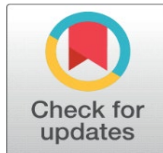
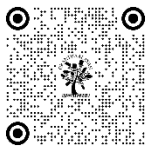


FROM CUBICLES TO CLOUDS: ANALYZING OPERATIONAL EXPENDITURES IN THE ERA OF REMOTE WORK FOR IT COMPANIES

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ABSTRACT

The global shift toward remote work has significantly altered operational dynamics within the information technology (IT) sector. This paper examines the impact of remote working on the operational costs of IT companies, with a specific focus on changes in facilities costs, employee benefits, and other administrative expenses. Utilizing a comparative approach, the study collects quantitative data from financial reports of selected IT companies. Preliminary findings suggest that remote work has led to a reduction in direct office-related expenses but has introduced new costs related to digital infrastructure and cybersecurity. The research also explores the long-term implications of these shifts, including potential savings from reduced real estate investments and increased expenditures on virtual collaboration tools. By analyzing these trends, this paper aims to provide a comprehensive overview of cost heads and find if these are affected by the work-from-home (WFH) operating model in the IT industry, offering valuable insights for policymakers and corporate leaders as they strategize future working models.

Keywords: Remote working, Work from Home, IT Companies, Operational Costs, Facilities Costs

1. INTRODUCTION

COVID 19 Pandemic has impacted every industry differently. In 2020 the WFH has increased to 12.38% from 5.49% in 2019 (Woźniak-Jęchorek, & Matuszak 2023). Its impact on the IT industry has been very unique. While almost all industries and sectors came to standstill, IT continued to thrive and grow even in the situation of multiple and repeated lock-downs due to its inherent capability to allow working from a remote location. This is one of the very few industries where a majority of key workforce can work remotely (Barring a few needed to physically maintain hardware equipment). The benefits of this model and its resilience to lock-downs are so high that many companies are already discussing extending the 'WFH' mode, another name for remote working, even after the pandemic. The primary reason for this is a minimal impact or even improved employee productivity and margins. There are many studies that cover the impact of Remote working or WFH on Employee's Productivity, Family, Finances and Health. However, there are very few or no studies that describe the financial impact of 'WFH culture' (also called

remote working or working remotely) on the IT organizations. Within the IT sector, a delivery centre is a physical establishment tasked with the coordination and oversight of the dissemination of digital goods and services. (David et al 2011) The primary cost of an IT office is associated with running a Delivery Center (DC), this is where employees work and create software or services and deliver them digitally (online) to their clients who are spread across the globe. The operational expenses of a distribution centre may fluctuate contingent upon the particular infrastructure implemented. Furthermore, the incorporation of sophisticated technologies, mobile communication devices, may result in an escalation of operational costs for a delivery centre (Yang et al 2019). In its entirety, the operational expenses of a delivery centre comprise elements such as technological infrastructure, system components, and maintenance obligations.

Apart from the Salaries of IT employees, the operations of the Delivery center is a major cost head for the IT organizations.

With employees working from home, the delivery center virtually becomes redundant. Shutting down or scaling down the Delivery center operations should intuitively save a lot of costs for the organization and thus add to the bottom line of the IT organization. According to the Gartner, Inc. Digital Worker Experience Survey (2021), the usage of collaboration tools for work has increased to nearly 80% in 2021, compared to just over half of workers in 2019. This represents a surge of 44% since the onset of the pandemic. It is the object of this paper to study the financial impact of WFH and subsequently reduced operations of Delivery centers on the organizations' profitability.

2. OBJECTIVES OF THE STUDY

The objectives of this study are threefold. First, the study aims to identify and understand the various cost heads associated with operating a delivery center. Second, it seeks to determine whether these cost heads are affected by the work-from-home (WFH) operating model. Finally, the study intends to understand the cumulative impact of the WFH model on the profitability of organizations.

3. LITERATURE REVIEW

Productivity of IT employees was studied by Patanjali and Bhatta (2021) in light of lock-down imposed due to pandemic in India. The study focused on identifying if productivity of employees was affected because of the WFH culture in IT. Since employees were working from home they had received some amount of autonomy and empowerment which otherwise would have been difficult to get. The study found that the autonomy and empowerment of employees was correlated with the productivity of the employee. Most of the employees showed the improvement in the productivity. The study concluded that the organizational and cultural factors significantly impact productivity in case of WFH.

