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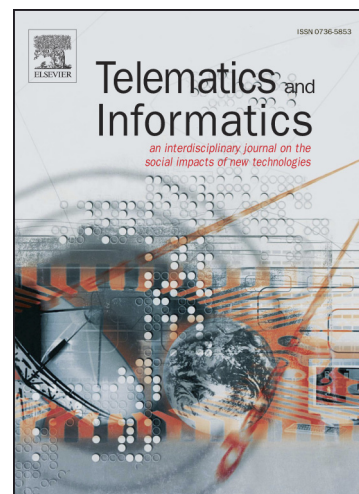
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**Title:**

**Towards an Empowerment Framework for Evaluating Mobile phone Use and Impact in Developing Countries**

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## **Towards an Empowerment Framework for Evaluating Mobile phone Use and Impact in Developing Countries**

### *Abstract*

This paper challenges the dominant optimism around mobile phone contribution to socio-economic development in the developing world. It argues in favor of how mobile phones could empower socio-economically marginalized young to overcome their marginality by examining its use within the broader socio-cultural, economic and political contexts. Drawing on the information and communication capabilities of mobile phones, this paper uses an ethnographic data and a synthesized empowerment framework to analyze the relationship between mobile phone usage and empowerment of marginalized young people in Sierra Leone. In doing so, the paper focuses on the socio-culture, political and economic uses of mobile phones. The focus on these uses is based on the argument that for mobile phones to empower marginalized young people their uses should facilitate economic, political and socio-cultural issues underpinning their marginality. The study results suggest that mobile phones empower marginalized young people to communicate and access vital livelihood information to articulate their everyday activities. However, it is not strongly evident that the use of mobile phones completely emancipates them from socio-economic and political exclusion.

**Keywords:** Empowerment Theory; Empowerment Framework; Mobile Phone and Marginalized Young People; Sierra Leone; Mobile Phone and Development

### **1. Introduction**

There are almost seven billion mobile phones subscriptions at the global level, and three quarter of these subscriptions are from developing countries (ITU, 2014). In Sierra Leone, mobile phones subscriptions have grown exponentially from 2,000 in 2002 to 3.5 million in 2013 (NATCOM, 2014). Alongside the rapid global penetration of mobile phones, there are optimisms that their uses have facilitated socio-economic opportunities for poor and marginalized people living in developing countries (e.g. Aker & Mbiti, 2010; Donner, 2006). Indeed, researchers have documented the potential benefits that mobile phones have accrued to the poor, including fish folks in Kerala (Abraham, 2007), grain traders in Niger (Aker, 2010), mobile women in Bangladesh (Aminuzzaman et al., 2003), small business owners in Rwanda (Donner, 2006), rural and urban dwellers in Ghana (Sey, 2011) and Burkina Faso (Hahn & Kibora, 2008). However, in spite of this, there are still concerns that the relationship

between mobile phones and socio-economic development remains unclearly established. A particular reference can be drawn from three contested research groups that underpin mobile phone studies in developing countries. The first group, the technological deterministic proponents, believes that the mobile phone is a panacea for ameliorating the problems of poor people (e.g. Ekine, 2009; Scott et al., 2004b; Smith et al., 2011). Here, the mobile phone impact is often determined by the outcome of development projects or mobile phone applications (Sey, 2011). The second group of researchers are critical that the increase in access to mobile phones strengthen and widen existing socio-economic disparity between poor people and the privileged segments of society (Buys et al., 2009; Etzo & Collender, 2010; Han, 2012; James, 2009; Wade, 2002). Finally, there are those who view the mobile phone as a means to achieving the development of human well-being (Aminuzzaman et al., 2003; Donner, 2006; Horst & Miller, 2006). A community of researchers from this tradition links mobile phones to socio-economic development by examining their everyday uses in the socio-economic, political and cultural milieus of the users (Hahn & Kibora, 2008; Sey, 2011; Slater & Kwami, 2005). Despite the divergent views, the three research approaches share a common denominator. That is, their focus on mobile telephony and its societal, economic, social and political impacts.

This paper is associated with the third group of researchers, but it takes a different view by linking mobile phone impact to mainstream participatory development thinking. Under this thinking, development is understood as the freedom to choose one's livelihood direction (Sen, 2001). In this context, marginalized individuals are expected to be empowered to map their own development trajectories by participating in development processes and holding accountable institutions that affect their lives (Huesca, 2008). While the processes traditionally occur in particular development project settings (Van de Fliert, 2010), the individual efforts outside this framework often go unnoticed or ignored. This paper attempts to make this connection by arguing in favor of mobile phones as crucial tools for empowering marginalized young people to make informed choices, expand their livelihood opportunities and enhance their well-beings (Gigler, 2004). The argument is underpinned by the understanding that mobile phones offer effective information and communication capabilities to the marginalized to enable them become active participants in their own development agenda (Beardon, 2004).

Overall this paper has two specific objectives. First, to suggest an empowerment framework that links mobile phone usage to human development outside the strictly economic formulations of the technology (Heeks, 2010; Madon, 2000; Thomas, 2012;

Warschauer, 2004). The framework emerges as a conceptual map of this study verified by the research data and key empowerment theories. Second, the study applies the framework to critically examine the relationship between mobile phone usage and the empowerment of marginalized young people in Sierra Leone. This paper defines marginalized young people in Sierra Leone as anyone aged 18-35 that lack or have limited access to political, social and economic opportunities either as a result of the state, community and family neglect or individual agency deficiency (Peeters et al., Heggen, 2000; 2009).

The rest of the paper is organized as follows: The second section re-conceptualizes empowerment theory to develop the framework. The third section briefly describes the research design. The fourth section provides a brief review of the institutional landscape of the mobile telephony industry in Sierra Leone and the acquisition and ownership pattern among the marginalized young people. This is followed by the presentation of the research results and discussion in section five and the final conclusion in section six.

