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CONTENTS

Sr. No.	TITLE & NAME OF THE AUTHOR (S)	Page No.
1.	<p style="text-align: center;">PERFORMANCE OF CONSUMER REDRESSAL AGENCIES IN HIMACHAL PRADESH</p> <p style="text-align: center;"><i>VIJAY KUMARI SHARMA & Dr. DEVINDER SHARMA</i></p>	1
2.	<p style="text-align: center;">COVID-19 PANDEMIC AND INFRASTRUCTURE MANAGEMENT IN TECHNOPARK</p> <p style="text-align: center;"><i>Dr. R. JOLLY ROSALIND SILVA</i></p>	5
3.	<p style="text-align: center;">ANALYSIS OF COVID 19 AND ITS IMPACT ON MEDIA & ENTERTAINMENT INDUSTRY IN INDIA</p> <p style="text-align: center;"><i>Dr. HARENDRA KUMAR</i></p>	9
	REQUEST FOR FEEDBACK & DISCLAIMER	13

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COVID-19 PANDEMIC AND INFRASTRUCTURE MANAGEMENT IN TECHNOPARK

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ABSTRACT

The world is still grappling with economic, social and public health challenges posed by the COVID-19 pandemic, Kerala's IT sector was not badly affected as other sectors. The industry was able to withstand the worst of times successfully as the revenue has increased to Rs 125.43 Crores (10% increase) during the FY2019- 20. Kerala has made significant progress in terms of investments, infrastructure development and employment generation through various initiatives for the promotion of IT industry. Technopark has shown steady growth in export, revenue generation and employment from 2010-2020 amidst the outbreak of Covid-19. IT companies are shifting to a hybrid working system where they combine work from home and work from the office. Creation of small work-sharing facilities in different regions across Kerala with Net connectivity, electricity and laptops facility established by the government in collaboration with Kerala IT Parks helps professionals to 'Work Near Home' (WNH). Prefabricated incubation facility at the Technopark campus was designed to assist businesses with beginning work and getting up to speed, prior to their office space becoming operational.

KEYWORDS

IT companies, technopark, covid-19, infrastructure, work near home.

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INTRODUCTION

The COVID-19 pandemic has swept the globe with uncertainty, tragedy and panic. Kerala's usual economic pillars have been crumbling in distress amid the pandemic outbreak. But the IT companies and startups in Kerala experience a boost in business. The world is still grappling with the enormous economic, social and public health challenges posed by the COVID-19 pandemic, and Kerala's IT sector was not badly affected as traditional sectors.

IT Sectors has adjusted and adapted to lockdown restrictions by quickly putting in place work-from-home protocols. This results into a hybrid model, with employees working from home and at office. The fact that there continues to be a demand for space in the three major IT parks in the State indicates that the disruptions in growth and productivity, created by the pandemic, are well controlled at present. With the easing of lockdown restrictions, companies started showing their intent to set up operations in the State. Existing companies are expanding their operations, further pushing up the demand for space in IT parks. There was an upswing in the employment figures for the sector. The year 2019-20, with all its difficulties and challenges, has proved that Kerala's IT sector is built on solid foundations. The industry was able to withstand the worst of times successfully as the revenue has increased to Rs 125.43 Crores (10% increase) during the Financial Year 2019- 20.

STATEMENT OF THE PROBLEM

The development of infrastructure will develop the economic growth of the country. The performance of infrastructure is the reflection of the performance of the company. The researcher found that it would be worthwhile to study the Infrastructure management practices of Technopark, Thiruvananthapuram during the covid-19 pandemic.

OBJECTIVES

1. To ascertain the global and Indian IT scenario during Covid 19 pandemic
2. To ascertain the Infrastructure management practices of Technopark to overcome the challenge caused due to lock-down.

RESEARCH METHODOLOGY

The study has been conducted using secondary data. The study adopted is descriptive in nature based on published data sources particularly journals, newspapers and online database.

GLOBAL IT/ITeS INDUSTRY SCENARIO

The global IT/ITeS sector shows a negative growth of 5 to 10 percent in Financial Year 2020-2021, probably for the first time, due to the impact of the COVID-19 outbreak. This will in turn hurt IT/ITeS industry in India. IT industry may show a negative growth for the Financial Year 2020-2021 was the statement given by former CFO of Infosys. Everest Group, a consulting firm, estimates a negative growth of 5 percent during the Financial Year 2020-2021 globally and the magnitude of COVID-19 has never been witnessed by the IT industry.

