MASTER THESIS

"The Effect of GST on Indian E-commerce Industry"

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1. Abstract

India is one of the countries which have a fast paced growing economy. It is believed that India could emerge into a self-sufficient developed nation way back in the past but the reality is that India is still in the list of the developing nation. It is because of several reasons like corruption, unsuccessful economic policies, lack of awareness of education, low literacy rate, insufficiency and adulteration in food products, pollution, excess in number of population and so on. In case of economic policies, taxation plays a vital role and the recent tax reforms which the government of India has undertaken is one of the reasons for its economic achievements in the world scenario. This paper aims at analyzing the effect of the newly implemented Goods and Services Tax in the field of the Indian e-commerce industry. The indirect tax reform was taken by the government of India in the form of MODVAT. In due course of time, several taxes were introduced in accordance with the necessity. Due to a number of different forms of taxes and uncertainty in the tax system the government face loss in tax revenue. It is because there tax compliance burden, cascading of taxes expense of tax litigations created an unfavorable business environment and by thus resulting in fewer investments. These are the reason for the government of India to implement a unified and well-structured tax system that could make India into a single tax regime. The Goods and Service Tax was introduced in India in July 2017. The e-commerce industry is one of the highest contributors of Indian economy. The previous indirect tax system is one of the hurdles for the e-commerce industry in India in achieving maximum potential. This Master thesis analyses both positive and negative impacts on the Indian e-commerce industry by the implementation of the Goods and Services Tax.

2. A summary of Indirect Taxation in India (1986 to 2018)

The foundation of the indirect tax system at the federal level was laid during the year of 1986 by then finance minister Mr. V.P Singh in the name of MODVAT (Modified Tax System) [1]. One of the ultimate aims of the introduction of MODVAT is to provide an opportunity for deducting excise duties paid on certain goods from the government[2]. The other objectives of this system are to prevent repeated payments of duties and tax in different stages of production and excise duties and to simplify and rationalize tax procedure[3]. MODVAT had significant effects in the administration of taxation.

The main advantages of this system were an increase in transparency of the tax burden under the union excise duties; a reduction in the cascading effect of input taxation; and the generation of a mechanism to check tax evasion through self-policing[4]. The failure of this system was due to heavy compliance burden and fraudulent practices supported by increasing number of corrupt bureaucrats. Some of the unlawful practices were by means of Credit Availed on Forged Documents, Credit without Payment of Duty, Credit Availed Twice on the Same Documents, Credit on Extra/Xerox Copy of Invoice, Credit on Invoice without Physical Movement of the Goods, Credit of Duty without Production of Duty-Paying Documents and so on[5].

The proposal and initiation for the reformation of MODVAT were during the year of April 2000. In the year 2002, the government introduced Service Tax Credit Rules; provide credit for service tax paid by service providers[6]. This laid foundation for the initiation of the new tax system in 2002 and thus leading to the introduction of CENVAT scheme in the year 2004[7]. The aim of this scheme is to eliminate the flaws in the previously existing tax system. Prevention of Tax cascading, codifying the credit mechanism, restraining fraudulent credits and so on, are some of the once highlighted during this tax reform.

1. Goods and Services Tax (India)-(https://en.wikipedia.org/wiki/Goods_and_Services_Tax_(India))
2. VAT in India – Past, Present and Future-(http://www.vatassociation.org/vat-news/news-from-iva-members/59-vat-in-india-past-present-and-future)
3. Types of taxes in India and advantages and disadvantages of VAT and MODVAT-(http://www.indiastudychannel.com/resources/140523-Types-of-taxes-in-India-and-advantages-and-disadvantages-of-VAT-and-MODVAT.aspx)
4. MODIFIED VALUE ADDED TAX (MODVAT) : STRUCTURE AND RESOURCE MORILISATION-Pawan K. Aggarwai-NATIONAL INSTITUTE OF PUBLIC FINANCE AND POLICY 18/2, SATSANG VIHAR MARG, SPECIAL INSTITUTIONAL AREA NEW DELHI 110 067
5. MODVAT: Short-Term Administrative Reforms-Parthasarathi Shome-Sukumar Mukhopadhyay-Hasheem N. Saleem- March 1996
6. CENVAT Credit Rules-History of CENVAT-(https://www.indiafilings.com/learn/cenvat-credit-rules/)
7. CENVAT-A Fresh Prespective- Vivek,Ashwani Sharma, Anuj Kakkar- Manupatra

The introduction of this system unified and merged the provisions thereby allowing cross-sectorial availability and utilization of credit[8]. The CENVAT credit can be claimed in the instances as follows; Manufacturers can claim excises duties on the final product, Inputs and capital goods which are partially processed, Services providers can claim service tax paid on taxable and exempt services[9].

The government of India made amendments several times in order to improve to the efficiency of CENVAT. In the year 2011, during the parliamentary budget, the government amended the definition of the term “Input” and “Input Services” as defined in rule 2(K) and rule 2(I) of the CENVAT Credit rules 2004[10]. The importance of this amendment is that in the previous definition there was the exclusion of several goods and the new update expanded the perspective of input and input services. The proposal for introducing a uniform indirect tax system to all states in India started as early as from the year of 2005 by the Kelkar committee headed by Mr. Vijay Kelkar which was formed under the previous Prime Minister Mr. Atal Bihari Vajpayee[11].

The structure of the new indirect tax system was created from references taken from the structure of European VAT system and other indirect tax systems around the world and was finalized with a general agreement in a dual GST including central and state separate legislation, levying and administration of tax in the year of 2009. Due to internal conflicts between the political parties and lack of sufficient support in the parliament the GST bill was not been made as law by the ruling party. In the year 2012, the government made further changes in the CENVAT.

Some of the main changes are as follows; definition of capital goods under rule 2(a) was expanded, the definition of Input Service under rule 2(I) was amended, the refund of CENVAT credit under rule 5 was substituted[12]. Other significant amendments include changes in rule 3(5), rule 3(5A), rule 4(1), rule 4(2), rule 6(3), and rule 6(3C), rule 6(3D) respectively[13]. The government of India made the third amendment in the year 2014. One of the significant changes is redefining the term “Relevant Period” under rule 7 of the CENVAT credit rules[14]. The same year the opposition party is voted and lifted up to power.

8. CENVAT Credit Rules-History of CENVAT-(https://www.indiafilings.com/learn/cenvat-credit-rules/)
9. JD Edwards EnterpriseOne Applications Localizations for India Implementation Guide-(https://docs.oracle.com/cd/E16582_01/doc.91/e23355/ind_wrk_wth_cenvat_crdts.htm#EOAID4302)
10. CENVAT-A Fresh Prespective- Vivek,Ashwani Sharma, Anuj Kakkar- Manupatra
11. GST: A 17-year-old dream, 17 phases towards creating history-IndiaToday-(https://www.indiatoday.in/india/story/gst-history-arun-jaitley-tax-reform-july-1-985482-2017-06-29)
12. ANALYSIS OF AMENDMENT IN CENVAT Credit Rules, 2004-(http://voiceofca.in/siteadmin/document/PG_ANALYSIS_OF_AMENDMENT_IN_CENVAT_Credit_Rules.pdf)
13. https://taxguru.in/excise-duty/cenvat-credit-6th-amendment-rules-2012-amend-cenvat-credit-rules-2004.html
14. Summary of Recent Amendments in CENVAT Credit Rules- Dr. Sanjiv Agarwal-(https://taxguru.in/excise-duty/summary-amendments-cenvat-credit-rules.html)

When analyzing CENVAT from a government perspective, this system of taxation has several shortcomings and the amendments in this tax system were not sufficient enough to increase its efficiency to the expected level. The main limitations of this system are Difficulty in the computation of exact tax amount, Dependence of tax burden on the number of stages in the supply chain, “Anti- Make in India” approach resulting in an increase in the cost of production and so on[15].