## **2. Conceptualizing Empowerment**

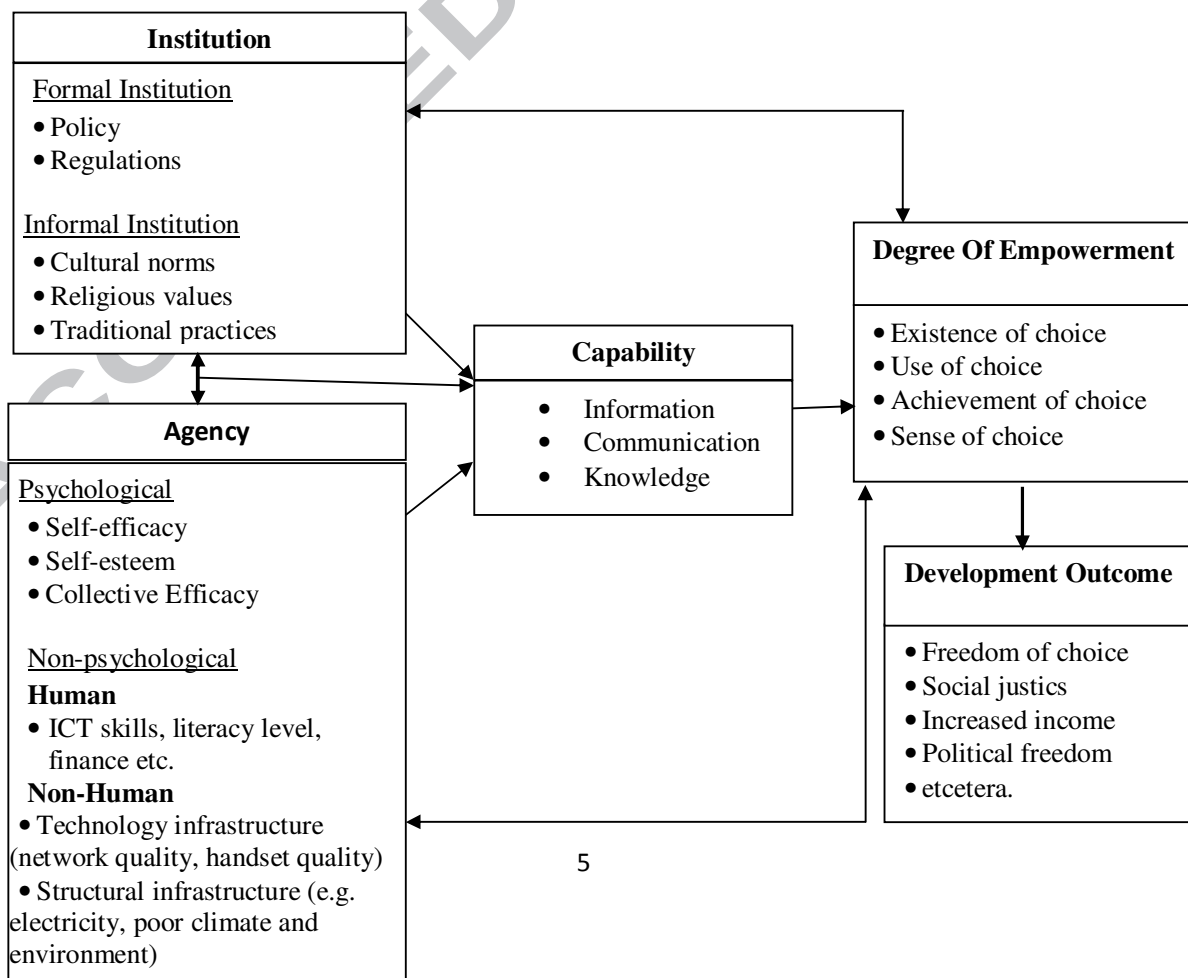
### **2.1 Empowerment as an individual attribute**

The empowerment concept is often understood in terms of power relations between people with less power and people with more power (terms as having power above others). (Rowlands, 1995; Sen, 1997). Empowerment in this case is inherently the end goal (Luttrell et al., 2009). It is achieved by addressing power inequities between people with less power and people with more power (Rowlands, 1995; Sen, 1997). Another form of empowerment is characterized as ‘power to’ and ‘power within’ (Rowlands, 1995). Here, empowerment is a change process involving a bottom-up participation of people with less power to pave a way for a greater control over decision-making processes that affect their lives (Kabeer, 1999; Sen, 1997; Rowlands, 1995). In this context, empowerment is instrumental because change depends on the agency of people with less power to critically reflect on their situations, identify possible solutions and take concrete steps of actions based on the choices available to them (Freire, 1972; Gigler, 2004). This paper specifically draws on this understanding of empowerment to explain the relationship between mobile phones and empowerment. The argument for this is that mobile phones are personal tools; therefore, how they are used and what they are used for solely rest on individual choices and expected outcomes. In other words, empowering poor people through mobile phone usage involves an *agentic process* — a process whereby people take the lead in making choices and being able to transform those choices into desirable outcomes.

Studies have employed this perspective of empowerment to develop frameworks to evaluate the outcome of individual uses of Information and Communication Technologies (ICTs) in development project interventions (Gigler, 2004; Kleine, 2010). In this article, an empowerment framework is suggested as a way of evaluating individual uses of mobile phones unbound from particular development project interventions.

## 2.2 Empowerment Framework

The framework is based on research data from Sierra Leone and key empowerment components drawn from studies by Schwerin (1995), Kabeer (1999) and Alsop and Heinsohn (2005). Schwerin employs the concept of empowerment as ‘power with’ to understand community mediation process. Kabeer draws on similar understanding of power to conceptualize empowerment as a change process in terms of one’s ability to make strategic choices. According to her, key attributes for enabling less powerful people to make strategic life choices are resources, agency and achievements. Alsop and Heinsohn also identify agency as an important attribute of empowerment, but take a step further to incorporate the ‘degree of empowerment’ attribute into the mix. For simplicity, the relevant concepts from these studies are merged into a single analytical empowerment framework. The framework highlights the interrelationship between individual agency, institutional structure, capability, degree of empowerment and development outcome.



**Figure 1:** The Empowerment Model

The framework suggests that individual empowerment depends on the ability of the individual to navigate within institutional structures to enhance his/her capability and make choices. The developing outcome(s) resulting from the empowerment rests on a number of factors such as the awareness about the existence of choice and the actual use of the choice to expand a person's livelihood capitals. The following sections briefly explain the key concepts in the framework.

**2.2.1 Agency**

The first component of the framework is agency. It refers to an individual's ability to weigh options, anticipate possible outcomes and make strategic livelihood choices. Agency has psychological and non-psychological components. The psychological component encompasses self-esteem, self-efficacy and collective efficacy as crucial elements for determining the quality of human life (Bandura, 1982). These elements contribute to the actor's ability to make meaningful choices in the empowerment process (Alsop & Heinsohn, 2005, p. 8). For example, the choice to use a mobile phone to acquire vital information and knowledge about the prevention or treatment of a deadly disease partly depends on one's agency to undertake this action. According to the framework, people with psychological agency may attain a high degree of empowerment. In that sense the possession of psychological elements (such as self-esteem and self-efficacy) and capability assets (knowledge and information) would enable them to proactively explore institutional structures and make effective choices.