Prasad et al (2020) studied the impact of independent variables on employees' well-being during pandemic. Structured questionnaire was used to take survey of employees in IT industry. The study focused on research question-If there was any correlation between the organizational and individual factors on psychological well-being of employees working from home. The result showed that Team work, Job related factors and Peer do not affect psychological well-being significantly. However, Communication, Policies of companies, work climate, job satisfaction and psychological factors had significant influence on psychological well-being of employees. The study concluded that the challenges of the employees working from home need to be addresses.

Bernstein et al (2020), tried to investigate the impact of WFH on creativity and productivity of the employees. The study found that white collar employees well adapted with the remote work culture as it provided them opportunity to balance work and home and child care. Such employees were preferring WFH for these benefits despite difficulties with WFH. Researchers observed that WFH has drawbacks such as integration of new members into teams, addressing and fixing weak ties and cultivation of relationships. The survey result showed that most of the employees were preferring hybrid work style that includes working both remotely and from office post pandemic. Therefore, organizations were preparing to increase investment in communication technology. Organizations are conceptualizing office space as an extension of virtual work. The paper highlights that virtual work has been successful during the pandemic due to human creativity, effective leadership, and sufficient organisational support.

Houghton (2020) reported that there was sudden rise in the workers working from home/ remotely compared to the pre-pandemic era. Technology has helped organizations to run their organizations without much impact of pandemic. Although the productivity of many teams did not fall when working remotely, there were few challenges faced by the employees. Many employees reported that in WFH setting they were working longer hours compared to working in office pre-pandemic years. Further WFH has impacted their work life balance because many of them said that they cannot

move away from their homes. The positive impact of working remotely was that employees could focus on their projects due to less and short meetings, virtually. Study concluded that many employees want to have hybrid working nature post pandemic. Employees want to continue some standard practices even after the pandemic for enhanced efficiency.

Hickman and Robinson (2020) conducted a research sponsored by Gallup to study working remotely during pandemic and its implications. 15,000 full time employees were surveyed. The study found that employees reported high level of engagements in work and hence remote work proved to be effective compared to traditional office working nature. The study revealed that remote workers exhibited a similar, if not higher, likelihood of experiencing a sense of connection to their company, receiving recognition and praise for their work, and effectively communicating with their colleagues. Nevertheless, the study also discovered that individuals who work remotely were more prone to experiencing feelings of isolation and encountering difficulties with diverting their attention due to household tasks and family obligations. Ultimately, the study indicates that remote work can yield positive results; however, it is imperative for companies to allocate adequate resources and provide necessary support to ensure its success for all individuals involved.

Study conducted by Gigi and Sangeetha (2020) suggested that a significant number of employees perceive remote working as having a beneficial influence on their work-life balance. They perceive themselves as capable of successfully managing their work and family obligations and maintaining focus on their work. However, they do not perceive family-related interruptions as having an impact on their work. The survey participants also indicated that their organisations are receptive to adopting novel approaches to enhance productivity, and they enjoy greater adaptability in fulfilling their tasks when working remotely. Nevertheless, they also pinpointed certain concerns regarding interruptions and disruptions in their work environment. They also conclude that there is no substantial disparity in work-life balance, productivity, techno-stress, job satisfaction, and communication across various levels of experience. Additionally, effective communication has a positive impact on job satisfaction in relation to remote work within the IT industry.

Operational expenses for public limited IT companies have been substantially impacted by the adoption of remote working practices amid the COVID-19 pandemic. Without sacrificing service quality, the transition to remote work enabled cost-saving measures such as decreased operating expenses (Michal et al (2022).

Furthermore, numerous organisations witnessed a 25–30% increase in productivity as a result of the implementation of intelligent technology and Quality 4.0, demonstrating the financial advantages of remote work (Sivamohan, Valluvan. (2022).

In addition, (Julia et al (2022) the implementation of Virtual Private Networks (VPNs) enabled dependable connectivity to organisational assets, which facilitated the establishment of remote work arrangements and enhanced cost-efficiency. In general, the implementation of remote working policies during the pandemic not only guaranteed the uninterrupted operation of public limited IT companies but also generated operational efficiencies and financial benefits.