In the year 2015, the finance minister of India Mr. Arun Jaitley proposed the implementation of GST. In 2016, a draft model law was released by the Ministry of Finance releases on GST to the public, expecting suggestions and views[16]. The GST bill was enacted and came to force from 1st of July 2017. From an economic perspective, this is one of the greatest milestones achieved in the Indian tax systems but the implementation of the new GST tax system was not very welcoming for the consumers in the first place.

The eight of November 2016 is remembered not only for the victory of President Trump but also is remembered in India for the demonetization of Indian Currency. The Indian government demonetized its own currency on eighth of November 2016[17]. The prime objective is to tackle the act of counterfeiting Indian banknotes, to eliminate black money hoarded in cash and curb funding of terrorism with fake notes[18]. To make the economy more digitalized and to bring more population under the taxable economic grid were also the reasons for the Indian government to make such a decision[19]. This move from the Indian Government has severe impacts on the lives of the general public.

A survey on the impact of demonetization in the Micro, Small and Medium Enterprises revealed that 73% of the subjects are facing huge cash crunch due to demonetization as they are unable to fulfil their daily requirements, 88% of the subjects said that the impact of demonetization is majorly seen on the retail, sector because of high dependency on cash for purchase by customers, 81% of the subjects said that the cash was driven agriculture sector is impacted majorly due to demonetization,56% of the subjects said the impact of demonetization on the Labour intensive sectors (leather, mining, textile) is quiet significant[20]. The cash withdrawal limitation per day from ATMs and Banks also affected the general public to struggle for their daily needs. Employees on daily and weekly wages were adversely affected because of non-availability of cash[21].

15. Disadvantages of CENVAT-BMS Team-January 23, 2013-Elements of Direct and Indirect Taxes-(http://www.bms.co.in/disadvantages-of-cenvat/)
16. History of GST in India -(https://www.bankbazaar.com/tax/history-of-gst.html)
17. 2016 Indian banknote demonetization-(https://en.wikipedia.org/wiki/2016_Indian_banknote_demonetisation#cite_note-withdrawaloflegal-2)
18. Withdrawal of Legal Tender Status for □ 500 and □ 1000 Notes: RBI Notice-PressReleases-(https://rbi.org.in/Scripts/BS_PressReleaseDisplay.aspx?prid=38520)
19. The after effects of demonetisation in India in 2017-DECCAN CHRONICLE-Nov 30, 2017-(https://www.deccanchronicle.com/business/economy/301117/the-after-effects-of-demonetisation-in-india in-2017.html)
20. IMPACT OF DEMONETIZATION ON ECONOMY, BUSINESSES AND PEOPLE -PHD RESEARCH BUREAU-PHD CHAMBER OF COMMERCE AND INDUSTRY(http://phdcci.in/image/data/Research%20Bureau-2014/Economic%20Developments/paper/Study%20on%20Impact.pdf)
21 Effect of Demonetization in India- Economic, Political and Social Perspective-Sriram K.V* and Lewlyn L. R. Rodrigues-(https://gribaconfo.com/wp-content/uploads/2017/05/205-Sriram.pdf)

The data collected from survey reveals that 58% of subjects were facing high level of difficulty in fulfilling their day to day activities, 92% of subjects were facing major impact of currency crunch is seen on daily needs of the people such as purchase of eatables, dairy products, and other necessities, 89% of the subjects reported unavailability of cash at banks and ATMs as a major hurdle in withdrawing/depositing cash from the bank/ATMs[22]**.** All the limitations on cash withdrawal were removed only on March of 2017[23].

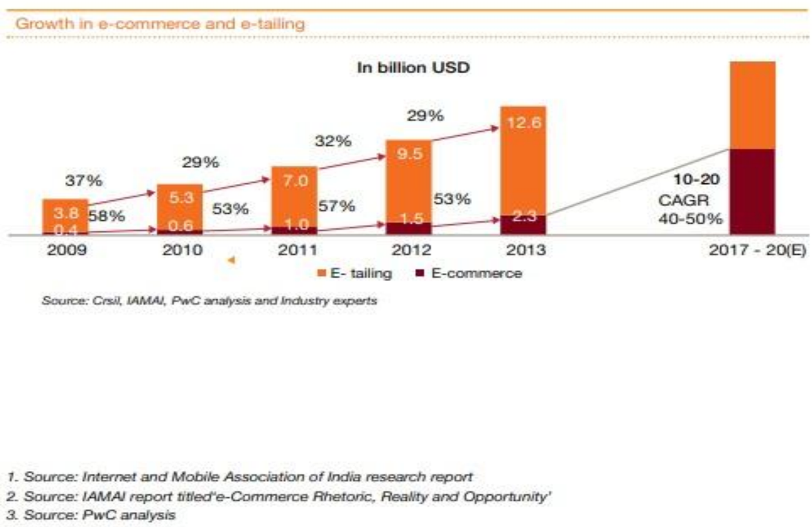
This is one of the main reasons for the people of India to be against the implementation of GST. Due to demonetization and low cash flow, people were facing issues to meet their basic needs. In this instance implementation of GST and by then resulting in the rise of sudden inflation of goods made people of India to face adverse economic issues. The result of a large economy like India cannot be analyzed or predicted with short-term results. It is not certain whether demonetization will be regarded as a prudent move from the government but the implementation of GST will be ultimately resulting in good results to the Indian economy. It is because the effort of making India into a single taxable regime itself is a great achievement and will presumably result in attracting more foreign investments and the more of its positive impacts in the field of e-commerce is discussed further in the upcoming chapters.

22. MPACT OF DEMONETIZATION ON ECONOMY, BUSINESSES AND PEOPLE -PHD RESEARCH BUREAU-PHD CHAMBER OF COMMERCE AND INDUSTRY-(http://phdcci.in/image/data/Research%20Bureau-2014/Economic%20Developments/paper/Study%20on%20Impact.pdf)
23. RBI removes limit on cash withdrawal, banks go back to pre-demonetisation era-(http://www.financialexpress.com/india-news/rbi-removes-limit-on-cash-withdrawal-banks-go-back-to-pre demonetisation-era/586375/)

3. Indian E-commerce Industry- An overview

The Indian Economy was plodding till the year 1980. The previous economic policies of the government were not sufficient enough to achieve higher standards in the economic growth. This phase had the lowest of GDP growth averaged at 3.5% per annum and with a per capita income averaged 1.3%[24]. In the year 1991, the “economic liberalization” was initiated. The ultimate aim of such liberalization is to make the market; service oriented and expands the role of private and foreign investments[25]. This also paved way for the emergence of e-commerce in India. The initiative of making internet publically available by state-owned service provider Videsh Sanchar Nigam Limited (VSNL) on 14 August 1995 is another milestone in the history of Indian e-commerce industry[26].