The non-psychological component is related to resources that enhance one's 'ability to exercise choice' (Kabeer, 1999, p. 437) and pave a way for a greater change in their lives. In their study, Alsop and Heinsohn (2005) measure resources based on what they call resources endowments such as informational, organizational, material, social financial or human. However, research data from Sierra Leone shows that resources comprise two categories: human and non-human. The former includes ICTs and literacy skills, finance and socio-cultural factors that influence users' capability. The later includes technological infrastructure (e.g. service quality and handset quality)(Kalba, 2008; Rouvinen, 2006) and

structural barriers (e.g. electricity, poor climate) that affect the delivery of efficient and effective mobile phone telecommunication services (Chipchase & Tulusan, 2007).

The framework suggests that the human and non-human resources have a reciprocal relationship with formal and informal institutions. This is because access and utilization of mobile phone services largely depend on the institutional arrangements (e.g. regulations and policies) and socio-cultural norms. Equally, the resource agency is also linked to the degree of empowerment. The argument is that the more users have access to and are able to use resources the higher the degree of empowerment and the higher the degree of empowerment, the more they able to use the mobile phone productively. For example, users who are aware about accessing productive farming techniques through mobile phones are in better position to use the technology for improved farming practices.

### **2.2.2 Institutional structure, capabilities, and degree of empowerment**

Institutional structures shape users' ability to make choices; they comprise formal and informal institutions. Formal institutions regulate the production, delivery and use of mobile phone services. Informal institutions such as cultural norms, religious values and traditional practices may inform and sustain people's actions and choices with regard to mobile phone usage. According to the framework, institutional structures and agency reinforce each other. For instance, while institutional structures shape a user's ability to make choices (i.e. agency), the choice the person make also influences how the rules, regulations or norms are set in these institutions (demonstrated by the reversed arrow in figure 1). Consequently, the reciprocal relationship between agency and institutional structures reinforces people's capabilities to use mobile phones productively. As argued by the Nobel laureate Amartya Sen, capability entails a sense of an expansionary freedom that people enjoy. The freedom itself is conceived by Sen as a primary ends as well as means to the development of people's well-being (Sen, 2001). Thus, capability in its normative sense is an individual's asset endowment to 'lead the kinds of lives they value—and have reason to value' (2001, p. 18). In this case, as illustrated in figure 1, people who have access to vital information and have developed communication skills and high level of knowledge about their needs are more likely to be empowered by using mobile phones (Schwerin, 1995).

Likewise, the degree of empowerment—that is, the existence of choice, sense of choice, use of choice and achievement of choice (Alsop & Heinsohn, 2005; Kleine, 2010) serves as a bridge between development outcomes and the rest of the components in the framework. It represents a very strong position in the empowerment mix because not all



choices a person makes empower (Kabeer, 1999). Choice itself ‘implies the possibility of alternatives’—that is, ‘the ability to choose otherwise’ (Kabeer, 1999, p. 347). However, choosing aimlessly among alternatives of choices does not lead to empowerment, ‘as some choices have greater significant than others in terms of their consequences for people’s lives’ (1999, p. 437). Equally, the existence of choice does not justify that people have the sense that it is available for them to choose (Kleine, 2010). Thus, in this context, individual empowerment rests on user’s ability to discern the existence of choices (e.g. access to mobile phone) and to actually use those choices to achieve the desired outcome (Alsop & Heinsohn, 2005).

### **2.2.3 Development outcomes**

Development outcomes are realized outcomes of one’s empowerment. It is often notoriously difficult to capture the development outcomes of people’s empowerment (Klein 2010), especially outside development project settings where pre-defined indicators are not set. In many project-based cases, the empowerment of an individual is considered as an achievement in itself. On the contrary, empowerment from an individual attribute perspective is considered as a means to achieving one’s development outcome (Alsop & Heinsohn, 2005; Kabeer, 1999; Schwerin, 1995). In this sense, a list of development outcomes is provided based on the research data of this study (see figure 1). This list is not exhaustive or fixed, it may change relative to the existence of opportunities and the endowment of individual or group to make choices that reflect some deep-seated constraints on their capabilities (Kabeer, 1999).

### **3. Research Design**

The key research respondents of this study comprised of young people who are positioned outside the normal socio-economic and political functioning of society in Sierra Leone. To understand the daily realities of this people with regard to mobile phone usage, the study adopted an ethnographic approach. This approach provided an opportunity to engage and interact with the research respondents in their socio-cultural milieus. More importantly, the approach offered a heuristic research framework to understand how the respondents constructed and reshaped their social-cultural, economic and political realities around mobile phone use. Similar to Horst and Miller (2006), data was collected from both urban and rural communities (Tombo and Wellington communities). Tombo is a small remote rural fishing community with a population of about 34,079. It is located on the Peninsula Highway about 49km east of the capital city Freetown. Its socio-economic activity is largely driven by a

small-scale domestic fishing industry. Wellington is a highly populated and remote urban community located in the east of Freetown. It has a small health center, a couple of secondary schools and limited supplies of water and electricity. Its socio-economic activity is dissimilar to Tombo in that the economic and social livelihood of the people is based on multiple and netlike economies. In that sense peoples' livelihoods are anchored on interconnected economic activities involving the formal and informal sector. In order to ensure an in-depth investigation and produce a rich ethnographic account, extended time was spent in each community. Tombo and Wellington were chosen for the research because of their geographical proximity to the Freetown central administrative offices, the access to mobile phone networks and the significant presence of marginalized young people.

The study was conducted in two phases. The first phase lasted for one month (March, 2013). It serves as scoping phase to inform the research questions, the select the research settings and locate and acquire local people's experiences of mobile phone use. During this initial phase, the researcher gathered data through informal interviews, focus group discussions, observations and document analysis. Information gathered from this phase contributed to refining the research problems, informing the framing of the research questions, selecting the research communities and identifying specific groups of marginalized young people as potential research participants.

The second phase lasted for five months (between February and June 2014). This phase involved participant observation in both open and closed settings, in-depth interviews with 50 participants, 22 key informant interviews and five focus group discussions, each composed of 3-8 participants (Barbour, 2011; Boeren, 1992). Research participants were chosen by means of purposive sampling based on the participant selection criteria<sup>1</sup> involving five different groups of marginalized young people: (i) Wharf youth (ii) Park youth (iii) Ghetto youth (iv) Petty traders in informal business or runners (v) Menial jobs/laborers. These groups were identified based on their areas of interest, skills and economic and social

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<sup>1</sup> To ensure that all groups are represented, the overall criteria were set in accordance with the objective of this study (Evers & de Boer, 2012), and involved participants whose compositions included the following:

- Must be a young person aged between 18 and 35 years and belong to one of the categories identified above
- Have experienced or at the risk of experiencing marginalisation or socio-economic hardship
- School dropouts and those who have never been to school
- Unemployed or employed in the informal sector
- Live within mobile phone coverage area in the research community

status. The group categorizations are an extension of early categories of marginalized young people in Sierra Leone (see TRC, 2004).

