

eHealth and Global Health: Investments Opportunities and Challenges for Industry in Developing Countries

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Abstract. eHealth investments from developed countries to developing countries are expected to follow the emerging trend of eHealth for meeting global health problems. However, eHealth industry from developed countries will need to learn to make this impending venture a ‘win-win’ situation with profitable return on investments. This short paper highlights some of these challenges that must be overcome in order to achieve these objectives.

Keywords: eHealth, developing countries, investments, industry, challenges, global health.

1 Introduction

This paper aims to open the discussion on how global private eHealth private sector or industry should transfer their technologies to developing countries (DCs). It forms a part of a work in progress on understanding the factors mediating the sustainable adoption and diffusion of eHealth services in DCs especially those in Africa [1]. Tackling global health challenges is a strategic agenda for most developed countries and encouraging their private sector to engage with public health services seems to be an emerging business model. eHealth, the use of information and communication technologies (ICTs) for supporting healthcare process is already forming part of this global health agenda.

Globalization has led to the adoption of ICTs for international development by these developed countries. An unexpected spillover of this policy shift is that according to Heeks (2008) [2] it presents new business opportunities for ICT industry from these countries. Further, opportunity for these countries amongst others is the economical benefits of opening up markets for their products and services [2].

eHealth for international development is not without its own history. Going down the memory lane, the now inactive G-8 Global Healthcare Applications Subproject-4 (G-8 GHAP-SP-4) (Circa 1995-2002) [3] set the tone for these countries to contribute to global health development through eHealth. However, notwithstanding the observed lack of activity of this initiative, other G8 countries have recently started to develop their own strategy in this regard and it seems that it has been resurrected and

reincarnated by the American Telemedicine Association (ATA). Recently, the ATA brought together global experts under the Global Forum on Telemedicine to foster global cooperative alliances in how eHealth can contribute to global health challenges [4]. In addition, it is also likely that the UK government might employ eHealth for her global health commitments in DCs going by a recent policy document authored by Sir Nigel Crisp titled “*Global Health Partnership: The UK contribution to health in developing countries*” [5].

Regional economies such as the Commonwealth and European Union (EU) also have eHealth as a strategic tool for meeting their global health commitments. The EU IST FP7 and other technology related projects with DCs is an example in this regard. The EU-Africa Lisbon Strategy exemplifies this strategic shift of using eHealth for meeting global health challenges through private/industry sector participation [1]. This global political trend, expected here to be embraced by eHealth industry as business opportunities, should be seen as a beneficial development. Involving private sector in product and service innovations for tackling global health challenges is a practice that will yield benefits for DCs’ populations [6].

However, emerging literature on eHealth economics, suggest that private eHealth industry will have to overcome six main obstacles in order to achieve sustainable and profitable investments [7]. These challenges will need to be understood and effectively managed in order to ensure their return on investments (ROIs).

2 Challenges to eHealth Investments

Understanding the: dynamics of eHealth adoption and diffusion within specific geopolitical region and health organizations; contextual and cultural background by engaging with multiple health stakeholders; dynamics and nature of health systems reforms and rapid technological changes; process of converging the different business philosophies of industry and health sectors, developing ‘win-win’ business models; process of technological R&D, funding and evaluation within health sector; nature of local eHealth policies, legal structures, standards and partnerships development. It is therefore a position of this paper that any eHealth technology transfer by the industry to DCs’ health sector should incorporate and strategize to overcome these challenges in their investment plans.

Moreover, bearing in mind that health services delivery in most of these DCs are public-sector driven, developing workable public-private partnerships (PPPs) should be of interest eHealth business or industry from these high income countries. Research evidence suggests that north-south technology transfer and eHealth implementations are complex and contentious issues with numerous recorded sustainability failures [8], therefore, the need to understand these contextual issues are deemed important for success [9]. As the financial burden of ICT failures is not a luxury that the fragile economies of these countries can sustain, this- should also be of paramount interest to eHealth business or industry.

Already, insights from eHealth projects in DCs could provide solutions to eHealth industry on how to overcome some of these eHealth investment challenges. For instance, business partnerships should take the form of a social enterprise model. This was found to be a sustainable business model for eHealth investment in a DC [10].

Limited financial resources and erratic electrical power supply has made the mobile/wireless ICTs to be sustainable for providing eHealth services in these regions. The use of mobile computers powered by locally fabricated solar panels for eHealth purposes have been demonstrated in Uganda for the past three years [11].

Any technology to be deployed must be low-cost and local R&D and “micro-industrialization” to support this is a sustainable business model from a widely known health enterprise in a DC [12]. Also, any eHealth R&D and transfer should adopt an ethical approach to intellectual Property Rights (IPRs) management [13]. A good practice that should be adopted in this regard is from the World Health Organization joint initiative with Connecting for Health (CfH), UK. Here-CfH will share its eHealth innovations with DCs under the emerging “*Sharing eHealth Intellectual Property for Development*” (SHIPD) [14]. Engaging local firms in these R&D process could help the industry in marketing and distributing their products in a cost-effective way. Aside, collaborative global-local eHealth R&D will make it possible for local firms to develop their capacity to innovate for local health needs [6].

Acknowledging that, there are differences in economic and technological capabilities of different DCs, the argument pursued here will therefore require certain contextual factors taken into consideration. Regional variations; as in countries from Africa, South America or Asia is an important factor. Emerging economies such as South Africa, Brazil and India are countries from these regions with more advanced economic clout and technological innovations that can even rival those from developed countries. Aside; health system configuration, market size, business climate, enabling legislation, infrastructures and policies are different factors at both national and regional basis that will determine the nature and dynamics of eHealth investments.

3 Conclusion

The emerging global shift in foreign policy of developed countries to adopt eHealth for tackling global health challenges in DCs, will inadvertently stimulate their private sectors to transfer eHealth investments to these countries. On the other hand, eHealth investments from DCs, especially from those of emerging economies are expected to go move towards the opposite direction in the nearest future. Low-cost, low-power and open source technologies already established in countries like Brazil and India might provide a competitive advantage for them to compete in the global eHealth markets. Already, outsourcing of eHealth services like radiological and hematological interpretations and diagnosis to DCs from developed ones is on the rise, due to better cost-saving advantage. Finally, however, global private eHealth investors or industries should develop their business strategies to overcome the above identified obstacles and potential ones. Incorporation of these insights is strategic, in order to achieve profitable ROIs.

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