by non-Jamaicans, since the local participants in the industry do not control most of the value-added chain, particularly the upstream (closer to the final consumer) activities. Reports suggest considerable potential for the industry as the global market continues to grow. It has been estimated that Jamaican music generates in excess of US\$1.2 billion (UNCTAD, 1999, p. 41).

- ⁷ These services facilitate all other forms of e-commerce, and themselves constitute a vastly lucrative area in a growing market.
- ⁸ E.g. direct online sales of business and consumer software, specialized reports, and other high-level content.
- ⁹ Computer equipment and peripherals; travel services and airline tickets; audio and video recordings and related equipment; books, flowers, clothing, toys, and even pharmaceuticals.
- ¹⁰ Retail business products and services obtained electronically include computer hardware and software, office supplies, travel services, payroll and benefits services, and specialized information and databases.
- ¹¹ Online brokerage services, direct investment and stock trading, and also numerous forms of online banking and bill payment.
- ¹² Such as electronic mail and file transfers.
- ¹³ The members of the committee are: Barbados, Bahamas, Jamaica, St. Kitts and Nevis, Suriname, and Trinidad and Tobago.
- ¹⁴ [Http://www.investjamaica.com/industries/film-music/index.html](http://www.investjamaica.com/industries/film-music/index.html)
- ¹⁵ Grove Studios produced the Grammy Award winning reggae album of Burning Spear, the soundtrack for the Disney Film *The Little Mermaid*.
- ¹⁶ Formed in 1998, Carribeat promotes and distributes music products and services from the French-, Spanish- and English-speaking Caribbean islands via the Internet. Online retailing of CDs, digital downloads, Internet radio and performance and studio bookings are also available. E-mail: caribbeat@jol.com.jm
- ¹⁷ Subscribers to this website are from the United States, Canada, England, Malawi, Jamaica, Germany, Australia, France, South Africa, Italy, Zimbabwe, Spain, Sweden, the Netherlands, Turkey, Ireland, Belize,

Bermuda, Botswana, Brazil, Ghana, Guyana, Haiti, Israel, Malta, Namibia, Norway, Poland, Uganda, Argentina, Barbados, the British Virgin Islands, Chile, Colombia, Cyprus, Denmark, Estonia, Finland, Greece, Kenya, Martinique, Netherlands Antilles, New Zealand, Nigeria, Portugal, Scotland, Senegal, Saint Lucia, and the United Arab Emirates.

¹⁸ The recently restructured Jamaican Ministry of Tourism & Sports with specific portfolio responsibility for entertainment.

¹⁹ Senior executives of the banking sector in presentations to the Parliamentary Subcommittee on the Entertainment Industry and in interviews on the subject

²⁰ The Industry Advisory Council on Entertainment is a mixed public and private sector body formed by the Government of Jamaica; Sounds of Jamaica Music Industry Directory.

²¹ Expanding the Economic Potential of Developing Countries, with Special Reference to the Caribbean Region, UNCTAD/WIPO, 2000–2001.

²² The lecture series has included the following presentations: Mike Alleyne, “Babylon Makes the Rules”; Eldon Birthwright, “Liberation Theology and Reggae”; Carolyn Cooper, “Reggae to Ragga: ‘What’s Left of the Protest?’”; “Bridges of Sound: Crossing over from Reggae to Rap and Back”; Hubert Devonish, “Language, Technology and Jamaican Dancehall”; Norval Edwards, “States of Emergency: Reggae as Political Critique”; Joseph Pereira, “Reggae goes Spanish; Garth White, “The Evolution of Jamaican Music, Parts I & II”; “Dancehall Substyles”.

²³ According to the new EU e-commerce directive, disputes will be settled in the seller’s country.

