

# Regional Development Getting Smarter with ICT

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## INTRODUCTION

One could think of a new context of regional development being represented through a dynamic outcome of the complex interaction between geographic relational networks and global production (industrial, trade services, etc.) entities within the context of changing regional governance structures. Again, "regional" here is losing the emphasis on geographic continuity. Perhaps the blended nature of globalization with a focus on the "local" level has most effective way of living a global knowledge economy and knowledge society.

The classical theories of regional development, such as the Staples, the Internal Colonialism, the Dependency theories and others are no longer efficient in nurturing the practice of regional development in the new context. New Regionalism is a term that is used to represent the changes in the identification of regions. It embraces a number of components which include: associational economy, learning regions, competitive regionalism, and regional innovations systems. This new concept of "regional development" seeks more effective use of public resources and significantly better policy outcomes. The main goal of this development is to find ways of increasing the competitiveness of all parts of the region instead of redistribution and subsidies for the ones that are lagging. It has proven that ICT's are effective tools, ways and platforms where such competitiveness in all sectors can be enhanced, encouraged and enabled. Through this we can think of connected regions in fact, where through e-governance policies and practices it is possible to develop a collective/negotiated governance approach involving national, and regional stakeholders, with the central government taking a less dominant role.

## BACKGROUND

### Understanding Development

Development has the overall concern of achieving a higher quality of life for people. It is a process of affecting change in different sectors of human life, with overall objective of enhancement of quality of life, and mitigation of risks that counteract such enhancement. The process of development itself is taken in a holistic and multi-disciplinary context of human development.

Usually development is planned nationally by the government to realize the specific objectives of human development, this covers vital sectors such as governance, healthcare, education, poverty reduction, gender equality, disaster preparedness, infrastructure, economics, human rights, environment and others. Such aspects of development would touch two major qualities of life: social and economic.

Although a lot of development work has been taking place in the world, under the scope of ICT for development (ICTD4D), no clear strategy is available for regional ICT for socioeconomic development. To make research in this context more indispensable is the fact that new technologies are taking shape quickly that provides greater potential for applications than traditional IT systems. To mention some of them: smart sensors, open data and cloud technology.

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## DEVELOPMENT IN ACTION

### Challenges

The multidimensional concept of regional development is determined by a multiplicity of factors such as availability of natural resource, human resources, capital availability and access. Other factors may include overhead investments, entrepreneurial culture and attitude, physical infrastructures, technological infrastructure and progress, open mind, public support systems, and so forth.

The major challenges of regional development are many; however they are characterized by two dominant issues: how regional progress of better life is initiated and how can we cope with undesirable interregional progress discrepancies? The first question addresses the economic issue of how to use scarce resources (i.e., inputs such as capital, labor, physical resources, knowledge etc.) so as to generate a maximum value of output. The second question is more of a socio-political equity nature and addresses the mechanisms and conditions (economic, policy interventions) that may help to alleviate undesirable development disparities in the space-economy.

One of the major concerns of controlling such development is the location of human activity. In fact in the past few years it was clear that a growing imbalance of human activity across regions causes major challenge to development. Things get worse even: a generation ago, people in the top 20% were 30 times as rich as those in the bottom 20%; nowadays, they are more than 70 times as rich! (Nijkamp & Abreu, 2009). The location patterns of people and economic activities globally world cause a great variation not only in the dispersion of economic activity, but also in the dispersion of better life among regions.

### National, Regional, and Global Development

There are needs for developments in all three levels: national, regional and global. At national level, concerns are for a certain country, a political region that may have different parts that are not similar. These “parts” could be geographic, in the sense that some parts of the country are mountains and that requires a different development based in the priorities and resources

available. Also, they could be social, that classes of the society may require different kinds of development policies and strategies. For example the low-income people of a country need perhaps a different development concern. In this case there are low-income people in different geographic parts of the country; hence the economic definition of a region would call for a different type of concerns while planning development for that “human” region. If these regions within the same country transcend boundaries and spill over other countries, maintain the same concept and definition of regionalization, we have what is called regional development. Eventually, if no boundaries are considered, the reference is global and hence global development.

As development becomes of global concern and is free from regional and national boundaries, many international stakeholders become involved. Hence the main concern and perception is the competitiveness. Figure 1 shows this paradigm of development.

## REGIONAL DEVELOPMENT

### Policies and Strategies of Regional Development

Policies of regional development can extend over different styles and theories. The need for regional development is highly motivated and expressed as a result of regional inequality or spatial disparity. This has been a demanding policy concern globally and for many years. It has been well established that such concerns are driven towards development.

Very often in such disparate regions the private sector decisions sometimes lead to inefficient macroeconomic development which require active policy responses by the public sector. Such development requires in all cases a mixed economy – predominantly private sector, but with a role for government intervention during recessions. Aggregate demand (total spending in the economy) may not necessarily equal the productive capacity of the economy. Total spending and in vesting for development may not focus on the type of production of the region. Sometimes such investment is influenced by a host of factors and sometimes behaves erratically, affecting production, employment, and inflation.

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