



Session Title:

Teleuse at the Bottom of the Pyramid

**Genderstanding Mobile Telephony:
Women, Men and their Use of Cellular Phones in Jamaica**

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Abstract

The mobile phone has emerged as the most widely-used communication device of the present era, with penetration levels among both men and women exceeding 94% in Jamaica. The cellular phone is also widely used across all classes, including those described as living 'at the bottom of the pyramid'. This paper draws on a recently completed national household study of quantitative patterns of mobile phone usage, as well as on qualitative data gathered in the country from both men and women. Among these are detailed interviews of a disabled female urban market trader and a rural-based male taxi operator, who provide insights on their motivations and practices as owners of mobile telephony. Both respondents regard the phone as indispensable to their business and necessary in terms of personal needs for social networking. At the same time, these interviews offer glimpses of how men and women relate to their mobiles in similar yet different ways.

The study benefits from global insights provided by a variety of sources, including the work of researcher Hans Geser, prior research in Jamaica by both the authors and by ethnographer Heather Horst. The authors conclude that while male and female usage patterns may appear similar, there are subtle qualitative differences between men and women's approaches to mobile communication. The paper concludes with a range of recommendations, including the need for further qualitative research into the effects of mobile telephony on interpersonal relationships, differentiated handset acquisition and usage patterns among men and women and, on how the mobile phone may provide a platform for both enhanced business development opportunities among low income households and an easier transition by low income users into more advanced broadband technology applications.

1.0 Introduction

The emergence of the mobile phone has brought about profound changes in how people of all classes relate to each other, conduct business and organize their lives and communities. In Jamaica, where cellular phones have achieved one of the highest levels of penetration globally, this impact is even more keenly felt among 'bottom of the pyramid users' whose low-income families often rely on basic communication systems in order to make a living. Jamaican mobile phone usage has achieved 94% and 96% prevalence, with users spanning age ranges, sex and social status to embrace the most widely accessible personal communication instrument of the present era and maybe of all time.

But how do men's uses of the phone differ from those of women? Do girls operate differently from boys in handling this commonplace but complex communication device in Jamaica and the wider Caribbean? How does poverty affect the exercise of gender roles and the adoption and use of mobile telephony? This paper reports on the preliminary findings of a qualitative study currently being conducted among low-income mobile phone users in Jamaica. It uses case studies, focus groups, personal observation and detailed interviews to track trends in male and female usage patterns and practices.

The term 'genderstanding,' used in the title of the study, is borrowed from author Meryl James-Sebro, in her quest for a more nuanced understanding of gender relationships as they affect people in spiritual, domestic, community and other social and cultural contexts. The logic of 'genderstanding' is to deepen and share understandings and sensitivity and to help bridge unequal power relations between women and men. The concept is being applied here to the search for a better understanding of the male and female approaches to interpersonal communication. In this context, it seeks to discover how the mobile phone may reduce the social divide between men and women in urban and rural settings and enhance the development of low-income families.

1.1 The context

The paper emanates from Jamaica, the largest of the Anglophone democracies in the Caribbean. Jamaica has a population of 2.6 million (Jamaica census 2000) and a per capita income of US\$ 3370. Its economy relies most heavily on tourism, bauxite production for aluminum export and on the traditional export crops of sugar and bananas. The country has an independent judiciary and enjoys freedom of expression through a wide range of media institutions.

With a labor force of 1.2 million, Jamaica's unemployment rate in April 2007 has been estimated by the Statistical Institute of Jamaica (STATIN) at 9.5%. However, it is widely regarded as being higher, given known levels of under-employment and seasonal work, particularly in the agricultural sector. Women and girls tend to number more heavily among the unemployed. In April 2007, STATIN indicated that the number of men in the unemployed labor force was 44,000 or 6.2%, while women numbered 76,300, or a female unemployment rate of 13.6%. This data bears relevance to the status of women and men both as tele-users and as members of the wider society and may help condition how they respond respectively to the innovation of mobile telephony as they seek to improve their lives.