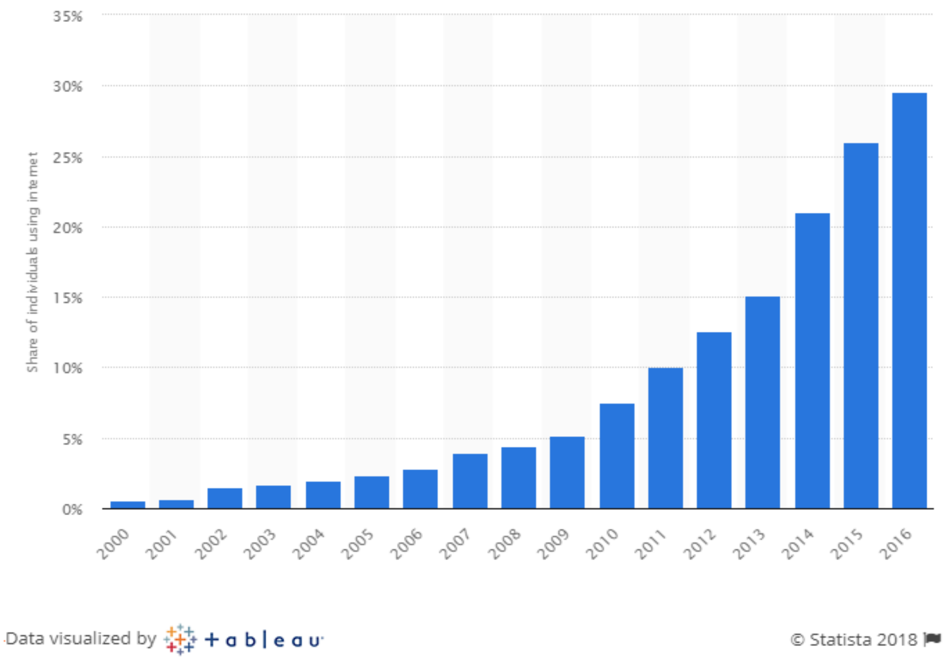
Special Tariffs and discounts in government and private owned transport firms when booking and reserving tickets online attracted more consumers to prefer online bookings. Even though few start-ups were providing e-services through their sites, until the dot-com bubble there were no significant improvements. The bubble burst had serious impacts on the Indian economy. This resulted in the collapse of more than a 1000 e-commerce business in India[27]. The Indian e-commerce industry had its revival during the introduction of online shopping models. These online sites attracted more customers by means of a fairly discount prize and uncompromising quality. Along with the E-commerce giants like Amazon and eBay, the Indian enterprises like Flipkart, Jabong, Make my trip etc., gave the industry the pace to reach a phenomenal level.



24. Redefining The Hindu Rate Of Growth- The Financial Express- Apr 12 2004-(http://www.financialexpress.com/archive/redefining-the-hindu-rate-of-growth/104268/)
25. https://en.wikipedia.org/wiki/Economic_liberalisation_in_India#cite_note-FOOTNOTETask_Force_Report20067%E2%80%938-29
26. The birth of the Internet in India-From Internet evangelists, through unstable dial-up connections, to the smartphone set. The story of Internet in India(http://www.livemint.com/Industry/R3kgewhIhKscbiELV1sHZM/The-birth-of-the-Internet-in-India.html)
27. Rebirth of e-Commerce in India-Milan Sheth-2012, Ernst & Young - Research study on the Indian e-Commerce sector,
28. The picture source- Evolution of e-commerce in India Creating the bricks behind the clicks-PWC

It was estimated that the market worth was about $3.9 billion USD in 2009 and later it extended to an amount of $12.6 billion USD in 2013[29]. This means there is an average increase of nearly $2.2 billion USD per year. It is noted that 70% of the Indian e-commerce market comprises of travel-related enterprises[30] and paving the way for India to achieve the world's 7th largest tourism economy in terms of GDP according to World Travel and Tourism Index[31].

There are several reasons for this rapid development in the industry of e-commerce in India. Some of the main reasons for this expeditious growth rate are increased utilization of the internet, Introduction of mobile phones (Smart Phones), increased number of online payments and rise in favorable demographics[32]. The chart below describes the amount of population using internet from the year 2000[33].



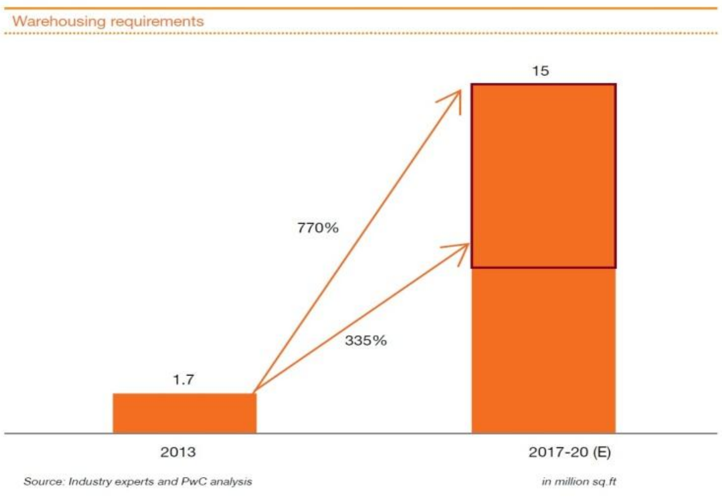
The internet is considered to be the backbone of the digital market. The increase in the number of users of the internet created more requirements for the suppliers and service providers. This initiated an expansion of the boundaries of the e-commerce industry. The requirement in this context means the availability of coders, web developers, product managers, online marketing managers, product developers and user-experience experts, data scientists and other experts for the companies to expand their e-commerce business[34]. Thus the employability rate due to this industry increased to a considerable amount.

29. E-commerce in India-(https://en.wikipedia.org/wiki/E-commerce_in_India#cite_note-7)
30. Evolution of e-commerce in India-PwC-(https://www.pwc.in/assets/pdfs/publications/2014/evolution-of-e-commerce-in-india.pdf).
31. (https://www.wttc.org/media-centre/press-releases/press-releases/2017/indias-is-the-worlds-7th-largest-tourism-economy-in-terms-of-gdp-says-wttc/)
32. A STUDY ON IMPACT OF E-COMMERCE ON INDIA's COMMERCE- Dr. Rajasekar, S. and Sweta Agarwal- International Journal of Development Research Vol. 6, Issue, 03, pp. 7253-7256, March, 2016-(http://www.journalijdr.com/sites/default/files/issue-pdf/5153.pdf)
33. The chart – Statista -(https://www.statista.com/statistics/255135/internet-penetration-in-india/)
34. Role of Digitization and E-commerce in Indian Economic Growth: An Employment Generation Perspective- Ms. Payel Chaudhuri and Dr. Abhishek Kumar (https://www.researchgate.net)

This in return promoted the industry to grow more and expand its horizons to an extent which covers even the micro interiors of most of the Indian States within a short span of time. It is estimated around 300 thousand employment opportunities are created in villages[35]**.** It is also noteworthy to mention the role of the job application website which helped people to get employed in several other fields in the Indian labor market. These factors were some of the reasons for a shift of concentration of labors in the Indian labor market to the e-commerce industry.