Globally IT firms may see a 5 to 10 percent decline and it is bound to impact Indian IT service providers. But according to a NASSCOM estimate, Indian IT/ITeS industry revenue would be \$191 billion growing at 7.7 percent. Both Infosys and Wipro in their US Securities and Exchanges Commission filings said that COVID-19 will impact its growth and profitability as there are project terminations, deferrals, bankruptcy filings and also pricing pressure from clients.

But there is a silver lining, especially for big IT firms. Their portfolio is balanced distinct from smaller firms. If banking, retail and energy sectors are down, other sectors such as telecom and healthcare seem to be growing. Another reason as to why they could fare better is that they have zero debt and cash reserves to tide over the crisis. Cash reserves of top IT firms TCS, Infosys and Wipro stand at \$5.9 billion, \$3.6 billion and \$3.53 billion at the end of March 31, 2020, respectively. These firms could afford to go for acquisitions and that could be the key growth factor during COVID-19.

As a result of continued slowdown in business, companies will ensure tight control on costs and trimming of staff will be one of the measures that will be used. When this stage does arrive, IT-ITeS companies will use factors like skills & competency, outcomes and impact, and costs and compliance when deciding which employee types will be given a trim. Over 90% of the workforce of Indian IT firms continues to work from home. Small firms have started termination of employees as their growth came under pressure.

INDIAN IT/ITeS INDUSTRY SCENARIO

India is the topmost offshoring destination for IT companies across the world. Having proven its capabilities in delivering both on-shore and off-shore services to global clients, emerging technologies now offer an entire new gamut of opportunities for top IT firms in India. The industry is expected to grow to US\$ 350 billion by 2025. Indian IT's core competencies and strengths have attracted significant investment from major countries.

The IT sector ranked 2nd in FDI inflow as per the Department for Promotion of Industry and Internal Trade (DPIIT). Indian IT & ITes industry, accounting for 8% of India's GDP, has also been impacted due to lockdown in key global as well as domestic markets. Major IT and ITes export markets such as US and UK were much affected by the global pandemic. Further, major client sectors such as Aviation and Tourism have experienced more impact on their businesses.

TECHNOPARK

Technopark, fully owned by the Government of Kerala, was set up to create world class standard IT infrastructure. It has five campuses spread over 662.54 acres under different phases of development. According to the Kerala State Planning Board, Technopark has a turnover of Rs 14,000 crore, export of Rs 7000 crore, investment of Rs 4979 crores, 410 companies and more than 60,000 workers in 2018-19.

Kerala has emerged as the 1st digital State in India, announced by the Hon'ble President of India in February 2016. Kerala has made significant progress in terms of investments, infrastructure development and employment generation through various initiatives. With various IT companies like TCS, Infosys, Wipro, Oracle, HCL, Cognizant and Cap Gemini setting up offices in the state, it can clearly be stated that Kerala is one of the preferred IT destination state. TECHNOPARK in Thiruvananthapuram, INFOPARK in Kochi and CYBER PARK in Kozhikode are the three IT Parks promoted by the Government of Kerala. All these Parks have world-class IT infrastructure facilities.

Technopark is an autonomous organisation fully owned by the Government of Kerala registered under the Travancore-Cochin Literary, Scientific and Charitable Societies Registration Act, 1955. Being one of India's largest IT Parks, it is one of the greenest Technopolis as well. Technopark came into existence in 1990 at Kerala State Capital. Technopark companies employ more than 62,000 IT professionals spread across 662.54 acres of land with 102.7 lakhs square feet built up space and about 450 companies are operating at present.