1.2 Tele-use landscape

The telecommunications context within which these people operate becomes important as part of understanding key issues of network access and service provision in Jamaica. While we indicated earlier that there is almost ubiquitous access to the mobile phone across all classes and the two gender groups, this level of participation was not always evident. The rapid growth of the mobile user base from about 300,000 mobile subscribers in the year 2000 to over two million at the end of 2007 is the result of a policy shift and increased foreign direct investments. After more than a century of monopoly telecommunications service provision by the incumbent Cable and Wireless PLC, the country moved into a competitive framework with the adoption in 2000 of a new Telecommunications Act.

This competitive regime led to new entrants such as the Irish provider Digicel, the American company Centennial which later became MiPhone and others in the mobile sector. More recently the provision of wired service by Columbus Communications, trading as Flow, has added competition in the provision of landline services, including the so-called triple-play of Telephone, Cable TV and Internet services. These competing entities, providing cheaper, more diverse offerings, have contributed to an expansion in a burgeoning new telecommunications landscape, with greater access for the low income or unemployed inner city residents and remote rural users who were previously excluded from the network by cost and technology.

1.3 Gender and the mobile phone

According to the results of a DIRSI national household survey on mobile telephony conducted in Jamaica by the UWI's Telecommunications Policy and Management Programme (TPM), women enjoy a 2% higher level of mobile phone usage than men. Women also appear to be earlier adopters. Almost 4% more women than men reported consistent use of the mobile phone over the preceding four years. The September 2007 Jamaica study reported that:

94.9 % of women and 93.1% of men used a cell phone in the last three months. The data suggest mobile telephony constitutes a common, long standing, and constant feature in the lives of a large majority of Jamaicans. This is supported by 69% of the respondents who report that they have used the mobile phone for a period of four years or more, which is consistent across both genders: 67.5% and 71.6% of male and female users respectively (Dunn 2007).

As Geser points out, where current usage figures between men and women are close, what may differentiate them is the nature and quality of phone usage. "While both genders are rather similar in the quantitative intensity of usage, they still differ significantly in the qualitative patterns and purposes of use." He also notes that "men and women have always been found to maintain quite different attitudes towards the phone and to give it a different place in their whole 'communicative economy'" (Geser 2006:2). As we will see later, these observed global variations also show up to some extent in the Jamaica study.

1.4 Internet usage

While there is now widespread access to the mobile phone, access to the Internet by both male and female Jamaicans is considered low by global standards. According to

the Jamaican DIRSI study, broadband Internet usage in Jamaica averaged just over 20% among all age ranges and both sexes. This means that some 80% of prospective users were not online. While this DIRSI figures is a lower penetration level than reported in earlier ITU estimates (see below), it is widely agreed that Internet access in Jamaica is lower than desirable. Speaking in May 2006, former Technology Minister Philip Paulwell stated that, "Internet penetration rates in Jamaica have remained behind those found in more dynamic markets, especially Asia, presenting a serious obstacle to the realization of the government's objectives to develop a strong and effective ICT sector" (Paulwell 2006).

Table 1 – Jamaica internet usage estimates 2000, 2002, 2006

Year	Users	Population	% Pen.	GDP p.c.*	Usage Source
2000	60,000	2,597,100	2.3 %	US\$ 3,056	ITU
2002	600,000	2,675,504	22.4 %	US\$ 3,229	ITU
2006	1,067,000	2,692,569	39.6 %	US\$ 2,900	ITU

Source: UNDESA.

Note: Per Capita GDP in US dollars.

In terms of E-readiness, the Minister said Jamaica had made tremendous progress and was now "behind the United States, Canada, Brazil and Chile in terms of our E-readiness for this region", and was "looking forward to overtaking them as the first small developing country to do so in the region" (Paulwell 2006).

In terms of Jamaica's e-Readiness, the Economist Intelligence Unit (EIU) indicated that in 2006 Jamaica's ranking declined by two places from 41st to 43rd globally. However, Jamaica's readiness score improved by just over 4% (from 4.82) to 5.03 over the preceding year. The EIU reported that almost all countries on the list improved their scores. The report indicated that the middle 20 countries, which include Jamaica, saw an average improvement of over 6% in their scores. This means that Jamaica's improvement, while significant, lagged behind its counterparts on the EIU list.

