



Knowledge Economy: An Indian Perspective

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ABSTRACT

Knowledge is associated with the collective of facts and information about a subject. Majority of the times it forms the basis of living a morally and ethically good life. In today's complex and dynamic business world, the concept of 'knowledge Economy' holds paramount significance. In the current scenario it aims to create values so that the society can attain the growth both qualitatively and quantitatively. Due to constant environmental changes, there is paradigm shift that can be associated with knowledge economy in 21st Century. In recent past, Indian economy has experienced a remarkable transition as a leading player in international markets. Indian economy has undergone a remarkable transition, emerging as a leading player at a global level. Vast pool of intellectual capital, introduction of startups and entrepreneurship development are the major drivers of economic growth and development. The concept of knowledge economy has created a favorable environment where people are working in a group. This has enhanced the competencies at the work place. Can India continues and do much more? The transition is not about shaping the entire reform agenda; in fact it is about testing what works and what does not work in the Indian scenario. This paper highlights the status of India as a knowledge economy at international level and traces the challenges that can hinder the pathway to India's journey.

Keywords: Knowledge economy, growth, challenges

Introduction

The 21st century also called post industrial era Bell (1974) in which the predominance of manufacturing has given way to knowledge and its management providing new avenues for growth. The concept of knowledge, as major determinant for global competitiveness, has received significant attention in recent years. According to Drucker (1994) the society that is emerging is dependent on the development and application of new knowledges: 'knowledge is being applied to knowledge itself'.

It has been a long journey for India from an agricultural economy to a knowledge economy. India has made massive developments in economic and social spheres over the past two decades. The story of Indian economy turned a new page with the introduction of various new policies in 1990. This new economy belongs to those who have the ability to create, adapt, and use knowledge to spur growth and innovation.

India, with its youthful population and thriving information and communication technology (ICT) industry, can become a leading knowledge-driven economy as long as regulatory, education, and infrastructure barriers are overcome, says a new report from the Asian Development Bank (ADB).

"By leveraging its strengths in human capital and ICT services, India can become a major global knowledge-based economy," said Bindu N. Lohani, ADB Vice-President for Knowledge Management and Sustainable Development. "But making this a reality will require many steps like putting in place supportive laws, improving infrastructure, dismantling barriers to trade and investment, up skilling the labor force, boosting research and development spending, and providing innovative financing options for small businesses and entrepreneurs."

Promising areas for India include developing technologies for poorer or price-sensitive customers—where it has already made advances—and stepping up investment and support for its booming ICT sector. As the world's largest film-producing country and third largest television market, it also has a natural advantage in audiovisual services where it has emerged as an important outsourcing hub for animation and other skills-intensive industries.

Objectives

- 1) To study the concept of knowledge Management with regard to Indian perspective.
- 2) To analyze various challenges that is associated with India being a knowledge economy.
- 3) To study the future prospects of India as a knowledge economy.

Literature Review

According to the Organisation for Economic Cooperation and Development OECD (1996), the KBE or knowledge economy (KE) is a term that describes the trends in advanced economies toward greater reliance on knowledge, information, and highly-skilled labor. The rise of the KBE has, in many cases, been accompanied by a concomitant decline in traditional industrial activities Baum (2009). This transformation comprises changes to societies' technological, economic, political, and value bases. The intensive use of information and communication technologies has had a big impact on society and the way in which new knowledge is produced and socialized, supporting the economic paradigm shift.