In the year of 2012-2013, the e-commerce industry was responsible for creating 1.45 million direct job opportunities in e-tail, around one million jobs in e-tail logistics and warehousing and 400 thousand in technology and corporate jobs[36]. These figures are the result of the desire of investors to build up business activities in the Indian e-commerce industry. Some of the main reasons for the companies to make such choices are to Increase the customer base, Rise in sales, expanding the business, Easy and secure payments, the Recurring sale of goods and so on [37]. The e-commerce industry has definitely acted as a better source for improving the numbers in the customer base. It is because of the ease in access to the consumer to buy their desired product through the fully customized to user-friendly online platforms.

The online platform acts as a medium for buying different products through a computer or mobile phones. The comparability of prices, quality of products, Cash on delivery system, easy returns, and warranty claims made the e-commerce platform more attractive for the consumers. This ultimately resulted in an increase in the sale of goods. The companies could see that there is a greater potential in the Indian e-commerce industry and expand the business would increase the chances of the sale of goods. The requirements of expanding the business in e-commerce include infrastructures and logistics investments like warehouses, advanced machinery delivery centers and so on [38]**.** The bar diagram below is an analysis done by a popular tax firm about



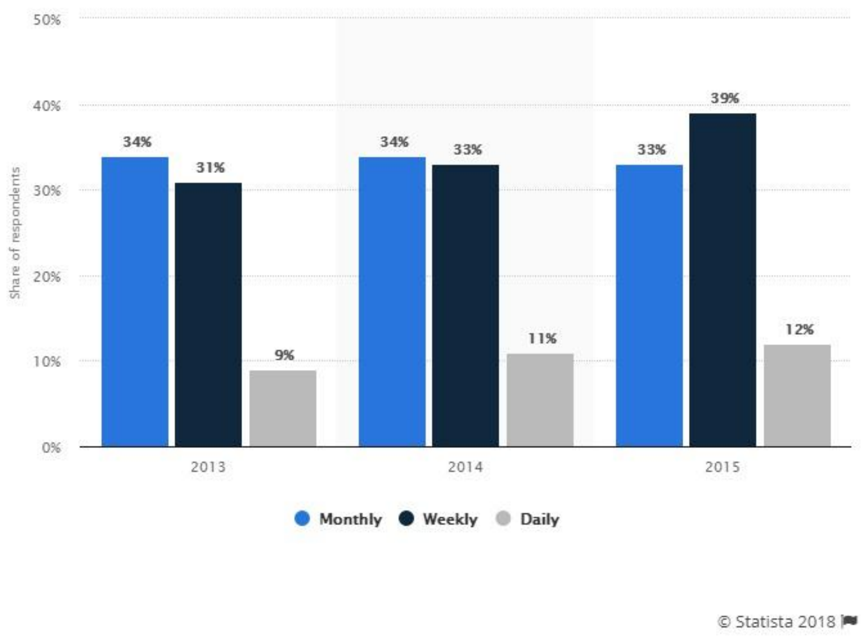
35. Impact of E-commerce on the employment in India- KPMG report papers- (https://assets.kpmg.com/content/dam/kpmg/in/pdf/2016/12/impact-of-ecommerce-on-employment-in- india.pdf
36. Technopak Report: E-tailing in India, Unlocking the potential, The Need for India to Analyze E-tailing on its Own Merit, May 2013
37. ADVANTAGES AND CHALLENGES OF E-COMMERCE CUSTOMERS AND BUSINESSES: IN INDIAN PERSPECTIVE- Dr. C. Eugine Franco , Bulomine Regi-International Journal of Research – GRANTHAALAYAH-Vol.4 (Iss.3: SE): March, 2016
38. Evolution of e-commerce in India-Creating the bricks behind the clicks-Research Paper-PWC-ASSOCHAM
39. Statistical Bar Diagram Image- Ecommerce Industry Analysis- PWC Report

The diagram represents the increase in the number of requirements from the year 2013 to the year 2017. It also estimates an increase of 220% from the year of 2017 to 2020. The increase in the amount of requirement can be related to the increase in the number of sale of goods and the customer base.

The mobile phones also act as an important driver in the development of the e-commerce industry. It was estimated that that in the year of 2013 in India only 10% of the mobile users used smartphones and only 5% of the e-commerce transactions were made through a mobile device but the figures doubled in the due course of time and a recent survey shows that more than 50% of the orders received by the e-commerce companies are through mobile phones [40]. Here we can see a considerable amount of figures in the contribution of mobile phones to the e-commerce industry. It was possible for the mobile phones to make such an impact due to several reasons. The advent of the electronic banking is also a key factor for people buying through the mobile phones.

The term electronic banking refers to the use of banking services through electronic means which include internet, ATMs, telephone banking, mobile phone banking and electronic funds transfers [41]. Since the increase in the usage of mobile phones and the payments through e-banking, it is possible for the consumers to buy efficiently and conveniently from the online e-commerce platforms.

Online shopping frequency among digital buyers in India from 2013 to 2015



The above chart describes the frequency of online buyers in India from the year 2013 to 2015.

40. E-Commerce in India Accelerating growth-Research paper- PWC-Published on 2015.
41. Online Banking on E-Commerce in India-Navpreet Kaur, Dr. Ashutosh Pathak, Parminder Kaur-Navpreet Kaur et al. Int. Journal of Engineering Research and Applications-ISSN : 2248-9622, Vol. 5, Issue 4
42. The source of Bar diagram- Online shopping frequency among digital buyers in India from 2013 to 2015-Statista Charts- India digital shopping frequency 2013-2015

Here we can see that raise in a number of buyers but the increase in the number of buyers could not be raised to a greater extent. This is due to several reasons cybersecurity issues in online payments, lack of organized warehouses, tax structures and behavioral changes of the consumers. The prominent among factors such as cybersecurity, taxation issues, logistics management and to what extent the Goods and Services Tax could resolve it, were discussed in detail in the upcoming chapters of the thesis.

4. Salient Features of Indian GST

India introduced GST system in July 2017. The availability of amount of information about the issues in the indirect tax system from other nations and their respective tax systems became advantageous for the Indian legislators in constructing the framework of Indian GST. India's tax system comprises a multitude of indirect taxes, applied at the central (federal) and state levels before the introduction of GST[43]. One of the main reasons for the implementation of GST is to make Indian Economy Competitive and encourage foreign investors to invest in the Indian Market[44]. It is a fact that foreign investors were not interested in investing because of different taxes in different states. As from July 2017, India adopted GST form of indirect system which is applicable to the whole of India.

Indian GST can be classified into two types. The Central and State GST i.e. CGST and SGST[45]. The ways the taxes are levied are very simple. All the revenue from the central GST goes to the Central Government and all the revenue from the State GST goes to the state government. The distinction of center and state GST is only for a theoretical perspective but in consumer perspective, there is an only single tax levied on the product they buy. For example, the customer sees only 12% tax on the product he or she buys and in the total amount of tax, 6% goes to the state and 6% goes to the central government. Thus if there is a transaction in one particular Indian State we apply Central and state GSTs.