According to Jamaica Central Information Technology Office, CITO, the primary reason for this is that the EIU 2006 rankings recorded improvement for Jamaica in only one of the six e-readiness categories: **Connectivity**. Jamaica's connectivity score improved by a very notable 29% but this was not sufficient to transform its overall ranking. CITO expressed the hope that the recently approved E-transactions Bill would lead to an increase in consumer and business adoption of the electronic transactions strategy along with the provision of supporting e-services, which should lead to a boost in all areas of the country's ICT environment.

By taking these trends and the demographic data into account, the paper provides a gendered and case-based analysis of mobile telephony use among the poor in Jamaica.

2.0 'Genderstanding' Jamaican mobile telephony

2.1 Case Study 1 – Inez

2.1.1 Disabled but not Immobile

Inez is a 40-year old Jamaican fruit and tuber vendor operating her own small business in the Papine market, located in the capital, Kingston. She lives in an adjoining area of the city and commutes daily to and from the market. Inez is physically disabled and travels to and from work via a faithful motorized wheel chair, which she navigates in amongst the bustling traffic of the city. Given her disability, Inez finds it difficult to make personal contact with her suppliers and customers on a daily basis. The gadget that has come to her rescue is her ever-present mobile phone. *“Yes man, I can get me business going by calling suppliers who deliver my goods right to my stall or at a location where somebody can pick it up for me. I don't know about anybody else but the cell phone is important to me”*

2.1.2 Security

Like many other women encountered in the study, Inez sees the mobile phone as a means to improve her personal security. She notes that sometimes it can cause people to lose their life: “a man can pass you by and use the cell phone to call another who can hurt you, as you continue your journey.” She regards the ownership of flashy new phones as something that can threaten personal security and attract thieves. “From phones just came in, I bought one and still have it until now,” she says. Asked why she has taken this approach Inez explained: “From it can say ‘Hello’ and ‘yes’ and so forth, I am ok, because they will kill you for the brand of phone you have. The phone could even cost one dollar, once it can say ‘hi’ ‘hello’ and ‘yes’ and I can hear, I don't care. Look at my phone casing now. Do you see how it is? I am not going to change it. I got a new phone from abroad recently, but ‘is this one a want. As you take out the new phone to talk, and say ‘hello’, a man come from nowhere, snatches it and runs away, and if you talk they want to kill you for it. So I prefer the old phone.” Speaking philosophically, Inez remarks, “the cell phone is a good thing and a bad thing. It makes people lose life and it makes people gain life. It is good and bad...”

2.1.3 Business tool

Inez credits the cell phone for enabling her, despite her disability, to eke out a living in the harsh environment of poverty that surrounds her. As an urban vendor of agricultural products, she often needs to make contacts with suppliers in rural farming communities. Inez combines her use of the mobile for work and social outreach. She refers to her friend Jacob, who supplies her with produce, but whom she also telephones socially from time to time. “Yes man, sometimes I want to call mi fren Jacob and say to him XYX, and in no time somebody pick up something from him for me”

Previously, she had to arrange this with great difficulty. “Since cell phone came about, it has been more comfortable for me. For example, if my phone is not working now, I cannot eat because I am worried about it, because my business is going to go bad, because some people who are supposed to contact me cannot do so. Therefore, I must have a phone.” *Asked how this has impacted her income stream, Inez makes clear that it has helped her to gain additional income and to procure and deliver her goods more efficiently.*

2.2 Case study 2 – Winston

2.2.1 “It is part of my body...”

Winston is a 47-year old Jamaican taxi operator from the rural parish of St Ann. He operates his taxi in the capital Kingston, but returns regularly to his home base some 60 miles inland. Winston says he has owned a mobile phone for more than a decade and relies on it as his most important possession after his taxi car itself. “The cell phone is part of me now, so it’s hard to leave it. It is part of my body, so if its not there, I wouldn’t go any far distance without realizing that I don’t have it. I don’t work without my cell phone and I always make sure it is charged and have credit.”