The data collection process during this phase adopted an iterative-inductive approach based on three stages: exploratory, focus and selective (Spradley, 1980). At the exploratory stage, researcher combined empowerment literature and participant observations and focus group discussions data to develop the research instrument and the empowerment framework. This informed the second stage (focus observation). During the second stage, in-depth observations and interviews were carried out. Data gathered during this stage was used to refine the framework and research instrument. At the final stage, the researcher applied the framework by focusing on the socio-cultural, economic and political dynamics that underpin the marginalization of young people in Sierra Leone. All data collected at the three stages were analyzed using thematic analytical approach—this involved developing codes, categories and themes. In addition, the researcher ensured that all names of the research respondents used in this study were given pseudonyms in order to protect their privacy and security.

#### **4. Mapping the Mobile Phone Landscape, Acquisition and Ownership Pattern**

##### **4.1 Institutional configuration of the mobile phone industry**

For the mobile phone to empower marginalized young people, it is imperative that they have equitable access to affordable and reliable mobile phone services. This section discusses the institutional configuration and actors involved in the provision of quality mobile phone services in Sierra Leone. Before the arrival of mobile telephony in Sierra Leone, the country's only landline telecommunication service sector was under the government monopoly. It was controlled and managed by the Sierra Leone Telecommunications Company (SierraTel), under the supervision of the Ministry of Communications and Transport.

Like many countries in Africa, the arrival of mobile telephony to Sierra Leone can be traced to the 1990s' liberalization and privatization reform discourse in Africa. In the 1990s, the World Bank and the International Monetary Fund (IMF) coerced African leaders to privatize and liberalize their telecommunications sectors. The pressure came as a result of the International Telecommunication Union (ITU)'s Maitland report, which warned of a missing link between telecommunications and development mainly because of the imbalances in the telephone access across the globe (ITU, 1985). As a result, privatization and liberalization were perceived as a major means to increase the penetration and access to

telecommunications services by many of the world citizens. Countries in many parts of the world, in particular developing countries, were forced to relinquish their telecoms to private enterprises. In Africa where many telecoms were under national government monopolies encountered resistance from key lending financial institutions such as the World Bank and IMF to borrow money. Adam and Gillwald (2007, p. 3) explain that “the World Bank and IMF used loan conditions as one of the major coercive tools for pressing privatization”. By the end of the 1990s, 13 African countries succumbed to the new lending criterion and relinquished their telecommunications sectors to private enterprises (Ibid). Additionally, about 19 sub-Saharan African countries liberalized their telecommunications sectors, which led to the penetration of multinational mobile phone companies into their domestic market. Sierra Leone did not join the bandwagon until the early 2000s, partly due to the decade-long conflict that ended in 2002. The then president Ahamed Tejan Kabba in collaboration with the World Bank and IMF facilitated the process, leading to the entry of new market forces such as Celtel and Milicom in the telecommunications sector. This was followed by the enactment of the 2006 Telecommunications Act and the establishment of the National Telecommunications Commission (NATCOM) (GoSL, 2006).

Since 2006, the Sierra Leone government has increased its commitment to develop the mobile phone and other ICTs infrastructures. As a major step towards this direction, the government developed the first national ICT policy in 2009. The policy framework provides the basis for integrating ICTs into the core development agendas such as the Poverty Reduction Strategy (PRS), Vision 2025 and the Millennium Development Goals (MDG), with the optimism of achieving the country’s development objectives (GoSL, 2009a). Furthermore, as part of the World Bank’s multi-million dollar funded West African Regional Communications Programme (WARCIP-SL), the government succeeded in landing a submarine fibre optic cable in 2013. The project aims to increase tele-density and expand access to affordable broadband. A similar commitment towards digital inclusiveness in Sierra Leone led to the government’s approval of the Telecommunications Amendment Act 2015, which paves the way for the liberalization of the international gateway.

Regardless of the seemingly government effort to improve the mobile phone infrastructure, the low quality level of service is not what many ordinary Sierra Leoneans expected. Coupled with the cost of maintaining mobile phone services, many Sierra Leoneans struggled to cope with the problems of interconnection error and erratic network connectivity. Despite the country’s national telecommunication regulatory body consistent reminder and

levying of hefty fines on some of the major telecom actors<sup>2</sup>, yet defective network connectivity remains a major challenge in the country. However, given that ordinary Sierra Leoneans rely on mobile telephony as the only source for voice communication, they continue to succumb and use whatever services throw at them by the providers.

#### **4.2 Acquisition and ownership of mobile phones**

In the early years of mobile telephony penetration in Sierra Leone, high service and maintenance cost limit the acquisition and ownership of mobile phones to few wealthy people. Service providers charged high cost for handsets, SIM cards and service maintenance, usually in foreign currency. The cheapest handset at that time cost about \$70.00, a SIM pack about \$20.00 and top-up fees a minimum three dollars (Sesay, 2004, p. 129). Considering that the majority of the population in Sierra Leone live on less than \$1.25 a day (UNDP, 2011), the high cost of handsets, SIM cards and service maintenance kept the mobile phone ownership from the reach of most ordinary people, including the marginalized.

However, in the last decade, the arrival of more telecom actors, expansion in telecom services to other parts of the country and low subscription and maintenance cost have increased mobile phone ownership among both the rich and the poor. Currently, four mobile phone companies — Airtel, Africell, Comuim and Smart — compete with the country only fixed-line and mobile phone service provider, SierraTel. The competition among the providers for the country's market share gives subscribers the advantage to acquire handsets and SIM cards at a reasonable cost from any part in the country. Generally, a handset costs as low as \$10.00, a SIM card about \$1.00 and top-up fees as low as \$0.26 for 25 units, which can last for about three minutes of voice call. The seemingly low cost of mobile phone services enables all marginalized young people involved in this study to acquire and own a mobile phone.

The kinds and origin of mobile phone handset that marginalized young people used or interested to possess vary remarkably among them. Most young people possess low cost, feature and smartphones with an extended list of popular and unknown brand names including Nokia, Samsung and ITEL. The feature or standard handsets used have limitations such as small buttons, screen size, storage space and operating system that may constrain the user's behavior and reduce effective usability significantly. Despite the physical and

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<sup>2</sup> The regulatory body recent levied a \$1.2 million fine on Airtel, one of the leading operators, for poor quality service delivery. [http://www.natcom.gov.sl/images/images/REGULATOR\\_SLAMS\\_USD\\_1\\_1.pdf](http://www.natcom.gov.sl/images/images/REGULATOR_SLAMS_USD_1_1.pdf)

functional limitation, some young people prefer a feature mobile phone than a smartphone because of its durability and low cost. The durability of most smartphones sold in Sierra Leone cannot be guaranteed because they are replicas of well-known models such as Samsung and iPhone. They are specifically designed in China for people in Africa and other developing countries with limited financial capability to acquire expensive smartphones. In Sierra Leone, common problems identified with Chinese smartphones included network failure, SIM card errors, frozen screens and software configuration. Not surprisingly, because smartphones have multiple functionalities such as the internet and social media applications, the majority of marginalized young people either has one or desired to have it.