In case of transactions involving the multiple Indian States and also transactions involving other nations such as importation, the Integrated GST is applied[46]. The rate for Central, State and Integrated GST is the same. India uses the same taxable transaction as the European Union supplies of goods and services, Importation, the concept of taxable person are similar. India has multiple rate system which includes 0%, 5%, 12% 18% and 28%[47]. The reduced rates like 0% and 5% in order were allocated to certain goods in order to prevent huge tax burden on the Indian population. In India, all supply of intangible goods like the supply of digital goods is treated as a supply of services because it follows the definition followed in the European Union. The product which is not considered as goods is considered as a service in the Goods and Services Tax act.

43. The Effect of the GST on Indian Growth- Eva Van Leemput and Ellen A. Wiencek- Board of Governors of the Federal Reserve System (https://www.federalreserve.gov/econres/notes/ifdp-notes/the-effect-of-the-gst-on-indian-growth-20170324.pdf
44. Implementation of GST to attract more FDI (https://economictimes.indiatimes.com/news/economy/finance/implementation-of-gst-to-attract-more-fdi/articleshow/54310069.cms)
45. GOODS AND SERVICES TAX IN INDIA - A POSITIVE REFORM FOR INDIRECT TAX SYSTEM- Akanksha Khurana, Aastha Sharma- . International Journal of Advanced Research
46. Goods and Services Tax in India-Taking stock and setting expectations- (https://www2.deloitte.com/content/dam/Deloitte/in/Documents/tax/in-tax-gst-in-india-taking-stock-noexp.pdf)
47. Difference Explained: GST India vs GST in Other Countries- (https://blog.saginfotech.com/gst-india-vs-foreign-gst)

One of the main advantages of the introduction of GST is that it could eliminate different taxes that are levied at different forms. Some of the main taxes which are completely eliminated from the tax system after the introduction of the GST are Excise duty, Countervailing duty, cess, Central Sales Tax, Service tax, and State level VATs etc[48]. The Service tax is an indirect form of tax levied on service providers by the government. The Countervailing duty is the tax levied on imported goods to offset subsidies made to producers of these goods in the exporting country [49]. Cess is levied on only products belonging to a particular field. Especially products related to agriculture, education and so on comes under cess. The excise duties are levied on goods at the moment it is manufactured. The Central Sales Tax is levied on the interstate sale of goods and VAT is levied by the state government when the sale occurs within the state.

The cascading effect prevailing in the existing indirect tax system was also removed by the introduction of GST. Most of the goods and services in the previous tax system were subjected passes through a number of taxes in different stages. In the process of production and supply-chain, it attracts multiple indirect taxes leading to an extraneous increase in prices of goods or services. For example an electronic goods like computers when manufactured using some imported components has to pay custom duties, when leaving the factory excise duty is paid, sales tax is paid in the next leg of its journey from the manufacturer to the wholesaler and finally from the wholesaler to the retailer there could have been valuing added tax and this situation will become more complex when goods are sold between the states because interstate sale of goods not only attracts a Central sales tax and also is vulnerable to different VAT rates across the state [50].

The introduction of GST made India a single tax regime. In the new GST regime, the tax rates are the same for both inter-state sale and sale within the state. There is also sufficient clarity in the separation of taxes levied. For every good a consumer buys, taxes are paid to both the central and the state government. For example, the tax rate for the goods related to fruit juices is 12%. If we assume a person buys a fruit juice bottle for 100 rupees then he is paying 12% that is twelve rupees as GST. In these twelve rupees, six rupees goes to the state government and six rupees goes to the central government. In this way, it is clear that the central and state government can levy equal amount of the tax on the product.

The increase of threshold of VAT registration fee based on the annual turnover amount is another feature that is noteworthy to mention. In the previous tax structure, any institution which conducts any financial activity with an annual turnover of 5 lakhs is supposed to be registered for VAT with registration fees.

48. Basic Concepts and Features of Good and Service Tax In India-Girish Garg- International Journal of scientific research and management (IJSRM)-Volume-(2)-Issue-(2)-Pages-(542-549)-2014
49. Countervailing Duties (CVDs)-Investopedia Definitions- (https://www.investopedia.com/terms/c/countervailingduties.asp)
50. Removing Cascading Effect of Taxes-Suraj Jaiswal-Centre for Budget and Governance Accountability (CBGA), New Delhi-August 2017

In the present GST system, the turnover threshold has been increased up to 20 lakhs and 10 lakhs for special states. In this way, the implementation of GST is beneficial for the small dealers and traders [51].

It is also a fact that centralized registration under GST is much convenient for the new start-up companies compared to the procedurals norms under the previous tax system[52]. There are twenty-nine states in India. Each state is different in all aspects. From a corporate perspective, it is very difficult to manage several registrations for taxation procedures when performing interstate sale and sale of goods or services within the state. In the GST regime, the one point registration is very useful for both the start-up companies, Indian MNEs and also foreign companies who wish to participate in the Indian market. This ultimately attracts more investments within the nation as well as investments from abroad to the Indian market.

The Good and Service Tax has a positive impact on different sectors of the Indian economy. Out of which the FMCG Industry, Agriculture Industry, Financial services, ICT service providers, MSMEs, housing and construction industry are some of the main contributors of the indirect tax system in India. These sectors are taken into consideration for the study of the influence of the implementation of the Good and Services Tax.

The Fast Moving Consumer Goods sector is a significant contributor to the Indian economy. In India the Fast Moving Consumer Goods sector consist of 50% of the sale of food and beverages, 30% is from the sale of household and personal care and rest depend on other products [53]. In the case of FMCG sector, the main issues relating to tax is the inter-state transfer of goods and warehousing. In the previous tax regime, an entry tax is levied for the entry of goods in each state so in order to get tax advantage the corporates have to use different strategies to overcome it. The implementation of GST as mentioned eliminated the entry tax which will make the FMCG sector to progress at a higher rate. It is estimated that the FMCG market will progress from US$ 29.4 billion in 2016 and will reach up to US$ 220 billion by 2025 [54].

The Agriculture Industry is the backbone of Indian economy. Indian from the day of independence mainly relied on the field of agriculture. Under the new GST regime, most of the main food items are either taxed with the least tax rate of 0% or 5%. The products which are branded i.e. which packaged is charged with a reasonable tax rate of 5 % and 12% depending on each product.

51. Study on New GST Era and its Impact on Small Businesses Entrepreneurs-Saurabh Suman-Journal of Accounting, Finance & Marketing Technology-Vol. 1, Issue, 02. 24-36p, August, 2017
52. Goods and Services Tax (GST): Chen LE, Taib MSBM, editors -SHS Web of Conferences; 2017: EDP Sciences
53. GOODS AND SERVICES TAX IN INDIA - A POSITIVE REFORM FOR INDIRECT TAX SYSTEM-Akanksha Khurana1, Aastha Sharma-International Journal of Advanced Research (2016), Volume 4, Issue 3, 500-505
54. Indian FMCG Industry Analysis-April 2018- Indian Brand Equity foundation-References- World Bank, Emami Reports, Dabur Reports, AC Nielsen

The inclusion of products which are branded gives an increase of the price of these agriculture goods between 0.61 and 1.18 percent [55]. Since the credit system of the GST regime works efficiently than the previous system this increase in the price is considered to be a benefit to the agriculture industry. The Information and Communication Technology industry is one of the significant contributors to the Indian economy. India is considered to be a significant player in providing a human resource in developing software and works relating to the information and communication technology industry. Under the new GST tax system, the field of Information and communication technology attracts 18% as a tax rate.