GROWTH OF TECHNOPARK FROM 2010 TO 2020

The growth of Technopark is viewed in terms of the number of companies functioning in the Technopark campus, built-up space and exports. Technopark has shown steady growth in export, revenue generation and employees' strength for about ten years. The trend in Technopark is shown in Table No. 1

TABLE 1: GROWTH OF TECHNOPARK

Sr. No.	YEAR	No. OF COMPANIES	BUILT SPACE (in Sq.Ft)	REVENUES EXPORT	NO OF EMPLOYEES
1	2010-11	200	46,50,000	1963 Cr	30,000
2	2011-12	265	60,00,000	3400 Cr	38000
3	2012-13	285	71,00,000	3493 Cr	40520
4	2013-14	336	72,00,000	4250 C	45390
5	2014-15	342	72,00,000	5100 Cr	47100
6	2015-16	358	85,10,000	6250 Cr	51865
7	2016-17	370	9300000	5000Cr	52746
8	2017-18	400	9700000	6452Cr	56000
9	2018-19	410	9700000	7000Cr	60000
10	2019-20	450	10270000	7350Cr	62000

Source: Economic Review

TOTAL INVESTMENT

Major MNCs that began operations at the Technopark campus during the period 2016-2020 include Nissan Digital India, Tech Mahindra, Teranet, Way Dot Com, and HnR Block India Pvt Ltd, which together account for an investment of Rs 27.5 crore. The investment trend during the pandemic period is also quite attractive which is depicted in the Table No. 2.

TABLE 2: INVESTMENT, TURNOVER AND EXPORT

S. No	Year	Investment (in Crores)		Total Investment	Total Turnover	Total Export
		Technopark	By Companies			
1	2019-2020	979	4,000	4,979	15,000.00	7,350
2	2020-2021 (upto 30/09/2020)	979	4,200	5179	15000.00	7,350

Source: Economic Review

TECHNOPARK AND CRISIL

CRISIL, the foremost provider of ratings, data, research, analytics and solutions retains 'CRISIL A/Stable' rating for Technopark in its latest review dated 24th July 2020. The rating reflects Technopark's steady cash flow and healthy debt protection metrics, backed by sufficient liquidity. It vouches that Technopark maintains its pre-eminent position in the IT sector, despite the impact of COVID-19 globally.

IMPACT OF COVID-19 IN KERALA IT SECTOR

The impact of Covid-19 on the IT sector and the response measures by the sector to the pandemic has been very significant. The fall in demand from the main markets is the key issue for the IT industry. The companies most immediately affected are those associated with airlines, hotels, tourism, and entertainment.

After the Covid lockdown, 20 new IT companies have come to Kerala to set up their operations. Along with this, five existing companies have also asked for more space as part of their expansion plans. In the post-Covid scenario, IT companies are shifting to a hybrid working system where they combine work from home and work from the office. Currently, IT Parks are operating with 5-10% of employees only. The new method allows companies to achieve up to 85% productivity. According to the companies, 20% of employees will continue to work from home even after pandemic.

With companies across the globe asking employees to work from home, IT parks and commercial buildings are facing a major decline in revenues as some organisations are looking at vacating office buildings with some being unable to pay rents due to the slowdown. The IT parks in Kerala seem to have bucked the trend, with the Infopark in Kochi, Technopark in Thiruvananthapuram and Cyberpark in Kozhikode continuing to grow. Compared to the past 2-3 years, the number of companies and techies working out of these IT parks has been increasing steadily.

INFRASTRUCTURE MANAGEMENT DURING COVID-19

The government has waived rent for April, May and June 2020 for all IT and ITes companies which have taken up to 10,000 sq ft of space on rent. Rent has also been waived for these three months for the incubation centers operating from the IT Parks, irrespective of the area occupied. IT and ITes companies which have taken more than 10,000 sq ft of space have been offered a moratorium on rent for three months. These companies have been allowed to pay the rent for April, May and June 2020, by July, Aug and September 2020, respectively, without any penalty or surcharge. For all non- IT establishments (restaurants), functioning within the government IT parks and operating out of government buildings, rent has been waived for three months from April to June 2020. Three-month waiver will also be given to new companies on rent space to start activities in any of the IT parks.

The annual 5 percent hike in rents for IT and non- IT office spaces, shops and establishments in government-owned buildings within IT Park was not to be imposed in the financial year 2020-21. The fixed expenses such as electricity charges with companies are also to be reduced. As the power consumption will fall considerably due to the non-functioning of the companies in IT Parks during the lockdown period, the benefit of reduction in electricity bills will also be extended to the end-users by subsidizing electricity tariffs.