##### **5. Applying the Framework: Mobile Phones, Empowerment Capabilities and Achievements**

As personal tools, mobile phones offer the potential to give freedom and privacy to people to communicate and access information. Therefore, what is communicated and the kind of information people seek wholly depend on their ability to discern and make choices based on their needs. Arguably, this demonstrates the relationship between agency and capability freedom with regard to mobile phone usage. Scholars have argued that access to communication and information is relevant for human well-being, and the absence of such capability assets contributes to poverty (Beardon, 2004; Gigler, 2004). While this understanding has dominated mainstream development discourses (e.g. Huesca, 2008), it is often unclear how these capability assets are used to transform a person's livelihood. Therefore, in the process of linking mobile phones to the empowerment of marginalized people, this disconnection triggers a question about the underlining communication and information capabilities that the technology offers. Certainly, in marginalized young people's context, it is imperative to examine the use of mobile phones in articulating their everyday economic, social-cultural and political activities. This is particularly crucial in the context where an empowerment is considered as a means to the development of marginalized young people. Moreover, it is also crucial because the marginalization of young people in Sierra Leone involves a wide array of issues. These issues can emanate from socio-economic and political exclusion, oppressive traditional and cultural systems and distortion in family life and kinship networks (Cubitt, 2012). Hence, against this background, the analysis to follow is organized in alignment with the socio-economic and political dynamics that underpin the marginalization of young people in Sierra Leone.

## 5.1 Economic Activity

### 5.1.1 Reinforcing an economy of dependence

A typical problem that prevails among marginalized young people in both Tombo and Wellington is their inability to secure a steady flow of income to support their livelihoods. This is because a majority of this population lack adequate skills to secure better employment opportunities (Cubitt, 2012). As a result, most struggle to make ends meet. However, those who have narrow breakthroughs become sources of support for their family members experiencing economic hardship; a practice that this study characterizes as an economy of dependence. This economy system does not only resonate with marginalized young people, but also with the wider population that experience or is at the risk of experiencing socio-economic difficulties. For example, Abu, a young tailor who left his rural community in Bombali district in search of greener pastures in Freetown, is a victim of this informal economy. Abu earns approximately \$150.00 per month; an amount scarcely sufficient to support his household of three children. Yet Abu sends twenty percent of his income to support his parents every month. Abu explained that he usually sends the money via mobile money. 'Every month, I send money to my parent in the village for their feeding through Airtel money'

Mobile money is an innovative system that extends financial services to the unbanked segment of society (Airtel, 2012). Through observation in Sierra Leone, it appeared that mobile money reinforced the economy of dependence. Like Abu, other respondents in Tombo and Wellington have learned to take advantage of the system. Kelfa, an office messenger in Wellington, explained that he used the system to send money and build a house in his village. For him, this would have been impossible without mobile money. In Tombo, two young women shared their experiences. Isatu, who owned a salon in the community, described the system as a savior. Although the term, savior, may have different connotative meanings, for Isatu, it means saving the life of her mother who lives in her home town, Makeni. Isatu explained that on several occasions she had used the system to transfer money to pay for her mother's medical bills. As well, Amina, a petty trader, used the system to pay school fees for her two young brothers in Bo. Bo is the second capital city of Sierra Leone; it is situated about 222km away from Tombo. Prior to the introduction of the system, Amina explained that she used to travel to Bo to arrange her brothers' school affairs, which used to cost her extra money and time. Amina explained that despite the burden on her to look after her brothers, the system has made it easier and cost effective to organize their school affairs.

### 5.1.2 Coordinating business

Apart from mobile money, respondents involved in some kind of enterprises indicated that the communication and information capabilities of mobile phones offered them opportunities to coordinate their businesses. John, a mobile phone vendor, was very positive in this respect. Being a vendor in mobile phone accessories, John explained that access to timely information on new business deals, prices and products was crucial for the success of his business. As a result, he noted that the mobile phone enabled him to meet with these challenges in timely manner. Isatu, a petty trader in a busy park in Wellington, shared different experiences as to how the mobile phone has changed her communication patterns with customers.

Before I communicate in different ways using my eyes, waving my hands or doing other forms of body movements, but now I communicate to the customers through the mobile phone. For example, some customers often called and informed me in advance about their arrival or travelling dates and asked me to prepare certain items for them (Isatu, female, 27, petty trader).

In Tombo, Ibrahim illustrated another business use of mobile phones. Ibrahim sells and supplies cigarettes to other customers in Tombo and its surrounding communities. Every week he used to travel three times to the capital Freetown to check for prices and arrival of new consignments. In Tombo, Ibrahim used to travel to all his customers to inform them about new retail prices of the cigarettes, collects payment and makes new delivery. These activities used to cost him time and high overhead cost. Since he purchased a mobile phone about two years ago, Ibrahim is able to undertake all his transactions through the mobile phone. Thus, he is able to save time, travelling costs and in turn has expanded his business from 10 to more than 200 customers. James, a handcart rider, provided a different account of mobile phone usage. James is a driver by trade and father of three children. He moved to Freetown to secure a driving job but ended up becoming a hand cart rider due to the difficulty of securing a driving job. The livelihood of his family rests on the handcart job. Therefore, maintaining a constant flow of contracts is important for him. To do this, he relies completely on mobile phones for acquiring these contracts. James explained that before he relied on the customers that travelled or visited the park where he worked to hire a handcart. According to him securing contracts from those customers was very competitive. But, since he acquired a



used mobile phone about three years ago, he has been able to build a network of customers that contact him frequently for new job contracts.