2.2.2 Good for business...

As a taxi operator, the mobile is commonplace among his peers and competitors, and provides a ready source of work from customers’ business calls. While Winston sometimes receives text messages on his phone, he has never sent a text message. “Whether for foreign or for yard, I just call!” He mainly uses the mobile for business, and finds it “flexible, as passengers can call me and I can get to people. It is so much more convenient.”

2.2.3 Personal freedom

Winston uses the mobile phone both for business and personal purposes and sometime calls relatives and friends abroad. He finds it much easier to make these contacts with the mobile. “Previously when I wanted to make a foreign phone call, I would have to join a long line at Jamintel and wait until you hear yu number and name and then yu go to make a call, and yu would pay for yu time,” he recalls. But, now, he says he can make his calls home and abroad from inside of his car. “For instance, about 3 days ago, one of my friends died, and I just called my friend overseas to let him know. This technology is great, man, I love it!”

2.2.4 Security

Winston is accustomed to changing his mobile phone regularly, partly as a result of theft of newer phones. “With the style of the cell phone, you can have it with you anywhere. Its very convenient and exciting.” His first mobile was a high fashion ‘flip’ phone, which he acquired from a friend in Canada. ‘I used it for a good period of time and then they changed over time and start improving. Winston reports however, that his newer mobiles are often stolen: “they stole about 3 or 4 phones from me.” He said that only recently the same thing happened again so he has to be very careful. “I bought a brand new phone not even for one month, and it was stolen from my car”

2.2.5 Perception of common gender roles

For Winston, both men and women use the mobile phone for the same basic purposes: “Some ladies talk a lot, and they love to be on the phone. But I think it can be vice versa.”

2.3 Analysis and Conceptual Issues

While caution must be exercised in not reading too much into only two quoted respondents, our wider observation and research suggest that both men and women in low-income households exercise similar patterns of basic usage for the mobile phone. As indicated in the quantitative study, both men and women use the mobile phone to make social links and to network among friends and family. This is regarded in the quantitative study as a primary form of use of the phone. However, the interviews and personal observation data are showing that there is a far more complex engagement in what appears to be social networking.

People are combining in a seamless manner an economic usage with their social communication. As Inez indicated in her interview, she uses her phone to call her friend and what may appear to be a social call also functions as a business link. It is clear that where users are involved in self-employment or small businesses, the phone is used to garner new business, make their services more timely and efficient, while maintaining social contacts with friends and family.

The interviewees both recognize that the mobile phone is a crucial device for personal security, a result that is also reflected in the quantitative study. In those inner-city communities where crime is prevalent, as in up-town settings, there is the omni-present risk of criminal attacks. Concerns about this may be mitigated by the presence of the phone and the ability to make emergency contacts. The wider fieldwork data supported this security attribute as being particularly valued by women. But as we have seen in Winston's narrative, it is also crucial for men in certain occupational activities, such as in the provision of taxi services.

Both men and women encounter the risk of theft of their mobile phones. The resistance strategy of Inez differs markedly from that of Winston in this regard. The female respondent prefers to keep a low profile older phone, while the male respondent, who is more attracted to the newer editions, simply replaces the phone as often as it is stolen and vows to be more careful each time. While these different approaches cannot safely be assigned gender specific attributes, it may be true that women adopt strategies of greater personal security for their phones while men take greater risk with the safekeeping of their mobiles.

It could be argued that Winston's relationship to his mobile phone revolves around business, security, personal freedom and empowerment. While these could be considered male attitudes towards the cell phone, they could equally be applied to the female user, Inez. Ling, as cited by Geser (2006) suggests that in relation to male ownership of mobile phones, "its ownership, but not necessarily its use for social interaction, provides a secure foothold. It increases ones' potential for independent action and, when confronted with the unexpected such as coming upon a car accident along the road, the mobile telephone allows one to aid in setting things aright. There is also the symbolic value of being involved with the newest technologies as being a sign of one's modernity."