According to Aidar (2021) the capacity to work remotely has demonstrated itself as an economically advantageous solution for numerous businesses. Enabling employees to telecommute can lead to cost reduction for businesses in multiple ways. A notable way to save costs is by decreasing expenses related to business travel. Utilising teleconference sessions in lieu of in-person meetings, decreasing the number of site visitors, and reducing the number of employees attending conferences or meetings can effectively minimise or eliminate employee travel for such purposes.

According to a report (Verma, 2021), the reduced travel of Google employees due to the pandemic, along with savings from company promotions and entertainment, resulted in a \$268 million decrease in expenses during the first quarter of this year compared to the same period last year. According to a corporate filing by Google, this was mainly due to the Covid-19 pandemic. By calculating this expenditure on an annualised basis, taking into account the fact that it has been almost a year since Google closed its offices worldwide, Google has managed to save over \$1 billion in expenses. Google utilised the savings to counterbalance the expenses associated with recruiting a substantial number of new employees, estimated to be in the thousands. Due to the pandemic, the marketing and administrative costs remained unchanged.

While work-from-home protocols were inevitable, IT services companies reported strong December 2020 quarter (Q3 FY21) results compared to last year. HCL Technologies reported a 31.1% YoY increase in net profit for the December quarter, Infosys 23.7%, Wipro 20.8%, MindTree 65.7%, and Larsen & Toubro Infotech 37.85% (Naik 2021).

The study conducted in Sri Lanka (Wijegunawardhana, 2022) instigated the impact of WFH on the country's economy with special reference to IT industry. To achieve the objective authors conducted extensive literature review. The study found that the WFH phenomenon has proved to be beneficial to employees, employers and the country's economy. Employers benefited due to less staff expenses, decreased operational expenses, reduced employee turnover, and improved employee satisfaction. The study recommends that WFH can be continued for its multiple benefits and win-win situation for all. Research believes that WFH can enhance the economic condition of the country.

According to CBCL (2020) the WFH phenomenon had led to reduced operational expenses because workspace and utility expenses reduced significantly. Similarly, Behrens et al (2021) also reported that WFH has resulted in decreased physical office space requirement and office administration. Further the cost such as phone, electricity and maintenance of infrastructure also reduced significantly. WFH culture also resulted in reduced commuting expenses. CBSL (2020) and Kulatunga (2020) also reported similar findings related to expenses in IT industry.

4. METHODOLOGY

The IT sector comprises an extensive array of establishments, spanning from modest five-person shops to multinational conglomerates employing millions. The majority of these corporations are privately held and refrain from publicly disclosing their cost structures. Furthermore, it is common for multinational corporations with delivery centres in India to withhold particular information regarding their Indian operations. For the purposes of this paper, secondary data that is available to the public has been utilised. There is a strong herding behaviour in BSE listed service companies including IT companies. These companies follow mean capital structure of IT sector (Krishnankutty and Mishra 2022). The scope of the examined sample is limited to companies that are part of the Nifty-IT index, which is published on the National Stock Exchange of India. The companies were chosen according to several criteria: the scale of their workforces, which varied from sizable to modest, their standing as representatives of the Indian IT sector, the composition of their service offerings (including IT and IT-enabled services)—whether they predominantly utilise an offshore workforce or a workforce that is extensively stationed at client locations—and their operational models.

Five companies were selected for comprehensive analysis in accordance with the specified criteria: Tata Consultancy Services (TCS), Wipro Ltd. (Wipro), Infosys Ltd. (Infosys), Tech Mahindra Ltd. (TechM), which was previously referred to as Mahindra British Telecom, and Co-Forge Ltd. (CoForge), which was formerly known as NIIT Limited. The study employed a wide range of sources, such as publicly accessible research reports, company annual reports and statutory filings, news articles, and press releases from various organizations.

5. DATA ANALYSIS

The delivery center is considered as one of the major cost centers in the IT organization. Most organizations place a high priority on optimizing their delivery center to reduce the cost of delivering IT services. We will look at each of the major components and understand if it is impacted by working remotely.