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ANNEX I

(Jamaica)

Section 2 of the report is based on information collected from the following sources:

The following persons were interviewed in 1999 (Kingston, Jamaica):

- (a) Winston Barrette, Bank Manager, Bank of Nova Scotia
- (b) Carolyn Cooper, Co-ordinator, Reggae Unit Studies, University of the West Indies
- (c) Rosalee Hamilton, Director, Institute of Law and Economics
- (d) Dianne Daley, Special Advisor, Intellectual Property, Minister of Commerce and Technology
- (e) Vilma Gregory, CEO, Vilcomm Services International Limited
- (f) Vanus James, Economist (Trinidad and Tobago)
- (g) Peter King, Special Advisor to the Minister of Commerce and Technology
- (h) Tony Laing, music historian
- (i) Jason Lee, manager, Sonic Sounds
- (j) Beverly Morgan, Chairman, Electronic Commerce Committee, Ministry of Commerce and Technology
- (k) Gary Patterson, CEO, Executive Decisions Consultancy
- (l) Phillip Paulwell, Minister of Commerce and Technology
- (m) Courtney Rattray, Special Advisor to the Minister of Industry and Investment
- (n) Brian Schmidt, Marketing Manager, Irie FM
- (o) Lloyd Stanbury, entertainment attorney, Chairman, Caribbean Music Expo Limited
- (p) Michael Witter, Head, Economics Department, University of the West Indies

The search engines used in conducting the online searches were Excite, Altavista and Hotpot/Lycos.

Dates: The study was conducted from October 1999 to February 2000 in Jamaica.

ANNEX II (Canada)

Research methodology used in Canada

Research in musical electronic commerce is almost non-existent in Canada. While use of the Internet in the music industry is gradually growing, it is yet to be explored by researchers. The research was set up in various stages. Stage 1: e-mails were sent out to 30 researchers at Canadian universities and colleges in the fields of music, cultural studies, communication and culture, information technology and video. E-mails were also sent out to Latin American and Caribbean list serves. Stage 2: follow-up e-mails were sent to those who had expressed an interest in the project. Stage 3: telephone calls were made to those who had expressed an interest in talking further about the project instead of just answering the questionnaire. Stage 4: e-mails were sent out again to the same people, thanking those who had already responded and urging the people who had not responded to reply to the questionnaire.

With regard to the various sectors in the Caribbean music industry, most people did not have e-mail addresses. E-mails were sent to 28 people in the industry. Telephone discussions were conducted with those people who either did not have e-mail addresses or who preferred to discuss the project on the telephone.

The survey participants

The participants who took part in the survey were randomly chosen from Canadian universities and various sectors of the Caribbean music industry, i.e. artists, musicians, promoters, distributors, publishers and writers over a period of two months (January and February 2000). The survey was conducted via the Internet and by telephone. While there were a large number of researchers working in the area of electronic commerce or music in general both internationally and in Canada, only a few of the researchers were working specifically in the area of musical electronic commerce (or other cultural industries). One of the researchers from a Canadian university suggested setting up a university-based research network comprising Canadian researchers dealing specifically with electronic commerce and music in Latin America and the Caribbean.

Another researcher was involved in a North American project, whereby he conducted the research for a book on Stax Records entitled *Soulsville U.S.A.* A large part of this book dealt with issues of political economy as it affected an interracial independent soul music company in Memphis, Tennessee, that operated from 1960 to 1975 before it was forced out of business by

the combined efforts of CBS Records, Union Planters National Bank and the United States Government.

The questionnaire

The questions asked in the questionnaire sent out to the researchers were:

- Are you working on or planning to work on electronic commerce and music research?
- Do you know who in Canada is actively researching or planning to research this field?
- Are you interested in working on IDRC projects in a partnership with Latin American and Caribbean researchers in this field?
- Do you know other Canadian researchers who would be interested?
- Are their experts in this field whom we should contact – in Latin America and the Caribbean or outside Canada generally?

The questions asked in the questionnaire sent out to the various people in the Caribbean music industry were:

- Do you know anything about electronic commerce and music?
- Are any of you involved with joint Canada–Jamaica or Canada–Caribbean music industry projects?
- Is anybody interested in using the knowledge for whose creation, IDRC will pay to invest in this area with partners in the Caribbean?
- What are the main problems and opportunities as regards setting up joint Canadian–Caribbean music business projects?
 - (a) Interviews with persons in the public sector who develop policies that affect the music industry or promote Jamaican music;
 - (b) Interviews with persons in the private sector who work in the industry or whose activities affect the viability of the music product as a form of export in an electronic age;
 - (c) Interviews with persons in tertiary institutions;
 - (d) Online searches regarding the Jamaican musical product.