While Inez and Winston reflect common basic usage patterns, there is some variation in patterns of acquisition. In addition, there seems to be some amount of gender neutrality, as both genders have almost identical percentage usage and ownership of mobile

phones. This result emerges from the TPM study. Table 2 presents the cross tabulation results for users of the mobile phone by gender.

The perception that women are more active users of the mobile phone than men is not strongly supported either from the interview data or from the national household survey. As indicated in Table1, women were found to be only marginally higher (1.8%) in mobile phone usage than men. According to Winston, while “some ladies talk a lot, and they love to be on the phone,... I think it can be vice versa.” While the uptake of mobile phone ownership initially favored males, that divide has now also been closed.

Table 2 – Users of mobile phone * Gender cross tabulation

% within GENDER

		GENDER		Total
		M	F	
TM1 - Users of mobile phone	Yes	93.1%	94.9%	93.8%
	No	6.9%	5.1%	6.2%
Total		100.0%	100.0%	100.0%

An interesting contrast here is with Internet usage, Geser (2006), suggested that, “in a very fundamental way, the cell phone has contributed to equalize the communicative social integration of men and women much more than the Internet, where male users still dominate.” The Jamaica national household survey conducted by TPM, found that Internet usage among the population was very low overall, but that in Jamaica women are marginally higher users of the Internet than men. Figure 1.1 displays some of the results. While the qualitative data have not yet extended into gender variations of Internet usage, the results of the Jamaican household survey appear to differ from the reported international patterns that suggest that men are still the dominant users of this ICT resource, globally.

In the case of text messaging, it is clear that the main differentiating demographic is age. Younger respondents in the household survey were far more active users of SMS text messaging than older respondents. Our interviewee, Winston, at age 47, is able to receive and download his numerous text messages but admits that he has never sent one himself, choosing instead, like most in his age cohort, to make a call. As Figure 1.2 from the household data indicates, women tend to send more SMS text messages than men. While the difference is not great, it is significant and may reflect variable income and employment levels, as SMS is regarded as a cheaper means of communicating.

Figure 1 – Average number of hours spent on the Internet

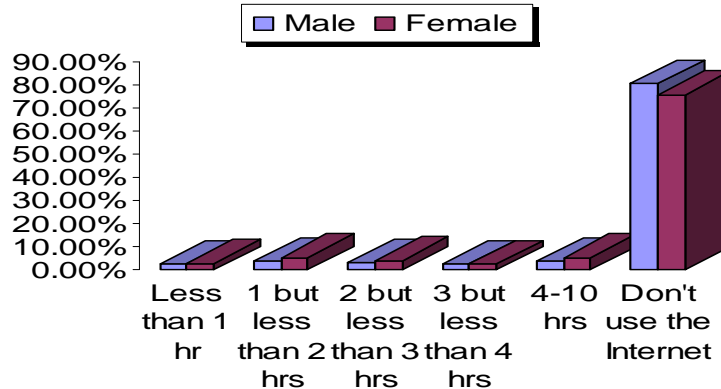
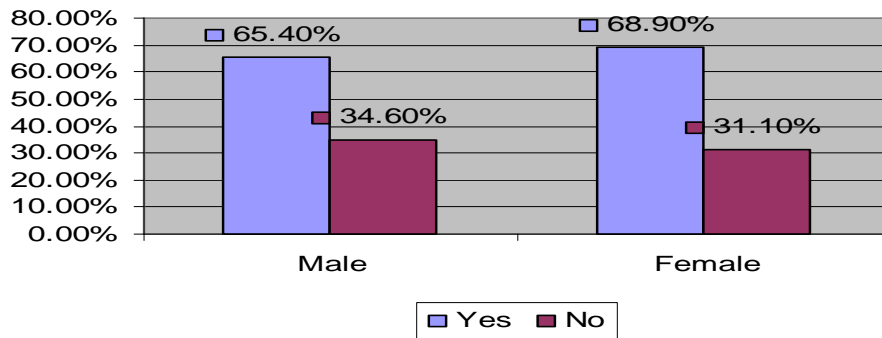


Figure 2 – Sent or received text messages in the last 30 days



Winston and Inez’s profiles indicated that bottom of the pyramid users are dependent on their mobile phones for commercial activities as much as, or perhaps more, than the top end executive users. While the top end users might use mobile telephony for basic business activities such as arranging meetings or liaising with staff/co-workers, their jobs tend to demand even more multimedia features to effectively execute their tasks. In addition, they usually have a back-up in the form of office landlines or home telephones.