6. EMPLOYEE BENEFIT EXPENSE

Compensation to IT employees working in the Delivery center forms the major chunk of the operating expense of the organization. Between 50-70% of the operating costs of the company come from these expenses. This includes direct compensation, which is salary and bonuses, and indirect compensation in form of benefits. Indirect compensation includes Gratuity, defined contribution, share-based compensation, etc. These costs are largely unaffected by the location of the employee and have to be borne by the organization irrespective of the actual work location of the employee. As a matter of fact for an IT services company, as the company grows, the labor costs also grow in line with the revenue growth. This is evident from the analysis of the result of 5 companies below. Note that this cost excludes the employee benefits cost of support staff.

The data presented in the Annual report shows that employee benefit expenses as a percentage of profit before tax (PBT) increased for most IT companies over the last four years, with some fluctuations. This suggests that the COVID-19 pandemic has had a significant impact on employee benefit expenses for IT companies, resulting in increased costs.

Table 1- Employee Benefit Expenses as a percentage of Profit before Tax(PBT)

Organization	Year ended March 31, 2019	Year ended March 31, 2020	Year ended March 31, 2021	Year ended March 31, 2022
TCS (Rs Cr)	188.26%	203.45%	209.81%	208.09%
Infosys (Rs Cr)	215.37%	231.23%	208.58%	212.51%
Wipro (Rs. Mn)	259.74%	266.55%	239.07%	297.26%
TechM (Rs Mn)	315.84%	371.90%	324.17%	299.06%
CoForge (Rs Mn)	382.86%	424.89%	472.29%	445.11%

Source- Secondary Data collected from companies' reports

The increase in employee benefit expenses can be attributed to changes in employee working arrangements brought about by the COVID-19 pandemic, such as remote work and additional health and safety measures. These changes resulted in increased expenses related to employee benefits, including health insurance, sick leave, and other related costs.

Based on the trend observed in the data, it is likely that employee benefit expenses will continue to be a significant cost for IT companies in the future. The pandemic has accelerated changes in employee working arrangements, such as remote work and flexible work arrangements, which are likely to persist beyond the pandemic. This suggests that employee benefit expenses will remain an important consideration for IT companies as they adapt to these changes in the workforce.

In conclusion, the data suggests that the COVID-19 pandemic has had a significant impact on employee benefit expenses as a percentage of PBT for IT companies, resulting in increased costs. While there have been fluctuations in the data for some companies, the overall trend indicates that employee benefit expenses will continue to be an important consideration for IT companies in the future.

7. FACILITIES

Facilities include the building rentals and all the other related utilities that are required to run the premises. They typically include:

Rent. In case of a leased building, this is a significant part of facilities expense. For a small enterprise, which does not have the wherewithal to negotiate hard (due to small volume of space needed) the rent can be quite high.

Utilities. This includes Electricity, water etc. For a large premise, Central air conditioning (HVAC) adds to the cost of operating and maintaining the facility.

Furniture and non IT equipment. This includes Office Tables, chairs, fixtures and other allied equipment needed to make the facility adequate for IT operations.

Housekeeping. This includes setup cleaning and basic maintenance of facilities.

Many large companies prefer to own the facilities rather than lease them. (this helps to create a hard, long-term asset to strengthen their balance sheet.). In such cases while there is no rent, it still incurs basic expenses if the facility is not used and it becomes a fixed expense along with constant depreciation. It is a matter of financial strategy that the company wants to follow.

The data presented in the research report indicates that facility expenses as a percentage of profit before tax (PBT) for IT companies have decreased or remained relatively stable in the last four years. TCS, Infosys, and CoForge have all seen a steady decrease in their facility expenses as a percentage of PBT over the past four years. In contrast, Wipro has seen a slight decrease, then an increase, and then a decrease in facility expenses as a percentage of PBT over the same period. TechM has experienced fluctuations in facility expenses over the period but has seen a slight decrease in the most recent year.

Table 2- Expenses on Facilities as a percentage of Profit before Tax(PBT)

Organization	Year ended March 31, 2019	Year ended March 31, 2020	Year ended March 31, 2021	Year ended March 31, 2022
TCS (Rs Cr)	10.25%	6.41%	4.87%	4.14%
Infosys (Rs Cr)	7.08%	8.17%	5.73%	4.18%
Wipro (Rs. Mn)	19.25%	16.11%	14.57%	16.69%
TechM (Rs Mn)	4.32%	7.23%	4.31%	3.37%
CoForge (Rs Mn)	12.16%	5.58%	5.28%	4.99%

Source- Secondary data collected from companies' reports

The decrease or stability in facility expenses as a percentage of PBT for IT companies could be attributed to the adoption of remote work and other cost-cutting measures. The COVID-19 pandemic has forced companies to adopt remote work and reduce costs wherever possible, including facility expenses. While the adoption of remote work has led to increased expenses in other areas such as technology, it has also allowed companies to reduce facility expenses.