Section 3 of the paper is based on information collected from the sources/researchers listed below. E-mails were sent out to researchers in Canadian universities and colleges in the fields of music, cultural studies, communication and culture, information technology and video, and to various list serves.

Robert Bowman, (rbowman@yorku.ca) – York University

Area of interest:

A book on Stax Records entitled *Soulsville U.S.A.* A large part of this book dealt with issues of political economy as it affected an interracial independent soul music company in Memphis, Tennessee, that operated from 1960 to 1975 before it was forced out of business by the combined efforts of CBS Records, Union Planters National Bank and the United States Government.

Sam Lanfranco, (lanfran@yorku.ca) – York University

Area of interest:

He helped build Bellanet the ICT-focused secretariat located at IDRC in Ottawa. He worked closely with Cuba on electronic issues and with IDRC-funded projects in Latin America and the Caribbean that looked at the role of ICTs and electronic commerce in the tourism sector. He is currently working with UNDP and the World Bank in similar areas.

Michael Gurstein (gurstein@techbc.ca) – University of British Columbia

Area of interest:

His field of interest is the use of ICTs for local economic development (electronic commerce). He is currently working on the use of ICT as a support for locally based music (and other cultural) activities and its links with electronic commerce and Internet support for tourism. Published paper: “Fiddlers on the wire: music, electronic commerce and local economic development on a virtual Cape Breton island”, in *Doing Business on the Internet: Opportunities and Pitfalls*, Celia T. Romm and Fay Sudweeks (eds.), Springer Verlag, Berlin, 1999. Excerpted in Internet Intelligence Bulletin, (UK) <http://www.techbc.ca/~gurstein/articles/E-CommPaper.html>.

Raju Sodhi (rsodhi@transactive.ca), Robert Levings (rlevings@transactive.ca) – TransActive

Area of interest:

TransActive is a Halifax-based electronic commerce consulting company specializing in four key areas: market analysis, electronic commerce strategy, training and education, and product development advisory services. They have in-depth experience in building electronic commerce-based business, including the capability of assessing/researching markets, understanding/defining business models, and implementing electronic commerce solutions. They are versed in the issues

impacting on the music industry as a result of technological evolution and can apply this knowledge to defining appropriate successful business models for developing countries. One of their partners has researched and defined a specification for launching a music-oriented portal – one that could form an integral part of any effort to market music from developing countries, including Jamaica.

Dexter Noel (de3055@unb.ca) – University of New Brunswick

Area of interest:

Associate Professor of Spanish and Latin American Cultures, Director of International Development Studies, Coordinator of Interdisciplinary Studies at the University of New Brunswick. He teaches an IDS course at the University of New Brunswick entitled “Music of the West Indies.”

Brigido Galvan (brigido@yorku.ca) – York University

Area of interest:

He is a PhD student in ethnomusicology in York University’s music department. He is in the process of writing his dissertation. His work deals with the transnational circulation of Latin American music and the creation of/effects on local cultural economies and identities among Latin-American Canadians.

Robert Witmer (rwitmer@yorku.ca) – York University

Associate professor at York University’s Fine Arts/Music Department. He lived in Jamaica for some time and is the author of several publications on Jamaican popular music.

Other researchers contacted about the project:

Carole Chauncey (chauncey@acs.ryerson.ca)

Jerry Durlak (jdurlak@calumet.yorku.ca)

Dalton Kehoe (dkehoe@yorku.ca)

Martha Davies (mdavies@telebyte.net or mdavies@e-connexions.net)

Andrew Tomcik (atomcik@yorku.ca)

Michael Coghlan (mcoghlan@yorku.ca)

David Lidov (lidov@yorku.ca)

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Deborah Fels (dfels@acs.ryerson.ca)

Louis Lefeber (lefeber@yorku.ca)
Patrick Taylor (taylorp@yorku.ca)
David Trotman (dtrotman@yorku.ca)
Rinaldo Walcott (rwalcott@yorku.ca)
Carole Yawney (cyawney@yorku.ca)
Jacob Slonim (slonim@cs.dal.ca)
Charles Davis (cdavis@unbsj.ca)