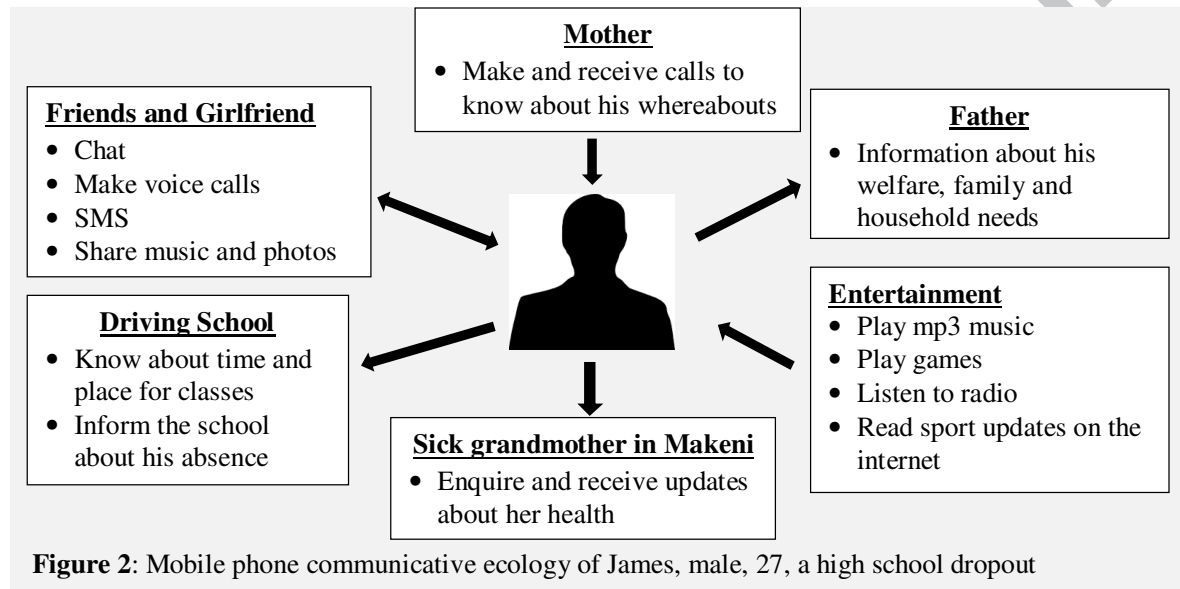
The respondents' accounts illustrate two implications for articulating the economic activity in their everyday world. On the one hand, mobile phones offer them the capability to organize and transfer money and coordinate business activities, but the use of this capability depends on their agency to make those choices. Of importance is the high level of degree of empowerment attained through the process. In the sense that the respondents demonstrate high level of knowledge, skills and awareness about the economic benefits that mobile phones accrue. The respondents' judgement to use mobile phones to send money or pay school fees for family members would have certainly proven difficult and expensive without mobile phones. Equally, this is also true for the coordination of businesses activity for many who believed that their businesses successes are partly driven by mobile phones. On the other hand, if empowerment is to be judged as a means to development, for this young people, mobile phones offer some element of development outcomes such as freedom of choice and increase in income for the business users. This is particularly true if the notion of development is adopted from its understanding as freedom to 'lead the kinds of lives [one's] value—and have reason to value' (2001, p. 18).

## **5.2 Socio-cultural activity**

By comparison, the respondents used mobile phones to maintain family, friendship and other kinship relationships more than any other forms of usage. An example of this reflected in the mobile phone communicative ecology of James (Figure 2). James is a high school dropout living with his unemployed mother together with other six siblings. James's father works as a laborer in an iron mining company in Pepel, but the income generated from this job is insufficient to sustain the family. As a result, James enrolled in a non-government organization (NGO) sponsored driving school with the hope of acquiring a driving license that would possibly land him employment as a driver. As depicted in figure 2, the everyday utilization of the mobile phone for James is dominated by the coordination of friends and family-related issues.

Based on observation, informal discussions and a semi-structured interview with James, more than 65 percent of the calls he regularly made or received were from his father, mother, friends and other relatives. Like James, many respondents explained that mobile phones offer them the opportunity to create and maintain constant communication with family member(s) and other social connections. For Gibo, a local tailor in Tombo, it was

difficult to distinguish between his business use of mobile phones and coordinating family activity. Studies discovered similar outcome in Rwanda and Ghana (Donner, 2006; Sey, 2011). Gibo is divorced and his four children live with their grandparent in the city. One important point that he mentioned was the ability to coordinate his family from his tailor shop without the need to travel to them.



The coordination of burial ceremonies was another intriguing socio-cultural use of mobile phones that resonated with marginalized young people. Generally, it is required for relatives and friends of a deceased person to attend funeral ceremonies irrespective of the distance. However, given that most funeral notifications are often short (ranging from couple of hours to days); it is important for the deceased family to convey the burial information as quick as possible to family, friends and well-wishers. The respondents explained that in the past years, conveying burial information, particularly to distant relatives and friends was difficult and expensive. Research respondents noted that mobile phones have eased the delivery of burial information. Fatumata, a 28 years old unemployed house wife, gave an account of this.

Before when a family member is deceased, it will take days or even months before one could receive information about the death. But now as soon as such an incident

happens, one is alerted immediately through the mobile phone. It is really an important help for us (Fatumata, female, 28, unemployed house wife).

Similarly, Almamy, a fisherman in Tombo, explained that the mobile phone has helped him to remain connected to his home town and attend important funeral ceremonies. One Saturday morning, while the researcher was on his way to Tombo, he met three family members who have just returned from attending a burial ceremony of their uncle. While seated in a public transport, this family shared with the researcher that without mobile phones it would have been impossible for them to attend the ceremony on time. They explained that, the deceased man raised them up in his household. Therefore, not attending his funeral would have been interpreted differently by other family members.

The uses of mobile phones demonstrated in different socio-cultural contexts in Tombo and Wellington reinforce agentic processes of articulating mobile phones into the everyday routines of the users. Depending on the user's needs and the organizations of other livelihood aspects, the use of mobile phones to establish connections and uphold cultural values may have an impact on users' livelihood (Sey, 2011). Donner (2006, p. 21) notes that 'one way to understand the social impacts of mobile phones is to consider how mobile may change a user's network of communication partners'. For Sey (2011), mobile phones are likely to enhance increased capabilities and benefits to the users if their uses are connected to different resources. Both scholars emphasize the importance of connectivity in realizing the actual benefits that mobile phones accrue to the users. Not surprisingly, in Sierra Leone the notion of connectivity is crucial for the survival of many Sierra Leoneans. Because, in many cases, access to financial, business and employment resources partly depends on social connections involving family, friends, acquaintances and connections to patrons in higher positions (Kamara, 2008, p. 186). In this sense, one would argue that for many respondents, using mobile phones for socio-cultural means has to do with not only maintaining ties but creating opportunities for survival. But, as Donner and Sey note, achieving these opportunities may depend on users' capabilities to connect to appropriate networks and resources. In evaluating the socio-cultural use of mobile phones in Tombo and Wellington against these criteria, research respondents chose to limit their connectivity to family members and people that they already know (Donner, 2006). Hence, although this may have implications in terms of determining opportunities for livelihood survival, drawing on the assumption of empowerment as freedom to have control over one's decision, the findings show that mobile phones enable users to pursue their own ends (Kabeer, 1999). The ends here mean to stay

connected to families and other people, 'and to draw on those contacts when they are in need, whether this is a need for money, information or conversation' (Sey, 2011, p. 385).