The Good and Services tax act classifies software services on the basis of tangible and intangible forms. If the software is transferred through electronic form it would be regarded as service and in case of transferring through media or any other tangible format then it should be treated as goods [56]. The 18% levied on the information and technology industry will increase the product prices and by thus leading to more profits for the company as well as revenue for the government.

The Financial Services are considered to be exempted for tax in most of the countries around the world. In India, all types of the financial services are included under the service tax regime[57]. In the present GST regime, the financial services come under the purview of services. The GST act states that anything that is other than a good is considered to be a service. As far as the construction industry is concerned the value of a constructed property forms a part of stamp duty on land and other indirect taxes are levied on inputs and also in the case of the registration of the property, stamp duty is payable on the entire cost including the embedded taxes[58]. The problem here is that in the previous tax regime is that there is no mechanism to offset these taxes whereas in the GST tax system these costs are covered under the purview of real estates.

The Micro Small and Medium Enterprises industry are also one of the prominent contributors to the Indian economy. As already mentioned the increase in the threshold of 5 lakhs to 20 lakhs in general and 10 lakhs in special states makes the MSME industry to be a success under the Goods and Services Tax. It is also to be noted that in the case of the threshold for Central GST for goods may be kept at Rs.1.5 crore and the threshold for services should also be appropriately high (Empowered Committee of Finance Ministers, 2009) [59]. This also helps new entrepreneurs to sustain and survive in the highly competitive Indian Market.

55. GST in India: A Big Leap in the Indirect Taxation System- Dr. R. Vasanthagopal- International Journal of Trade, Economics and Finance, Vol. 2, No. 2, April 2011
56 GOODS AND SERVICES TAX IN INDIA - A POSITIVE REFORM FOR INDIRECT TAX SYSTEM-Akanksha Khurana1, Aastha Sharma-International Journal of Advanced Research (2016), Volume 4, Issue 3, 500-505
57 Basic Concepts and Features of Good and Service Tax In India-Girish Garg- International Journal of scientific research and management (IJSRM)-Volume-2-|Issue-2|-Pages542-549|-2014|
58 GST in India: A Big Leap in the Indirect Taxation System- Dr. R. Vasanthagopal- International Journal of Trade, Economics and Finance, Vol. 2, No. 2, April 2011
59 GST in India: A Big Leap in the Indirect Taxation System- International Journal of Trade, Economics and Finance, Vol. 2, No. 2, April 2011- Dr. R. Vasanthagopal-

5. Effect of GST in Indian E-commerce Industry

The Indian e-commerce industry works in different business models. The main reasons for adopting different business models are to tackle the several challenges imposed on the industry. There are few structures, based on which different business models are created by the corporates. Some of the main structures are business-to-business (B2B); business-to-consumer (B2C); business-to-government (B2G); consumer-to-consumer (C2C); and mobile commerce (m-commerce) [60]. Some of the popular business models adopted by the Indian e-commerce industry are Managed marketplace model (MMP), Open marketplace model (OMP), Inventory led model, Social networks business model, Aggregator marketplace model, Software as a service model (SAAS) etc[61].

These models are taken into consideration from several other models in order to analyze how an indirect tax system in the field of e-commerce. An online marketplace is a type of e-commerce site that connects the sellers, service providers or manufacturers with the consumers or buyers[62]. Here we can see three different types of Marketplace models. The managed marketplace model, open marketplace model, and inventory-led model.

The typical example of the managed marketplace model is the Amazon electronic commerce company. Here they have inventories and warehouses in many places to store the products from sellers. They use their platform as a medium to sell goods. The goods may be from other sellers and own products of the company. Their main target is fast moving goods i.e. goods which are frequently bought by consumers. A small amount is charged form the sellers as a warehouse charge and prices are actively monitored by the platform operating company [63]. There is also a possibility for the vendor to directly ship the product to the consumer through this platform. A similar example is Flipkart.com which is an Indian company actively participating in India and few other countries.

The open marketplace model is similar to the managed marketplace model with some few differences. They act as a medium between sellers and consumers i.e. B to C, between manufacturers to sellers i.e. B to B and also a medium between two consumers i.e. C to C. The best example for the open marketplace model where they sell goods between buyers and sellers i.e. B to C is eBay. In eBay, they sell products of other sellers to customers and act as a medium between them. The best example for platforms that sell between manufacturers and sellers i.e. B to B is alibaba.com. In Alibaba, they sell products from wholesalers to retailers or small-scale sellers and act as a medium of sale.

60. E-Commerce and E-Business-Zorayda Ruth Andam-May2003-e-asian task force-UNDP-APDIP
61. Study Paper on Taxation of E-Commerce under GST- The Institute of Chartered Accountants of India- Second Edition : August, 2017
62. A guide to Marketplaces –Boris Wetz & Angela Tan Kingyens-Marketplace Handbook-Published on 11-08-2015
63. The information about Managed Marketplace model reffered from-Marketplace: the future of e-commerce- Philippe Corrot,Adrien Nussenbaum

Here they do not have inventories or warehouses. In general, an open business model is open to innovations and has fewer boundaries and limitations in the process of their own business activity [64]. An Indian e-commerce company OLX.com which is similar to Marktplaats of The Netherlands is also an example of the open marketplace model. The inventory led model is another model where they perform same as the open market model but the only difference is that they have inventories. The main advantage of this model is that they try to deliver the goods or services within twenty-four or forty-eight hours. The inventory is owned by the online platform company and goods and services are rendered by connecting different sellers and service providers[65].

The social network business model is a web-based business model which works as free or freemium to its customers. Both the business models use their client's data for making revenue. The free social network model works to produce its revenue through advertisements. The freemium model is basically free but some services and privileges will be charged a small amount as a fee from the consumers. The best example of the free social network business model is Facebook. They use their client's data, analyze their needs and connect certain companies to the clients by posting advertisements in their platform. They get their revenue as advertisement charges from the companies who wanted to connect with them but basically, there is no fee for a Facebook membership[66]. The best example of the freemium business model is LinkedIn. Here there is no charge for membership but in order to get few extra services and privileges certain amount is charged as premium.

The aggregator business model works in such a way that the firm acts as an aggregator between two parties. The term aggregator represents an entity that transparently collects and analyses information from different data sources in order to satisfy to the needs of its clients [67]. In the aggregator model, the firm does not manufacture or warehouse any product. It collects data from the internet of third party service providers and also provides information about its own services to its clients. The best example for the aggregator business model is Uber, Ola etc.

Uber acts as a medium between to clients i.e. C to C. In one hand it has a passenger who is a client and on the other had a taxi driver who has registered in the Uber platform. A small amount of fee is charged for using the platform and for the customers provided through the platform from the taxi driver. Even though the fee charged is relatively small compared to the other business model when a large amount of transactions occurs then this business model earns relatively more revenue. Since big infrastructures like warehouses and machinery are not involved using this model it has attracted more start-ups to adopt this kind of business strategies.