Knowing that knowledge provides competitive edge and understanding its strategic importance is of course not the same. Joia (2000) states that the understanding of knowledge as a strategic weapon for a corporation is not recent. He reports that academics, researchers and practitioners have been highlighting the importance of the intangible assets of a corporation for a number of years. For example, Joia claims that in 1945, Frederick Hayek presented research about the use of knowledge in society and in 1962, in a seminal work, Fritz Machlup from Princeton University produced an eight-volume work under the general title Knowledge: its creation, distribution, and economic significance. As has Sveiby (2000b), Joia (2000) too noticed that the last 10 to 15 years of the previous millennium brought about a total explosion of documentation about the subject. With regard to the years since 1985, Sveiby (2000b) is of the opinion that the knowledge management literature and research from the last decade should be seen to have gone through at least three phases:

- The first phase was from around 1985 – 1990 when a few, not knowing of each other's work, were experimenting, writing and thinking in isolation. They were taking their inspiration from philosophers such as Wittgenstein and Polanyi and were exploring the value created by leveraging the competence and skills of people and knowledge creation. 'Knowledge Management' and 'Intellectual Capital' were not widely used as concepts.
- During the second phase (1991 – 1997) the IT revolution and the Internet started driving change in organizations. The IT solutions and management processes during this time were about reusing (existing) knowledge and how to avoid re-inventing the wheel. The misconception that knowledge could be 'managed' enthused managers and consultants around the world. The phrases 'knowledge management' and 'intellectual capital' became the highlights of conferences in both Europe and the United States. Both knowledge management and intellectual capital were seen primarily as means to increase efficiency.
- The third phase is post 1997. In this phase knowledge creation and innovation were regarded as 'hot' and the issues became much more human again. More and more people have come to realize that efficiency is not enough. Creating environments that enable all people to create knowledge are said to generate the real value for corporations and society. People are beginning to realize that human beings are at the core of value creation and not IT systems.

Arindam Banik and Pradip K. Bhaumik's paper "India's Transition to knowledge Economy: Variation Across States" (2009) makes a comparison between human and economic capital in developing country perspective. They have shown in this paper the interdependence of economic and human capital. It is found that the productivity of economic capital depends on the intensity of human capital and vice-versa based on data published by the CMIE, Economic Survey data 2005 – 2006 published by the Government of India and the data published by Indiastant.com Only the data of 2003-2004 were considered to especially explain the time dimension of the transition of Indian economy into knowledge economy. The findings reveal that the rise of knowledge economy is very important aspect for the overall growth of Indian economy in the 21st century.

Drucker (2008) considers 'knowledge' one of the most important resources of the economy, while other researchers Halford (2020) and Nonaka and Takeuchi (2019) characterise it as an intangible and nonlinear production resource, a public good Handa (2019) open, and collaborative Bratianu (2021).

Furthermore, Bratianu et al. (2021) sustain the views expressed by other researchers that the knowledge of a group cannot be obtained by cumulating the knowledge of each group member, but through an integration process. The notion of the knowledge-based economy (KBE) emerged toward the end of the 1990s, although Peter Drucker first coined the term in 1969 in his work *The Age of Discontinuity* Drucker (1969).

Knowledge Management: The Indian Perspective

In the present scenario the concept of Knowledge Management hold paramount significance. It has been a long journey of India from an agricultural economy to a knowledge economy. For adjusting the fast changes, proactive policies are needed to expedite changes in society. In the absence of such policies, growth cannot be inclusive. Disparities between the 'have' and the 'have –nots' manifesting in the rich-poor divide, rural-urban divide, digital divide and the like, are giving rise to serious non participation in the development process and conflicts within the countries as well as amongst them. India has made enormous developments in its economic and social fronts in the past two decades.

After growing at about 3.5 percent from the 1950s to the 1970s, the 9 country's economy expanded during the 1980s to reach an annual growth rate of about 5.5 percent by the end of the decade. The success story of Indian economy turned a new page with the policy decision taken in the early 1990. After the new development strategy announced in 1991, India accelerated its growth prospects and increased its integration with the global economy. The country has recognized the comparative advantage of India as a knowledge pool and converting itself into a knowledge economy.