Overall, the trend observed in the data suggests that IT companies have been able to reduce facility expenses as a percentage of PBT through cost-cutting measures, including remote work, and other efficiency measures. It is likely that companies will continue to adopt these measures in the future, even beyond the pandemic, to maintain cost efficiencies.

8. EQUIPMENT

All IT companies need to provide their staff with adequate personal computers or laptops to work with. Since their work is highly technical, the computers are of higher configuration to support the highly technical nature of the work. However, the employee will need to have a high-end computer even if he is working from home and the company must provide it to them. This was done during the pandemic as well. Since the computer now needs to travel to the employee's location, the standard desktop is generally replaced with a laptop of similar, if not higher, configuration. This increases the cost for the company. While some companies experimented with sending Desktops to the employee's home, this presented various challenges such as Transportation of bulky equipment to every individual home, legal compliance issues.(due to nature of bonded warehouse related goods), configuration problems. (Most people have WiFi at home or use a mobile hotspot. Desktops are not equipped to use WiFi or hot spots). They also need to run additional security software to protect against misuse and data theft.

Accessing data outside of the company's secure premises poses additional security risks. The company needs to deploy additional security software to prevent the theft of data over the internet, prevent the theft of data by the employee himself, prevent access to unwanted websites to maintain the safety, security, and productivity of the employee.

Server computers that store all the company's information must still be maintained on company property, but they must now be upgraded to support extra layers of security for remote working.

Looking at the data, we can see that for TCS, the cost of equipment and software licenses as a percentage of PBT has decreased over the last few years, suggesting that the company has been able to manage these costs more efficiently. For Infosys, on the other hand, the cost has been on an increasing trend, with a sharp increase in the year ending March 31, 2022.

Wipro has seen some fluctuations in this cost over the years, but overall it has remained relatively stable, with a slight decrease in the year ending March 31, 2022. For TechM, the cost has been consistently high over the years, but with a slight decrease in the year ending March 31, 2022. CoForge has seen a sharp increase in this cost in the last two years, but it is still relatively low compared to other companies.

Table 3- Equipment as a percentage of Profit before Tax(PBT)

Organization	Year ended March 31, 2019	Year ended March 31, 2020	Year ended March 31, 2021	Year ended March 31, 2022
TCS (Rs Cr)	5.46%	4.51%	3.34%	2.26%
Infosys (Rs Cr)	12.13%	12.28%	15.86%	22.62%
Wipro (Rs. Mn)	1.18%	9.38%	5.53%	4.25%
TechM (Rs Mn)	34.21%	43.94%	49.25%	46.72%
CoForge (Rs Mn)	7.04%	18.17%	28.51%	27.54%

Source- Secondary Data collected from companies' reports

As for the impact of COVID-19 on this cost, it is difficult to draw any firm conclusions from the data. However, it is possible that the pandemic has led to a greater need for equipment and software licenses to support remote work and other changes to work practices.

Looking ahead, it is likely that the demand for equipment and software licenses will continue to be high as companies adapt to new ways of working. It will be important for them to manage these costs effectively to ensure their profitability.

9. COMMUNICATION EXPENSES

It follows from the previous paragraph that once an employee starts working remotely, the computer must be able to connect with the official servers and client servers along with layers of additional security that encapsulate the data. This increases the bandwidth requirement for both the servers kept in the office and for remote machines. The increased requirement comes from: Additional data accessed, that was typically accessed from within the secure premises of the company.

10. ADDITIONAL LAYERS OF SECURITY.

Additional application required to enable remote working (conference calls, video call, chats, [zoom meetings] that are bandwidth intensive.

Backups connections. High bandwidth connection for resilience and business continuity.

All these add up to a significant additional expense for both the company and the employee. In many cases this additional expense of additional data connection at employees' location may need to be borne by the company to ensure smooth business operations.