64. Concept of open business model-Opening Up the Business Model:Business Model Innovation through Collaboration- Tobias Weiblen-University of St. Gallen,School of Management.
65. Social Media Business Model Analysis - Case Tencent,, Facebook, and Myspace- Master's thesis-Xiaoyan Hu-2011- Department of Information and Service Economy-Aalto University-School of Economics
66. Aggregators: The New Businesses Travelling the "Fast Lane" on the Information Highway -Stuart Madnick, Michael Siegel, Mary Alice Frontini, Saraubh Khemka, Steven Chan,- Howard Pan Sloan School of Management - Massachusetts Institute of Technology

Nowadays it is tough for the start-ups to compete in the market because a lot many of the existing companies use this model as their business strategy. The success of this model depends on whether the company could create an environment that is friendly for the users to satisfy their needs through this platform.

In order to understand the mechanism behind the Software as a service (SAAS) business model, we need to sift through the definition provided by the Software and Information Industry Association (SIIA). According to the SIIA, the software as a service model works by means of providing an application or service, deployed from a centralized data center across a network – internet, intranet, LAN, or VPN – providing access and use on a recurring fee basis [67]. It becomes more clear and comprehensible when we analyze Wikipedia's definition. It defines that Software as a service (SAAS) is a software licensing and delivery model in which software is licensed on a subscription basis and is centrally hosted[68].

Here the service provider grants permission to access certain applications or provide certain services to the consumer from a centralized data center for a periodic subscription fee. The best example for the Software as a service business model is the Adobe Creative Cloud Suite, Office 360 etc. The Adobe Creative Cloud Suite is a software bundle which can be accessed by customers all over the world through the internet. The key factor behind the success of this business model is its pricing management[69]. The software license is provided for a subscription which may be monthly or yearly. In the regular software model, the software is priced very high and also the software provider has to provide further updates for free. Here the software provider can get monthly revenue for the software as well as the updates provided by him. In the case of the consumer, it is beneficial for its price for one time users and occasional users of the software.

Innovation is always infinite. Every day there will be new business models emerging in countries having a fast-paced developing economy around the world. Only the most popular models among them were taken into consideration and explained in detail. The reason for taking these business models into consideration is that most of the mentioned models were falling under a grey area under taxation. This imposed many difficulties for tax administration from a government perspective and compliance difficulties for the e-commerce companies. Some of the main compliance issues in the previous tax system are discussed in detail in the next chapter.

67. Software as a Service: Study and Analysis of SaaS Business Model and Innovation Ecosystems-Inna Churakova,Ramilja Mikhramova-UNIVERSITEIT GENT-FACULTEIT ECONOMIE EN BEDRIJFSKUNDE
68. Software as a service-From Wikipedia, the free encyclopedia (https://en.wikipedia.org/wiki/Software_as_a_service)
69. The future of software pricing excellence: SaaS pricing- PWC working papers- 2018

5.1 Compliance issues in Previous Tax system

The Industry of e-commerce was subjected to several taxes in the previously existing tax regime in India. The difference in the indirect tax laws in each state and complicated procedures during inter-state transactions made the industry to face several challenges[70]. The taxes that are levied on the e-commerce industry are the Central Sales Tax, Service Taxes on services and transactions, entry tax on the transaction and equalization levy [71]. It became tedious for the Indian e-commerce industry to face several taxes in several forms at several levels. The complexities in the tax compliances were also a reason for the necessity of a tax reform that proposes a tax unity or a single tax regime for the whole nation.

In case of the CST, a differentiation is made whether it is an inter-state sale or is it within the jurisdiction of the corresponding states. As already discussed CST applies to the interstate sale of goods and each corresponding states have their own VAT system of levying tax over the sale of goods. For example, in the state of Tamil Nadu, Indirect taxes are levied under the Tamil Nadu General Sales Tax Act, 1959 (TNGST). When we sift through the Tamil Nadu General Sales Tax we could see several flaws of this system of taxation. The legislation was intended to work in a multi-point levying structure but later due to several changes and amendments, a considerable number of goods and services are taxed single-point, preferably at the first point and with few exemptions of goods taxed at the final point [72].

Any legislation when failing to satisfy its purpose will probably end up with more problems instead for providing a solution. Here in the TNGST, the purpose of this legislation is to provide a framework that could create ease in compliance and certainty in the levying taxes on multiple levels but it the end up with several problems. The main problem in the TNGST is double taxation of commodities and multiplicity of taxes resulting in a cascading tax burden and also this system of taxation there were a multiplicity of taxes, such as additional tax, a surcharge on sales tax, additional surcharge, and resale tax on the second and subsequent seller of goods [73].

An additional sales tax is levied at varying rates on taxable turnover of Rs. 3 lakh and above computed under TNGST Act, 1959, in the name of Additional Sales Tax under Additional Sales Tax Act 1970 [74].

70. Impact of GST on Electronic Commerce- CA. Vasant Bhat and vetted by CA. Mandar Telang -The Institute of Chartered Accountants of India
71. Study Paper on Taxation of E-Commerce under GST- The Institute of Chartered Accountants of India- Second Edition : August, 2017
72. Structure Of Sales Taxes In Tamil Nadu- National Institute of Public Finance and Policy
73. A Study of value added taxes (VAT) in Tamil Nadu- Dr.(Mrs.)N.Kanimozhi Ph.D- International Journal of Scientific and Research Publications, Volume 3, Issue 12, December2013
74. Received the assent of the Governor on the 22nd May 1970,first published in the Tamil Nadu Government Gazette-Extraordinary on the 28th May 1970

The varying rates depending on the type of goods and services rendered. Certain goods and services were levied lower rates and goods were levied with the formal rate proposed initially under this legislation.

Then the system of indirect taxation was repealed during 2006 as Tamil Nadu Value Added Tax Act. The significant change that this enactment could bring to the existing system is that it could change the uncertainty of the varying tax rates by introducing three slabs of tax rates such as 1%, 4% and 12.5% and with an exemption to specified goods. The ultimately at the end, this enactment could not achieve a complete certain tax environment for business. These are flaws in the structure or foundation of legislation. From a corporate perspective and specifically in the field of e-commerce, such flaws will always be a hindrance to the state level and inter-state sale of goods. When every state has its own tax systems and has its own differences in the tax treatment, the end result will possibly be a situation of incertitude for companies. This also adversely affects the prices of goods.

The next impediment in taxation for the industry of e-commerce is distinguishing sales between interstate and sale within the jurisdiction of the state. Most importantly in a marketplace business model where the firm provides goods and services to several states within the country, there arises a question of jurisdiction to tax. If it considered being inter-state sales then it falls under the central sales tax and it is supposed to be taxable under the jurisdiction of the central government. If it is considered to be a sale within the state then it falls under the concerned states Value Added Tax and it is supposed to be taxable under the jurisdiction of the state government.

In the Marketplace model, we see the goods are transferred to different locations through the platform of the firm. Now let us assume the firm sells the goods or provides services where it is located, and then does that can be considered as a sale within the state? The answer to this question lies in the judgment of Kerala High Court in the Flipkart case. The brief facts of the case are as follows. Flipkart Private Limited company is an online good and service provider. It is legally registered under the Finance Act, 1994 and is being taxed within the purview of service tax. In this case, the Kerala state commercial tax department passed an order under section 67 of the KVAT Act to pay a fine amount of Rs.47 crores [75].