Telephone conversations:

Dr. Jacob Slonim (902) 494-3003
Dean, Faculty of Computer Science, Dalhousie University, DalTech
Dr. Catherine Peters (613) 961-8209, Industry Canada

Individuals from the Caribbean Canadian music industry who were contacted concerning the project:

Terry Brown – promoter, producer and song writer (teri-don@acncanada.net)
Ato Seitu – promoter and graphic artist (ato68@hotmail.com)
Donna Makeda – singer and publisher (makongo@idirect.com)
Jojo Abbenstets – promoter (howlers@idirect.com)
Makeda Silvera- publisher (sisvis@web.net)
David Smith – artist (dianedav@netcom.ca)
Sharon Issachar – promoter, producer and distributor (sherrj@hotmail.com)
Frederick White – promoter (fred@travel-net.com)
Denise Jones – promoter and artist (jones.jones@sympatico.ca)
Klive Walker – writer (klivew@interlog.com)
R.Z. Jackson – producer, singer and musician (dubworld@hotmail.com)
Jonathan Shaw – disc jockey and promoter (toonubian@hotmail.com)
Xola – musician (alololi@yorku.ca)
Milton Hart – journalist (mhart@yorku.ca)
Dalton Higgins – journalist (daltonhiggins@hotmail.com)
Kwame Brown – disc jockey (kobducats@hotmail.com)
Zowie Johnson – student activist (zjohnson@mobility.com)
William Brown – disc jockey and student activist (wabtut@yorku.ca)
Shucks – disc jockey (snakeyscorner@hotmail.com)
Mertella Moir – promoter and community worker (mjmsm@home.com)
Varqa – musician and poet (allthingpositive@hotmail.com)

Annex III

USEFUL WEBSITES

http://www.emusic.com	Site offering music for sale available through direct downloading
http://www.islanlife.com	Site offering information on Bob Marley, Ziggy Marley and the Melody Makers, as well as the opportunity to purchase their music videos and merchandise. A Gift Store, online music catalogue, and furnishings and fashions, are also available.
http://www.homeviewjamaica.com/iriefm/	Site for Jamaica's all-reggae radio station, featuring 24 hour live audio
http://www.liquidaudio.com	Site offering software for downloading music and web hosting for artists
http://www.listen.com	Site providing an extensive directory of music available with the permission of the legal copyright holder for download in MP3, Ms Audio, etc.
http://www.niceup.com	Site with information on reggae music as well as links to Reggae: artists, labels, radio stations and business. The site also has a very extensive list of reggae mail order sources.
http://reggaeambassadors.org	This site serves as the portal for an international network of reggae enthusiasts who have as their objective to promote the best interests of the singers and players as well as the reggae industry as a whole, and to act as a vehicle to make reggae music more popular.
http://www.reggae.cd.com	Site with a comprehensive online reggae music, rocksteady, ska, CD catalogue. It offers free shipping of CDs within the United States. Reggae videos, books and services are also offered.
http://www.reggaeexpress.com	Site with over 8,000 reggae CDs and offering shipping without charges in the United States.

<http://www.Reggaetrain.com>

A site with links to 101 reggae business sites.

<http://www.thirdworldband.com>

The official Third World site featuring music clips, a chat room, booking information, tour dates, band bios and band history.

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The Science, Technology and Innovation Policy Review: Jamaica. 156 p. Sales No. E.98.II.D.7. \$23.

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Report of the Workshop on the Transfer and Development of Environmentally Sound Technologies (ESTs). Sales No. E.94.II.D. 1. \$10.
(Joint publication with the Government of Norway. Oslo, Norway.)

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QUESTIONNAIRE

Electronic Commerce and Music Business Development in Jamaica: A Portal to the New Economy?

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Good	?	Poor	?

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7. Please indicate the three things you liked least about this publication:

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Consistently good ? Usually good, but with some exceptions ?
Generally mediocre ? Poor ?

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Very useful ? Of some use ? Irrelevant ?