This new economy belongs to those who have the ability to create, adapt, and use knowledge to spur growth and innovation. This Research is an attempt to create, use, share and exploit knowledge to provide the India incorporation a competitive advantage. After laying the foundation stone of the new policy and reforms in the early 1990s, India went forward with a series of reforms like:

1. Encouraging foreign direct investment (FDI)
2. Significantly reducing red tape
3. Opening up more sectors to private investment
4. Liberalizing trade policy and the exchange rate regime, and
5. Reforming capital markets, leading to an improved investment climate.

The government and the corporate India have realized the worth of knowledge as a weapon to make its mark in the new 10 millennium. They have realized that the time is very opportune for India to make its transition to the knowledge economy—an economy that creates, disseminates, and uses knowledge to enhance its growth and development. India should continue to leverage its strengths to become a leader in knowledge creation and use.

India as a knowledge Economy: Challenges

India is at a tipping point, both in terms of economic growth and in the human development of its more than one billion citizens. The future presents an opportunity for India as a Knowledge economy to tackle the following big challenges:

1. Skill development and employment for the future workforce:

According to the World Economic Forum's report "The Future of Jobs 2018", more than half of Indian workers will require reskilling by 2024 to meet the talent demands of the future. They will each require an extra 100 days of learning, on average.

There are four dimensions to the challenge of employment skills. First, the education system focuses on gaining conceptual knowledge, rather than tangible skills which ensure employability. Second, there are more jobs in the informal economy than in the formal economy (80% vs 20%). Third, there are state-level and regional disparities within India in terms of employment opportunities. And fourth, India has one of the lowest participation rates of working age women in the labour force - about 25%.

2. Unemployment:

Despite India's rapid economic growth, unemployment remains a serious issue in both rural and urban areas. The Covid-19 pandemic has worsened the situation, as many businesses have shut down or reduced their operations, leading to job losses. According to the Centre for Monitoring Indian Economy (CMIE), over 1.8 crore salaried jobs were lost between April and July 2020. According to the National Statistical Office's (NSO) Periodic Labour Force Survey (PLFS) report for the year 2021-22, the unemployment rate for 2021-22 was 4.1%. Thus, unemployment is a macroeconomic challenge for India as a knowledge economy.

3. Balance of Payments Deterioration:

India has been running a persistent current account deficit, which means that its imports exceed its exports. This reflects its dependence on foreign goods and services, especially oil and gold, and its low export competitiveness. India's exports and imports decreased by 6.59% and 3.63%, respectively, in 2022. Despite India's growth as a knowledge economy, the deterioration in balance of payments remains a challenge.

4. Infrastructural Constraints:

India's infrastructure is abysmal. Despite various developments in this field, infrastructure remains a setback for our country. India as a knowledge economy need to upgrade the infrastructure in order to compete with world developed countries. India lacks adequate infrastructure, such as roads, railways, ports, power, water, and sanitation, which hampers its economic development and competitiveness. According to the World Bank, India's infrastructure gap is estimated to be around \$1.5 trillion. Poor infrastructure also affects the quality of life and health of the people, especially in rural areas.

5. Inequality:

India has a high level of income and wealth inequality, which has increased over time. According to the World Inequality Database, the top 10% of income earners accounted for 56% of national income in 2019, up from 37% in 1980. Similarly, the top 10% of wealth holders owned 77% of total wealth in 2019, up from 66% in 2000. High inequality can lead to social unrest, political instability, and lower economic growth.

6. Weak Demand:

The demand for goods and services in India has been stagnant or declining due to various factors, such as low income growth, high inflation, unemployment and the impact of the Covid-19 pandemic. This has affected the consumption and investment levels in the economy, and reduced the tax revenue for the government. Thus, weak demand has created hurdles for India as a knowledge economy.