#### 4.3 Political Activity

Traditionally, communication process in Sierra Leone politics is one-directional in the sense that there is little space for citizens to participate and articulate their voices. This contradicts with the mainstream development thinking, where citizen participation in decision-making process is advocated. However, the emergence of mobile phones is gradually challenging and changing the political tradition in Sierra Leone. The respondents explained that the communication and information capabilities of mobile phones facilitated political activities through indirect and direct means. According to them, the process is driven by their agency and need to overcome their marginal position. Indirectly, they blend mobile phones with radios to establish technology-mediated spaces to articulate their voices in political and governance discussions. Two popular interactive radio shows mentioned by the respondents were *Monologue* and *Opinion Pool*. *Monologue* is aired by Citizen FM radio while *Opinion Pool* by Tumac FM radio. Officials from these radio stations explained that both programs are designed to promote awareness on policy and governance issues, encourage citizens to participate and deliberate on burning issues that affect them and their communities, and to motivate or spur the state, private sector and other key stakeholders into doing the right thing. Citizens participate by using their personal paid mobile phones to call or send SMS texts to a special number giving at the beginning of each show.

The communicative mediated spaces established differ from traditional means (such as radios, public gatherings, and television) that the government usually uses to engage with citizens. As mentioned above, it differs because communication through these channels is usually one-directional and citizens have very limited opportunity to respond or comment. In the new mobile-radio mediated spaces, communication is increasingly being diffused among citizen-to-citizen and citizen-to-government. Therefore, unlike the traditional communication means that often muted citizens' voices in public spaces, respondents explained that the blend of mobile phones and radios has increased a propensity of individuals or groups to express their concerns, increase mutual awareness and generate 'new intensities of listening' (Couldry, 2010). A radio producer provided an account of this:

For some authorities no sooner do they get any information through this medium that they immediately come to the radio station and make clarification or react

immediately by issuing press release based upon the issues deliberated here. So I believe that is one of the reasons why we established this program (Bangura, male, 32, radio producer).

Similarly, most respondents believed that direct communication capability (mobile-to-mobile communication) also offers them advantage compared with traditional means. When asked about the communication process, respondents explained that they use their mobile phones to call community leaders, district officers and other important government representatives to convey their discontents or requests. By doing so, they do not only feel empowered but also confident that community needs are responded to. Lamin, an unemployed young man explained

Persistent phone calls to the councilor resulted in the construction of mini bridges that link some important streets to the highway, which for many years have impeded the flow of traffic in our community (Lamin, male, 29, unemployed).

The findings suggest that mobile phones have become important mediated spaces for leveraging citizen's voice and reconfiguring a sense of ownership in policy and development debates. Importantly, they provide spaces for marginalized young people to balance their marginality by offering opportunities to hold government and private institutions accountable and by monitoring their activities, and commending or questioning them if they failed to deliver on their obligations or promises. Considering the magnitude at which the young people are political excluded from mainstream political activities, this finding highlights an important implication in the post-conflict development effort in Sierra Leone that has been marred with political and social volatility (Cubitt, 2012). However, Sierra Leone is not alone. Similar outcomes are also conveyed in studies from other developed and developing countries where the convergence of mobile technology and radio heightened citizens participation in social and economic issues that affects them (Rosales, 2013; Willems, 2013).

## **6. Conclusion—A Critical Reflection of Research Findings**

This paper has put together key concepts of empowerment theory to suggest an analytical framework. The framework is based on the notion of empowerment emerging from the positive energy of the least powerful people to facilitate a change in their situation using mobile phones (Alsop & Heinsohn, 2005; Kabeer, 1999; Schwerin, 1995). Drawing on the information and communication capabilities of mobile phones, this paper used this

framework to analyze the relationship between mobile phone usage and empowerment. In doing so, the paper focused on the economic, socio-culture and political uses of mobile phones. The focus on these uses was based on the assumption that for mobile phones to empower marginalized young people their uses should facilitate economic, political and socio-cultural issues that underpin their marginality. This assumption was grounded on the notion of human development emerging from the perspective of mainstream development thinking (Huesca, 2008; Sen, 2001).

A close examination of mobile phone usage among marginalized young people shows that mobile phones offer valuable opportunities to empower them. Much of these opportunities come from the use of mobile phones to coordinate businesses, organize family affairs and maintain socio-cultural connectivity (Donner, 2006; Sey, 2011). Of more importance to marginalized young people is also the use of mobile phones to overcome communication and information problems and amplify their voices in governance issues. There is, however, no strong evidence to suggest that these empowerment capabilities completely emancipate them from their marginality. Generally, young people are marginalized because the lack economic, social and political opportunities to actively participate in the normal functioning of society. The research findings show that mobile phones have only facilitated limited capabilities of these economic, socio-cultural and economic dynamics that actually underpin their marginality. For example, despite the potential to establish a dialogical communication channel between the state and the citizens, the political decision-making remains largely in the hands of political elites, which suggests that citizen participation in governance process, is still largely limited to ballot casting. Moreover, despite the perceived benefit of mediated spaces for facilitating governance, mobile phones uptake to articulate governance processes remains unnoticed in national development policy.

Furthermore, research respondents demonstrate their agencies to make choices freely based on their needs. In the empowerment framework, freedom of choice is an important development outcome. But, the fact that not all choices lead to development (Kabeer, 1999), one would argue that some of the choices made by research respondents reinforce their marginality rather than emancipate them from socio-economic hardships. For example, the choice to use mobile money systems to send money to parents or to build a house may only empower them to fulfill their parental obligation as required by the cultural tradition (Kamara, 2008). In doing so, however, does not necessarily contribute to improving

livelihoods. To a large extent, some choices made instead create more responsibilities and deepened their economic hardship.

Another conclusion that can be drawn from this study is the usefulness of the empowerment framework to link mobile phones usage, empowerment and human development. Its emphasis on the individual as an agent for their own development makes it an important framework that can be applied to mobile phone research or development work that focuses on individual empowerment and livelihood improvement. More importantly, the framework takes into account the relationship between individual agency, collective participation and institutional structures as a process of converting mobile telephony into a useful development tool. Most studies on mobile phone have often paid little attention to this relationship that has the potential to facilitate the organization, delivery and use of mobile phones.

Nevertheless, because of the limited space in this paper, this relationship and other components of the framework are not fully explored. Components such as institutional structures and technology and structural infrastructures that underpin the organization and delivery of mobile phones are explored but not in detail. Therefore, this paper encourages further research into these relational frames. In addition, because the framework was only applied on a specific group of marginalized young people in two remote communities in Sierra Leone, it is inconclusive to account for its applicability for a wider category of people in developing countries with varying development challenges. Thus, a more rigorous and systematic study could be of benefit through a richer examination of the relationship between mobile phones and human development using the proposed empowerment framework.