For bottom of the pyramid users, basic text messaging and pre-paid voice calls constitute the single most important element determining the success or failure of their businesses or social interactions. For example, when Inez was asked if she could manage for one week without using a mobile phone, she indicated, “No! No! That is boring; I cannot live without it because you must want to talk to somebody to know what is happening”. In the case of Winston, he considers it an integral part of his body, without which he cannot proceed with work or social communication. One wonders how they existed before the advent of the mobile phone. However, they now regard it as an indispensable tool for work, social relations and general communication.

While gender gaps have closed in terms of access to the mobile phone, another divide has opened up, namely the class divide in ownership of higher end mobile devices. The cost of personal digital assistants (PDAs) and other mobile handsets, is a huge obstacle to lower income users acquiring more sophisticated multimedia features.

Inez gave another interesting perspective on how the mobile phone is being used at the bottom of the pyramid. In her response to whether she thinks men and women use the cell phone differently, she responded, "well, the cell phone is a good thing and bad thing. It is good and bad. Good for business, bad for business; good for some people, bad for some people". Her response may be taken as an allusion to a kind of neutrality in the range of applications to which both men and women apply their use of the mobile phone. It is clear that the form of stratification between genders in mobile applications is dependent on social class and on the nature of transactions in which a person engages with his mobile phone.

Geser makes a similar argument when he suggests that "the cell phone is a technology with highly generalized integrative functions: by leveling, for instance, differences between boys and girls. Cell phones differ from most other technologies (e.g. motorcycles) which tend to accentuate rather than to minimize differences between genders, and being adopted irrespective of educational and family background. The cell phone bridges at least some gaps between different social classes." Geser further noted that, "Nevertheless, while the possession of cell phones may become ubiquitous and homogenous over all population segments (so that their value as status symbols disappears), cell phones may still accentuate social inequalities insofar as their factual usage patterns are tightly correlated with the various purposes of social actions, as well as with different situations, social relationships and social roles." The simple possession of a mobile phone may not be sufficient as a social marker of status. This may depend on the kind of device and the manner of its use.

Dunn & Dunn (2006), in an exploratory study reported the following three observed mobile trends:

- Mobile phones continuing as status indicators, e.g. The Razr phenomenon.
- Mobile ring tones in use as status indicators making the cell phone more and more customized to the personality of the owner.
- Increased dependence on mobile phones: Most respondents felt attached to their mobile.

The perception of mobile phones as an extension of one's self and indicators of status, has given rise to a myriad of anti-social behaviors with deadly consequences. The major issue at hand is that individuals of all social classes have been targeted for theft of their phones by criminal elements. This is a global phenomenon. There have been reports of individuals being killed in the process of being robbed for their mobile phones. This trend has reached alarming proportions to the point where the Government of Jamaica is considering a ban of mobile phones in schools, as a result of the stabbing death of a high school student for his phone.

Further, the utility of mobile phones has been capitalized on in criminal networks. The ability of criminals to communicate with each other more effectively has merely added to their arsenal one more deadly weapon that they can use to wreak havoc on society. This

is a point raised by Inez that, “sometimes a man passes you by and uses his cell phone to call another who can hurt you as you continue your journey.” This is congruent with Winston’s argument that, “yes [I feel more secure]. It’s a form of communication and security for me because once I have my phone, I can make a call and somebody can get to me.” This is the reality at the bottom of the pyramid.

