

Swot Analysis of Next Generation Infrastructure

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Abstract— In this project present a swot analysis of next generation Infrastructure. We increasingly depend upon the reliable and affordable supply of energy, water, transport, Information service and telecommunication to improve liveability and facility economic development. However today's infrastructure system are change drastically. They are becoming more web based and interconnected and transitional, with increasingly fragment public private ownership, while new technologies are on their way. The capital need investment in new Infrastructure and upgrading of ageing infrastructure is tremendous. The project will diagnose the main challenges with respect to Infrastructure development for the future in a social technique perspective.

Keywords: Swot Analysis, Next Generation Infrastructure, Strength, Weakness, Opportunities, Threats

I. INTRODUCTION

In past two or three decades the population of India is increasing which results increase public demands, lack of service and unemployment etc. It should be emphasized that good quality infrastructure is important not only for a faster-growing economy and also to ensure inclusive growth. By inclusive growth, we mean that The benefits of growth are shared by most of a country's population. So include growth will lead to poverty reduction and income inequality in Nation. The expansion of infrastructure such as irrigation, rural electrification, Road and trucking will promote agricultural growth and immobilize the agricultural sector Career. This shared infrastructure will help farmers and landowners processing industries to meet their needs for raw materials, fertilizers and others low-cost inputs and also help them get their products to markets located in major cities.

Availability of high-quality infrastructure increases productivity levels in economy and lower costs for businesses. In addition, the availability of a infrastructure helps to grow commerce not only within the country by improving transportation but also to promote foreign trade by improving ports and airports. This too help diversify the production of businesses when they are ready to obtain specific supplies raw materials and other inputs from where they are available. In addition, with improved infrastructure, companies can produce goods that are suitable for with the strain of the population of different regions and countries.

II. LITERATURE REVIEW

The world economy is served by a set of critical infrastructures in areas such as transportation, power, communication, water, and energy. In the past, infrastructure design used traditional engineering design approaches, which focused primarily on the technical requirements. This paper describes how next generation infrastructures should be treated as large-scale complex engineering systems requiring different frameworks, methodologies and design principles. Next generation infrastructure development requires a holistic perspective which includes organizational and

Contextual factors in addition to technical factors as an integral part of the design process. We propose different design approaches, utilizing uncertainty management, which are based on sustainability as an over-arching design principle. Particular attention in the paper is given to security considerations and the development of self-monitoring intelligent infrastructure.[1]

Digital government infrastructure provide generic functionalities that are used by large numbers of users. Typically, they have no central authority, are governed by networks and contain both emerging and purposefully designed parts. Their use varies over time, and a large number of individuals use them for different purposes. The basic digital government infrastructure has evolved over time and the development towards the next generation of digital government infrastructure (NGI) is under development. In this introduction, we discuss aspects of infrastructure development and this special issue contains papers contributing to the development of the NGI in various fields including customs, crisis management, legislation and regulation, providing a number of possible functions and services that may become part of the NGI. We argue that policy-makers should view the NGI from a complex-adaptive systems (CAS) view and that the next generation of infrastructures will provide not only technological services, including connectivity and security, but also shared information and knowledge in various fields, thus making it easier to participate, translate legislation and manage collaboration between public and private parties and in this way advancing digital government.[2]

In this study, we investigate the role of infrastructure in economic growth in India for the period 1970–2006. In this context, we develop an index of infrastructure stocks and estimate growth-accounting equations to investigate the impact of infrastructure development on output. Overall, the results reveal that infrastructure stocks, labour force and total investment play an important role in economic growth in India. More importantly, we find that infrastructure development in India has a significant positive contribution toward growth than both private and public investments. Further, causality analysis shows that there is unidirectional causality from infrastructure development to output growth. From a policy perspective, there should be greater emphasis on infrastructure development to sustain the high economic growth which the Indian economy has been experiencing for the last few years.[3]

Good physical and social infrastructure is the decisive factor for rapid economic growth, rapid human development and poverty reduction. Therefore, this study compares the level of development of social and physical infrastructure in India with the level of development of social and physical infrastructure in major emerging countries as well as developed countries. Research shows that India fundamentally lags behind other emerging countries in terms of access and quality of health, education and vocational or

vocational training services - perhaps the main reason why the India is slow to eradicate poverty. Likewise, India's physical infrastructure lags behind other emerging countries, particularly in the areas of per capita electricity access and consumption, Internet access, air transport and the quality of the volume of seaports. Given the urgent need for rapid development of our social and physical infrastructure, the following study attempts to identify the main challenges facing infrastructure development and discuss some possible ways to develop infrastructure and compete for some of these challenges. The level of economic and human development of a country is closely linked to the achievement of its physical and social infrastructure. While physical infrastructure is an important determinant of national production, good social infrastructure is vital for human development as well as economic progress through better educated, more skilled and healthier citizens. In higher education too, major reforms are needed as growing wealth and aspirations fuel a strong demand for education at all levels and the traditional dominance of the public sector. Now, the double challenge is to capitalize on the progress made in improving participation and to try to improve the quality of education, which is still poor. To achieve these objectives, the reform momentum must be maintained and broadened, particularly in view of the growth rate of the Indian economy, the changing needs of households and businesses, and the disparity between the two countries. results.[4]

Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis has been used since the 1960s as a strategic planning aid in many different types of businesses, including those in the construction industry. Although still widely used, this method calls for improvement to make it more useful in strategic management. The project described in this article aims to investigate whether the transformation of a SWOT analysis into a strategic plan can be supported by a reasonably simple quantitative model, such as a SWOT strengthen or not. Using mathematical approaches, including quantization techniques, "maximum sub-array" methods, and fuzzy mathematics, one or more heuristic (HR) rules are derived from the SWOT analysis. These personnel highlight the most influential factors relevant to the strategic planning situation, and thus inform strategic analysts where special attention is needed. A case study conducted in collaboration with an international Chinese construction company shows that the new SWOT approach is more useful for strategic planners. The document provides an enhanced SWOT analysis approach for strategists to conduct strategic planning in the construction industry. It also brings new knowledge about strategic planning by introducing streamlined analytical processes to improve SWOT analysis.[5]

III. OBJECTIVE

A. Proposed Methodology

- 1) Investigation of the strengths of the infrastructure.
- 2) Investigation of the weaknesses of the infrastructure.
- 3) Investigation of the Opportunities of the infrastructure.
- 4) Investigation of the threats of the infrastructure.
- 5) Evaluation of the performance of the infrastructure in internal as well as external environment.

- 6) By analysing the above result, suggest some effective measures for strengthening or modifying the current situation of the infrastructure.

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