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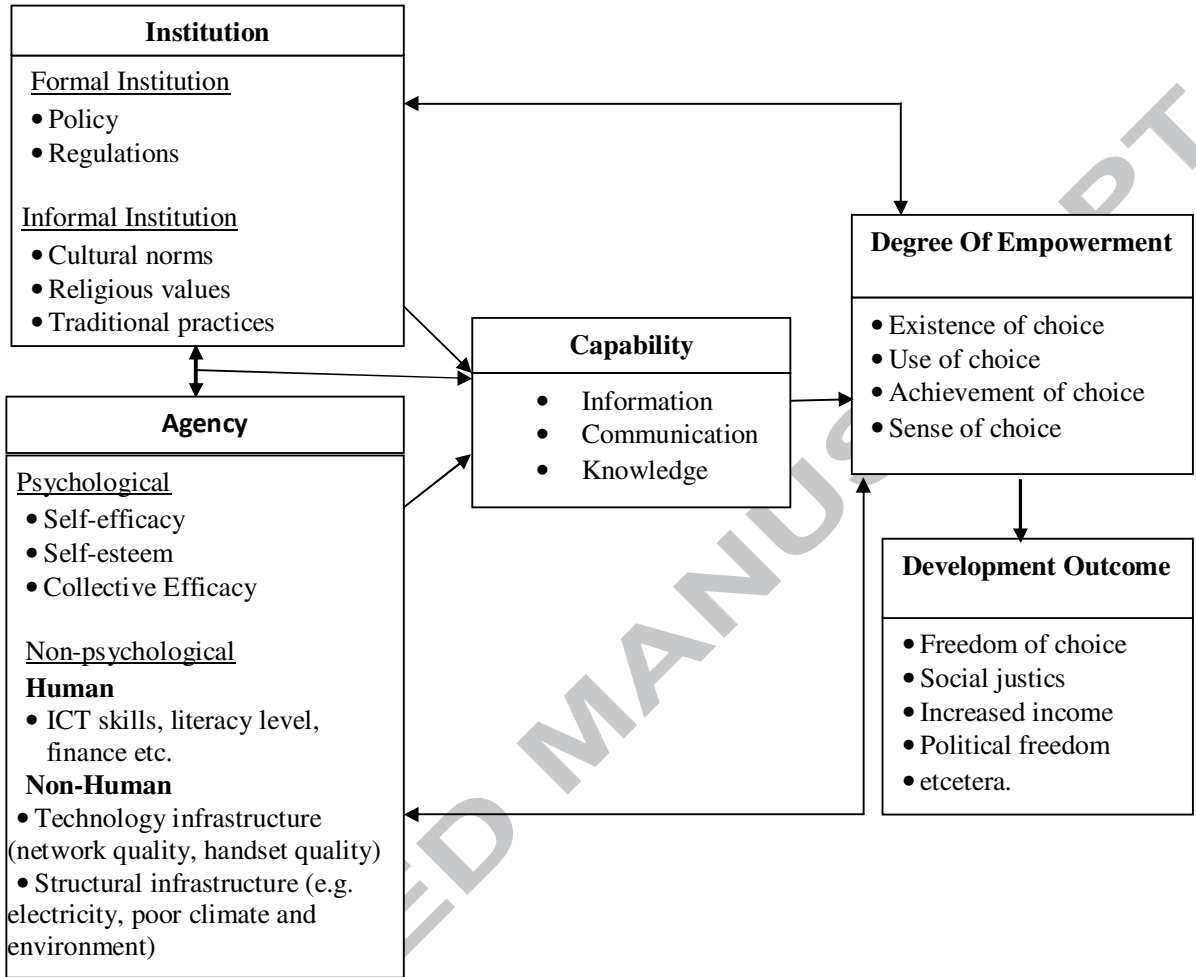
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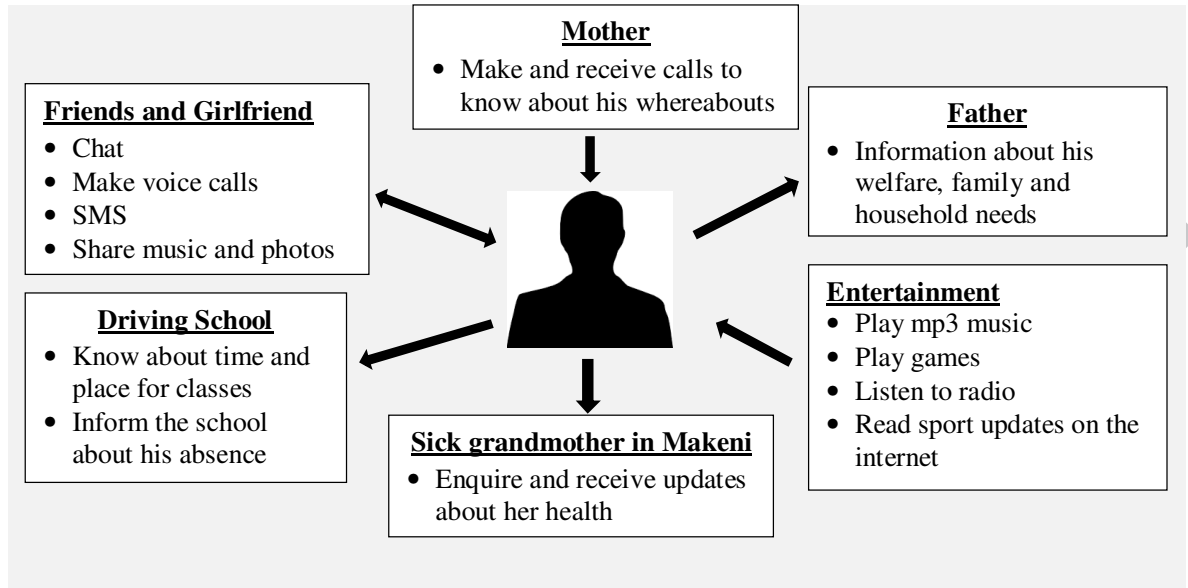


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<Figure 1.1 Empowerment Model>



<Figure 2.2 Mobile phone communicative ecology of James, male, 27, a high school dropout>

### Highlights

- An empowerment analytical framework for Mobile Phone for Development analysis is proposed.
- Mobile phones offer communication and information empowerment capabilities to marginalized young people to articulate their everyday activities.
- Mobile phones do not completely emancipate marginalized young people from experiencing socio-economic and political exclusion.
- Offers further theoretical and methodological insights into the understanding of mobile phone impact beyond the dominant economic growth formulation.

ACCEPTED MANUSCRIPT