Conclusions

The widespread use of mobile phones among low-income households in Jamaica is indicative of a social revolution in other Caribbean territories as well as globally. Great value is placed on the flexibility and versatility of a telephone that travels with the user wherever he or she wishes to go. This brings with it great opportunity for use of the device for both good and ill. The main case study respondents interviewed suggested that the mobile phone has proved indispensable to their business and social lives. Yet, they have also suffered the consequences of its adoption. In the case of one, her acquisition of newer phones has been restricted by fear of attacks, and in the case of the other, experiences of several thefts of such newer devices. Both also see the opportunity it offers for criminal activity. The implication of this is the need for combined public policy and industry initiatives designed to counter this fear, the reality of mobile phone theft and associated violence.

Yet, both interviewees and industry analysts agree that the mobile phones are vital to community. The study suggests that mobile phones have also contributed to narrowing the communication divide across gender lines, despite prevailing variations in income and employment that favor men. Mobile phones have also reduced the social class divide, in contrast to the manner in which the personal computer and the Internet have accentuated these divisions globally.

While our initial analysis of the household survey results suggests that the mobile phone is used mostly as a social networking device, the limited but instructive qualitative data are indicating a more nuanced and integrative usage, combining business and other income generating activities with calls that also provide social contact with family and friends locally and overseas.

The mobile phone’s convergence with the Internet and the possibility of cheap VoIP calling are clear directions for the development of mobile broadband opportunities that can benefit the poor. This must be facilitated by speeding up the pace of convergence of Internet technologies and mobile phones and reducing the cost of access to this converged mobile network. While acquiring an Internet-ready laptop may be far away for many low-income families, the best possibility for access to the Internet may be via low-cost mobile handsets with wireless links to cyberspace.

It is clear that low-income earning groups are not waiting for official government policies to empower their use of available technologies. They have embraced in quite unpredictable volumes the available mobile technology, and will continue to be creative adopters. The growing number of mobile subscribers will prompt service providers to respond to the collective purchasing power of low-income users by providing more functional operations at lower costs. While continued commercial initiatives will be crucial, government regulatory powers must also be brought to bear on the pressing need to ensure greater access and more affordable prices for users at the lower end of the socio-economic spectrum. The creation or use of the universal service provisions in

the more modern ICT legislation will help to speed up the pace of more low-income business applications via the mobile phone.

The assimilation of mobile telecommunications into the everyday activities of people at all levels is already achieved in Jamaica and in many other countries that are in a similar stage of development. This gives rise to new possibilities and new challenges in constructing appropriate policy frameworks to harness and transform mobile access into broadband access to facilitate improved ICT application in health, education, e-commerce, business development, cultural exchange and teleworking. The observations by Horst provide a useful closing backdrop for our analysis:

For many Jamaicans without access to a regular or reliable phone service prior to 2001, the mobile phone is viewed as an unadulterated blessing, transforming the role of transnational communication from an intermittent event to a part of daily life. For others, however, the mobile phone remains an object of ambivalence, bringing unforeseen burdens and obligations (Horst, 2006).

4.0 Recommendations

With virtual universal adoption of the mobile phone in Jamaica and in most other English-speaking Caribbean countries, there is the need for continuing research into the social and gender implications of the uses of the device, and on the extent of adoption of higher levels of broadband technology applications by various social strata, including the poor.

Among areas for future research are:

- The effects of the mobile devices on interpersonal relationships
- The effects of text messages on formal writing skills and on functional literacy.
- The feasibility of utilizing mobile phone technologies to help mainstream small businesses
- How the mobile phones can be harnessed to help in the delivery of emergency services and assistance especially among the poor
- Patterns and types of handset purchases by men and by women
- Local and global trends in mobile phone etiquette and security norms
- The disposal of disused handsets and its impact on the environment
- Perception and reality of health impact of cellular handset and cell site emissions
- The economic contribution and development prospects of supplementary businesses such as phone card distribution outlets and handset repair shops

While household survey data will continue to be useful for an overview of trends in the industry, there is the pressing and on-going need for qualitative research, including detailed ethnographic and gender-based studies on the effects of this widespread emerging technology on the population and on the attributes of an evolving mobile phone culture in Jamaica and the wider Caribbean.

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