The data presented in the Annual report indicates that communication expenses as a percentage of profit before tax (PBT) for IT companies have fluctuated but remained relatively stable over the past four years. TCS, Wipro, and CoForge have seen a slight increase or decrease in communication expenses as a percentage of PBT over the period, while Infosys has seen a slight decrease in communication expenses, and TechM has seen a slight increase.

Table 4- Additional layers of security as a percentage of Profit before Tax(PBT)

Organization	Year ended March 31, 2019	Year ended March 31, 2020	Year ended March 31, 2021	Year ended March 31, 2022
TCS (Rs Cr)	3.18%	3.77%	4.33%	3.97%
Infosys (Rs Cr)	2.24%	2.40%	2.38%	2.03%
Wipro (Rs. Mn)	3.95%	3.93%	4.37%	3.80%
TechM (Rs Mn)	6.60%	7.56%	7.71%	6.91%
CoForge (Rs Mn)	5.01%	4.50%	3.84%	3.96%

Source- Secondary data collected from reports

The data presented in the annual reports indicates that communication expenses as a percentage of profit before tax (PBT) for IT companies have fluctuated but remained relatively stable over the past four years. TCS, Wipro, and CoForge have seen a slight increase or decrease in communication expenses as a percentage of PBT over the period, while Infosys has seen a slight decrease in communication expenses, and TechM has seen a slight increase. The COVID-19 pandemic has led to an increase in remote work and the need for online communication, which could be one reason for the slight increase in communication expenses. However, the stability in communication expenses as a percentage of PBT over the period suggests that companies have been able to manage these expenses effectively.

Based on the data, it can be concluded that communication expenses as a percentage of PBT have remained relatively stable for IT companies despite the impact of the COVID-19 pandemic. It is likely that companies will continue to adopt remote work and other online communication methods in the future, which may lead to a sustained increase in communication expenses. However, it is also likely that companies will continue to manage these expenses effectively to maintain cost efficiencies.

11. TRAVEL EXPENSE

Expenses for travel would seem to be a significant cost head for any IT company. Many IT employees enjoy working abroad, and companies need them to travel in order to better understand client requirements and support the client after sales. On the other hand, the entire IT offshoring model relies on minimizing the need to travel to client locations and providing services only remotely. The data from annual reports of companies indicates that travel expenses could account for 10 to 30 percent of the profits (per pandemic). In general, companies with robust offshore practices that are able to instill confidence in their clients spend less on travel.

Based on the data provided in Annual Reports, it appears that travel expenses as a percentage of PBT decreased significantly for all companies between the years 2019 and 2021, likely due to the travel restrictions and remote work policies that were put in place during the COVID-19 pandemic. It's worth noting that even in 2022, travel expenses are still not back to pre-pandemic levels, indicating that remote work may continue to be a significant factor for many companies going forward.

Table 5- Travel Expense as a percentage of Profit before Tax(PBT)

Organization	Year ended March 31, 2019	Year ended March 31, 2020	Year ended March 31, 2021	Year ended March 31, 2022
TCS (Rs Cr)	8.36%	7.80%	2.47%	3.07%
Infosys (Rs Cr)	11.56%	12.31%	2.08%	2.75%
Wipro (Rs Mn)	15.39%	14.83%	3.78%	4.83%
TechM (Rs Mn)	20.84%	23.78%	5.61%	5.92%
CoForge (Rs Mn)	21.05%	21.45%	3.30%	3.16%

Source- Secondary Data collected from reports

It's also interesting to see the variation in travel expenses across the companies, with Wipro and TechM consistently having higher travel expenses as a percentage of PBT compared to TCS, Infosys, and CoForge. This could be due to differences in company culture, client location, or other factors.

Looking to the future, it's possible that companies will continue to prioritize remote work and limit business travel as a way to reduce costs and improve efficiency. However, it's also possible that as the pandemic wanes and more people are vaccinated, there may be a resurgence in business travel, which could result in increased travel expenses for companies.

12. MARKETING AND BRAND BUILDING

The information technology sector is fiercely competitive. There are thousands of small and large Indian players, and new ones are emerging daily. Many countries have also understood the model of IT service industry and are now competing with India in IT Sector. The fierce global competition makes the Marketing and Branding exercises necessary for practically all IT companies.