WNH TO BEAT COVID-19

With the COVID-19 pandemic forcing people to change their lifestyle in a big way across the world, the work scenario in Kerala is also witnessing a change. The occasional work-from-home (WFH) option for information technology (IT) employees has now become a matter of urgency. Though the work-from-home facilities served well in the initial days of lockdown, employee productivity levels suffered a decline eventually. While the majority of women employees complained about the psychological pressure of handling household and office work, a loss in employee morale has been reported across firms.

'Work near home', which is to be rolled out in all the major cities in Kerala is also the notable strategy of the government to win this crisis. This will be easier for employees to be near their home and even work from home. Creation of small work-sharing facilities in different regions across Kerala with Net connectivity, electricity and laptops facility established by the government in collaboration with Kerala IT Parks facilitate professionals to 'Work Near Home' (WNH). The working spaces being offered by Kerala are the most ideal and conducive as they lay great emphasis on environmental and sustainable parameters.

COVID 19 – PRECAUTIONARY MEASURES IN TECHNOPARK

Technopark is strictly adhering to the directions and guidelines issued by the Central and State Governments from time to time. The guidelines and directions are promptly communicated to all companies via mail and awareness posters are displayed at the building entrances. Proper signages are displayed at lifts, washrooms, chairs, dining area, etc. regarding the mode of usage and to ensure social distancing. All employees have to undergo thermal scanning at building entrances and cleaning and disinfection activities are frequently conducted.

No employee is permitted to enter the campus without a face mask and vehicles coming from distant places are disinfected before entering the campus. Hand sanitizer and handwashing facilities are provided in all buildings. Proper trainings are given to security and housekeeping personnel who are engaged in thermal screening, housekeeping and disinfection activities.

Most of the meetings inside Technopark are conducted through online video conferencing facilities to ensure social distancing. Only small meetings are conducted face to face, with proper precautions and social distancing. Technopark is making available necessary infrastructure such as thermal screening machines, hand sanitizer, hand wash, gloves, masks, etc. as part of precautionary measures. Restaurants are given instructions to ensure Government guidelines while preparing and serving food and also to ensure social distancing in the dining area.

PRE-INCUBATION FACILITY

Technopark provides business incubation facilities to start-ups in the IT and ITeS field. Technopark Technology Business Incubator (T-TBI), a joint initiative of Technopark, Trivandrum and the Department of Science and Technology (DST), Government of India, with great interest helping the technology business start-ups with all the necessary resources and supports to grow as a ripened business.

A 62,500 sq ft prefabricated incubation facility at the Technopark campus was launched during February 2021 designed to assist businesses with beginning work and getting up to speed, before their office space becoming operational. The incubation facility has centrally air-conditioned plug-and-play office spaces. The spaces are equipped with meeting rooms, conference rooms, a cafeteria, Fire Alarm and Fire Protection systems, 100% power backup and Building Management System for efficient operations.

FINDINGS

1. Transition to WFH proved more challenging for small and mid-sized IT & ITeS companies compared to large IT & ITeS companies.
2. Larger proportion of small IT & ITeS companies struggled to secure WFH authorisation from clients compared to mid-sized and large IT & ITeS companies.
3. Larger IT & ITeS companies were able to manage the transition to WFH, but have strong concerns about data privacy and the same concern is strongly reflected amongst the mid-sized IT & ITeS companies as well.

SUGGESTION

- The rent waiver, which was announced by the state government, may be extended to all the IT companies which work in IT parks owned by the government.
- The request of the IT companies to expedite the payment of pending arrears of state government and GST refunds may be accepted.
- The state may take steps to maintain good internet connectivity and uninterrupted power to increase the efficiency of employees working from home.
- As most of the IT units come under MSMEs, they can also avail the assistance, support for workers, credit support, other measures, etc., in the economic revival package announced by the central government.

CONCLUSION

The Coronavirus has forced businesses to think about how to meet employee and customer needs differently than ever before. Businesses that are ready to serve employees and customers with good infrastructure will be the one that succeeds. Whether a business is small or big, its bottom line can be benefited from a well-managed infrastructure.

Considering the tough situation faced by the IT Companies in IT Park the government of Kerala has well managed the infrastructural requirements bringing Technopark to achieve growth and success. The importance of infrastructure for sustained economic development is thus well recognized.

LIMITATIONS

Lot of research is available on public domain related to the development of IT sector in India but they do not specifically mention the infrastructure management of IT park. There are not many reports or studies or research papers published on Technopark.

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