Future prospects of India as a knowledge economy

1. In times to come, innovation and creativity will drive status. Creative ideas alone are not enough, for sustainability requires the successful commercialization of those ideas (Sinha et al., 2012). *A Whole New Mind* a book by Daniel Pink (2005) argues that we are entering a new age where creativity and innovation is becoming increasingly important.
2. The changing nature of the market, the challenge of ongoing change and the emergence of the knowledge society has lead to an increased focus on innovation (Matthews, 2003). Corporations across industries perennially struggle to generate and maintain profitable growth rates that match the expectations of investors and other stakeholders. This challenge increases in complexity as organizations and markets mature over time (Sinha et al., 2009). The solution to this challenge is to innovate on 2 regular basis as innovation is widely recognized as a source of a company's and indeed a nation's wealth creation (West, 2000).
3. India, with its youthful population and thriving information and communication technology (ICT) industry, can become a leading knowledge-driven economy as long as regulatory, education, and infrastructure barriers are overcome, says a new report from the Asian Development Bank (ADB). It is expected by 2030, India will do much better in the fields of education and IT.
4. Knowledge economies use ICT, innovation and research, and higher education and specialized skills to create, disseminate, and apply knowledge for growth. Currently, developing Asia ranks well below the OECD average in the World Bank's Knowledge Economy Index. In the near future more innovative practices and research labs will be the driving forces for Indian economy.
5. Advanced economies of Asia such as Japan; the Republic of Korea, Singapore, Taipei and China have successfully shifted from agriculture to manufacturing to knowledge-based industries. Others, such as the People's Republic of China and India, have built pockets of knowledge-based growth, but have not yet translated this into a broader economic model. Countries such as Bangladesh, Myanmar, and Lao PDR have yet to really embark upon knowledge-based growth. In coming years this transition will help the Indian economy to grow in international markets.
6. Swift technological advances mean developing Asia is unburdened by older generations of technology, allowing it to quickly embrace new technologies. The International Telecommunication Union estimates that in the past there were nearly seven mobile subscribers for every fixed line in Asia. With the right policies and investments, Asia could therefore move to on-demand cloud-based services and wireless internet and mobile applications faster than more developed economies. Thus, in India the future belongs to those entrepreneurs who will introduce and adapt technological advancements along with innovation.
7. Actions to promote knowledge-based economies will differ by country. But they will require strong, coordinated government policies coupled with investment in ICT including universal, affordable and high-speed broadband connectivity, better education notably tertiary and skills-focused training, and a culture of research and innovation with strong intellectual property rights. By 2030 it is expected that in India flexible capital and labor markets will play a crucial role and drive the economy towards the path of economic progress.
8. While technical and vocational education and training might enhance the employability prospects of the present and near-term labour force, if we wish to truly become a knowledge economy, with highly skilled and dynamic rather than abundant, cheap labour force, we should revamp our profoundly inadequate, inefficient and inequitable early health and education systems. It is important to realize that India is sitting on a potential goldmine of human talent. Our workforce will surpass that of China's in 2030, and peak in 2050, so we have a wide window of opportunity to realize our workforce ambitions for a knowledge economy in the next 2 decades.

Conclusion

India's transformation into a knowledge economy is a testament to its resilience, adaptability, and vision. By harnessing its vast intellectual capital, investing in education and technology, and fostering innovation and entrepreneurship, India has unlocked new avenues for growth and development. Despite its impressive strides, India's journey as a knowledge economy is not without challenges. Skill development and employment for the future workforce, unemployment problem, balance of payments deterioration, infrastructural constraints and inequality are the major challenges for India being a knowledge economy.

Ensuring equitable access to quality education, bridging the urban-rural divide, and addressing the digital divide are essential steps to unleash the full potential of India's intellectual capital. Additionally, nurturing a culture of innovation and risk-taking, while simultaneously protecting intellectual property, is crucial for sustainable growth. Encouraging collaboration between academia, industry, and government can foster research and development, leading to innovations with real-world impact. As the country continues to embrace the digital age and globalize its knowledge economy, the future holds immense promise for India to shine brightly on the world stage as a powerhouse of knowledge and innovation.

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