Marketing activities generally encompass a range of initiatives such as industry meets, seminars, and conferences. They also include exhibitions and expos, targeted offsite marketing events for both existing and new clients, and various sponsorship efforts. One-on-one sales and marketing expenses. (Sponsor dinners, vacations and other incentives etc.) Virtual marketing events. This involves online speaker series, videos, digital flyers and product/service brochures. Direct online interaction with Subject Matter experts.

The data from Annual reports shows that all the companies listed have varying percentages of marketing and brand building expenses as a percentage of profit before tax (PBT), with TCS consistently having the highest percentage. There is also some variability in the trend for each company, with some increasing and decreasing over the four-year period.

Table 6- Marketing and Brand building Expenses

Organization	Year ended March 31, 2019	Year ended March 31, 2020	Year ended March 31, 2021	Year ended March 31, 2022
TCS (Rs Cr)	9.38%	8.40%	6.73%	7.22%
Infosys (Rs Cr)	2.32%	2.40%	1.33%	1.84%
Wipro (Rs Mn)	2.35%	2.07%	0.73%	1.33%
TechM (Rs Mn)	2.87%	4.72%	1.66%	2.64%
CoForge (Rs Mn)	5.67%	5.34%	2.05%	2.22%

Source- Secondary Data collected from reports

It seems evident that marketing and brand building expenses have been impacted by the pandemic, as many businesses have had to adjust their marketing strategies in response to changes in consumer behavior and economic conditions.

As for the future, it is difficult to predict how these expenses will trend. Factors such as changes in consumer behavior, new technology, and economic conditions can all impact marketing and brand building expenses. However, companies will likely continue to invest in these areas as a means of building and maintaining their brand reputation and market share.

13. FINDINGS

In this study, we examined the main expenses related to the operations of the IT industry's delivery centers. The financial performance for each of these heads during pandemic year and the year immediately prior to it was compared to determine how remote working affected each.

Table 7-Impact of remote working on profits

Expense Head	Effect on Profits	Impact of WFH on Profits
Employee Benefits	High	Low
Facility expenses	Low	High
Cost of equipment and software licenses	High	High
Communication expenses	Low	Medium
Travel expenses	Low	High
Marketing and brand building	Low	High

Source: Own research

Employee Benefits are key expense of any service Industry. WFH has not really increased these costs. Some companies may have leveraged the situation to hire cheaper resources working from different location. However, this seems to have been offset by higher demand due to similar strategy adopted by almost all companies.

The WFH has reduced the need to maintain and operate expensive office facilities. This has clearly impacted the profits of the IT companies positively.

Cost of Equipment has gone up due to requirement of additional workstation sets (and associated software) needed at Employee's home, due to additional security and cloud based software requirements.

The communication costs have largely been unaffected. As the major servers are still accessed via company's network, these have to be maintained at same capacity as pre-pandemic levels.

As employees are no longer traveling as much as they needed to before the pandemic, the travel expenses have definitively gone down. These are largely expected to stay low.

The marketing costs have gone down after the pandemic. They are now inching up after opening of the travel but at a slow pace so far.

14. CONCLUSION

During the Period of pandemic, the IT industry has increased its business despite lock-downs, whereas other industries have suffered significantly. Although most of the expenses, such as travel and facilities, decreased sharply, those related to equipment, software [security and remote access] and communication increased dramatically. Savings from reduced travel and reduced use of facilities appear to be more than offset by increased costs for communications, equipment, and software. Therefore, remote working may yield only marginal improvements in profits in company's initial year, but it is expected to significantly increase profits in following years.

LIMITATION OF STUDY

Many large and small companies working in space of IT, are privately held. They do not publish audited operational or Financial data. Their operating parameters may be materially different from the companies selected for this study.

There are many foreign owned companies that though have large presence in India in terms of Delivery Center and Client Market, they are not obligated to present their financial data in India. Such companies do not follow Indian Accounting practices. Consequently, their financial parameters cannot be directly compared with those of Indian companies.

Start-ups, the companies that have started their operations in last few years receive support and incentives from Government and other agencies for their Facilities, Marketing and Equipment. Thus their operating expenses will be different and may not match the findings of this study.

CONFLICT OF INTERESTS

None.

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