

# Chapter 9

## A New Development Opportunity Confronts Old Paradigms: Exploring the Multiplicity Theory to Combat the Global Digital Divide

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### ABSTRACT

*There is a considerable debate about how the technological gap between rich and poor countries of the world can be bridged or eliminated. Technological optimists argue that Information and Communication Technology (ICT) can bring accelerated development to poor countries. Others question the viability of relying on ICT for development in low income countries. The ensuing debate has masked the digital divide problem and prevented a true discussion of how ICT can be deployed for the benefit of low income countries. On the otherhand, confronted with the persistent failures of one-size-fits-all economic development models, low income countries can no longer treat modernization as the pivot towards which all ICT-related development efforts must gravitate. There is a need to drop the singular vision of development which is premised on the experiences of Western developed nations and rather restore local actors and their cultures into the actual roles they play in development processes that occur within localities. Accordingly, this chapter reviews the perspectives that currently shape the ICT for development discourse and offers the multiplicity theory to bridge the gap in development theory and promote a development strategy which incorporates activities of both local and global actors in the development of localities.*

### INTRODUCTION

The influential relationship between technology and society dates back to the beginning of human history. Every stage of human development

is linked with some technology that supplies the tools which humans use to construct the social order (Ihde, 1990; Burke, 1985). Whether it was the crude tools of the stone age, the agricultural machinery of the green revolution or the factories of industrialization, the prevailing technology has often determined the type of most profitable

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work people do, the popular gadgets people use, and the institutions that come to be established (Mitchell, 2003, Mumford, 1934). The problem is that technological opportunities are not evenly distributed among individuals, nations and regions of the world. The pattern of access to technology shows a significant separation between rich and poor nations. The concentration of resources and technological innovations in rich countries and the lack of such opportunities in low income countries create a technological dualism which results in imbalances in access to technology, wealth and power (Singer, 1970). The unevenness of access to technology is a microcosm of the inequality that exists between two worlds - the so called Developed and Underdeveloped, the First and the Third, the Poor and Rich, High and Low-income countries or the Global North and Global South. The gap in technological adoption often threatens to deepen the existing disparities between the rich and poor nations. Accordingly, the role that technology plays in the development of nations fuels an endless debate. A similar disagreement is currently ranging over the technological gap which has resulted from the digital revolution. It is this discourse and its implications for bridging the global digital divide that form the subject matter of discussion in this chapter.

There is widespread agreement on the potential impacts of the digital divide between rich and poor countries, but despite the consensus on problem identification among scholars, strategies for bridging the divide are mainly disjointed (Kole, 2002; Schech, 2002). Proponents of the modernization and dependency theories that dominate the debate on ICT and development disagree on how the digital divide can be narrowed (Ojo, 2004). As ICT's are increasingly recognized as important factors in economic development (UNDP, 1998; World Bank, 1998; Heeks and Jagun, 2007), and as world leaders strive to identify strategies for promoting ICT-led growth in low-income countries, it becomes imperative to examine the discourse which strongly informs the case for bridging the

technological gap. This chapter examines whether the main theories that currently drive the ICT4development debate can generate policy guidelines that will stimulate ICT-led development in low-income countries. Specific questions that will be addressed in the chapter include the following:

- a. To what extent do explanations offered by the modernization and dependency theories validate the potentials of ICT to facilitate or impede economic development in the low-income countries of the world?
- b. Can ICT be deployed to correct decades of stagnant economic growth in poor countries and empower them to leapfrog several stages of their development into technological opportunities?
- c. Can the poor countries of the world ignore the transformative power and the development potentials of ICT and follow an exclusionary development path to economic development in a globalized society?

In answering the above questions, the chapter relies on published literature to explain the digital divide concept. Thereafter, global attempts to monitor the divide and track progress in efforts being made to close the technological gap are discussed. This is followed by a critical review of the main arguments in the ICT4development discourse. The analysis focuses on contradictory claims about the role ICT may play in the development of low-income countries. The extent to which the digital divide debate directly echoes assumptions of the Modernization and Dependency theories on development are then examined. The chapter concludes with a discussion of the multiplicity theory which argues against the subject-object assumptions of the dominant theories and promotes a development strategy which incorporates the values of people in both rich and poor countries.

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