The claims of the tax authorities are that the company has breached the provisions of sections 20 and 40 of the Kerala Value Added Tax Act. Here in this instant case, we can see there is uncertainty in the legislation in classifying the real nature of transaction carried out by Flipkart, whether the transaction was an intra-state sale or a sale with the jurisdiction of the state sale. The High Court of Kerala quashed the order of the Commercial Tax authorities stating that the Flipkart is an interstate sale of goods and it is not liable to pay tax to the state under the Kerala State Value Added Tax Act.

75. Flipkart Internet (P.) Ltd. Vs State of Kerala (Kerala High Court) - 13/10/2015-Writ Petition (c) nos.5348 & 6916 of 2015- [2016] 87 VST 103 (Ker)

In the case of inter-state sale of goods, an entry tax is levied when goods are transferred from one state to another. This made it difficult for the e-commerce operators to build more warehouses. This has been taken to the next level by state governments of states like Orissa, Uttarakhand, Mizoram, and West-Bengal have rules to charge e-commerce companies, additional taxes for delivering products to customers in their state [76]. This means that, even if the e-commerce operator is not a resident in the concerning state or he is not registered under the state VAT, if the product is delivered for the customer through the delivery services, taxes have to be levied on the product.

Another important tax related to the e-commerce industry is the equalization levy. The term equalization levy is defined as the tax levied on consideration received or receivable for any specified service under the provisions of this chapter[77]. The government wanted to have a control over the internet giants like Google, Facebook, and Twitter and so on. In the purview of the equalization levy, they imposed a so-called Google tax aiming to control their profits and getting a share of their profits. The result increased in burden for the Indian advertisers to pay more prices for the advertisements in the online forums like Google, Facebook and so on [78].

It is also a fact that internet giants like Facebook who adopt the free business models and provide free services are not actually free but they get valuable data from their users in exchange for the service and use of the data so collected is governed by the end user license agreement that more or less gives a free hand to the service provider[79]. For example, if a user is searching for flights to a particular place, search engine like Google not only provide information about the flights but also connects to hotels and restaurants in the concerned places by showing advertisements in their pages. By this way, the e-commerce company earns its income from the advertisements.

From a Government perspective, it is these activities cannot be brought under the tax compliance because of the free service cannot be imposed tax under the service tax. Indian indirect tax is a compilation of a variety of taxes which results in creating more uncertainty. From a corporate perspective, such an uncertain situation is burdensome in most of the times. Here is where the judiciary is involved but the Flipkart case is an example even for the judiciary to come to a conclusion with the existing laws in the state.

76. E-COMMERCE SECTOR- BEFORE AND AFTER GST-Harshita Bachhawat & Vibhu Jain-Hidayatullah National Law University, Raipur
77. Study Paper on Taxation of E-Commerce under GST- The Institute of Chartered Accountants of India- Second Edition : August, 2017
78. India proposes equalization levy on digital e-commerce transactions in 2016 budget- Global Tax Alert-published on 2 March 2016-EY
79. LEGAL AND TAXATION ISSUES CONCERNING E-COMMERCE-GOPAL SAXENA- THE INDIAN JOURNAL OF LAW AND TECHNOLOGY Volume 11, 2015

5.2 Indian E-commerce under GST

The Indian Good and Services Tax system Chapter-1, section- 2, clause- 44 states that "electronic commerce" means the supply of goods or services or both, including digital products over digital or electronic network [80]. It means that all the digital products which are either goods or services or both; supplied using the electronic network is being included under the purview of electronic commerce. According to chapter one Section 2(45) of CGST act, "electronic commerce operator" means any person who owns, operates or manages the digital or electronic facility or platform for the electronic commerce activity [81]. Here we can see the scope of goods and services under the electronic commerce and also the scope of e-commerce companies have been widened to a greater extent in order to bring all possible and relevant model of e-commerce under the GST tax system.

The section 9 (5) of the Goods and Services Act deals with the levying of a tax on the e-commerce operators. The first paragraph of section 9 (5) states that The Government may, on the recommendations of the Council, by notification, specify categories of services the tax on intra-State supplies of which shall be paid by the electronic commerce operator if such services are supplied through it, and all the provisions of this Act shall apply to such electronic commerce operator as if he is the supplier liable for paying the tax in relation to the supply of such services [82]. This section provides the authority to levy service tax on any e-commerce operator providing specific services through their platform within the jurisdiction of the Indian government. There are certain provisions provided under this criterion.

The second paragraph of section 9 (5) of the Good and Services Act provides the first provision to this rule, based on the residence or physical existence within the taxable boundaries. It states that provided in the first paragraph, where an electronic commerce operator does not have a physical presence in the taxable territory, any person representing such electronic commerce operator for any purpose in the taxable territory shall be liable to pay tax [83]. It means that when an e-commerce business activity is taking place within the taxable jurisdiction of India, the person who is liable to pay the tax is the person who represents the e-commerce operator if the electronic operator does not have a physical presence in the Indian Territory.

The third paragraph of section 9 (5) of the Goods and Services Act provides the second provision to the rule, in relation to the appointment of a representative. It states that provided further that where an electronic commerce operator does not have a physical presence in the taxable territory and also he does not have a representative in the said territory, such electronic commerce operator shall appoint a person in the taxable territory for the purpose of paying tax and such person shall be liable to pay tax [84].

80. THE CENTRAL GOODS AND SERVICES TAX ACT, 2017-Chapter-1- Section-2- Clause 44-CGST Act-Pg no-11
81. THE CENTRAL GOODS AND SERVICES TAX ACT, 2017-Chapter-1- Section-2- Clause 45-CGST Act-Pg no-11
82. THE CENTRAL GOODS AND SERVICES TAX ACT, 2017-Chapter-3- Section-9- Clause (5)-para 1-CGST Act-Pg no-23
83. THE CENTRAL GOODS AND SERVICES TAX ACT, 2017-Chapter-3- Section-9- Clause (5)-para 2-CGST Act-Pg no-23
84. THE CENTRAL GOODS AND SERVICES TAX ACT, 2017-Chapter-3- Section-9- Clause (5)-para 3-CGST Act-Pg no-23

This means that in case if the e-commerce company indulging economic activities in India does not have a representative then the company is liable to appoint a representative for the purpose of tax compliance and administration under the Goods and Services act. This makes it mandatory for an e-commerce operator whether physically present in India or abroad to be liable to pay indirect tax for the economic activities performed within the jurisdictional boundaries of India. It first moves of the Goods and Services act in preventing tax evasion by means of different business models and tax planning within Indian jurisdiction.

The section 52 of the Goods and Services act deals with the tax rate and collection of tax at the source. The clause 1 of section 52 specifically deals with the rate of tax to be applied by the e-commerce operators when providing services or supplying goods. It states that notwithstanding anything to the contrary contained in this Act, every electronic commerce operator (hereafter in this section referred to as the "operator"), not being an agent, shall collect an amount calculated at such rate not exceeding one per cent., as may be notified by the Government on the recommendations of the Council, of the net value of taxable supplies made through it by other suppliers where the consideration with respect to such supplies is to be collected by the operator [6]. It means that apart from the exceptions provided in the Goods and Services Act, all the e-commerce companies should apply a rate not exceeding one percent of the net value of taxable supplies performed by the e-commerce operator.

The second clause of section 52 of the Goods and Services act deals with the power to collect the taxable amount. It states that the power to collect the amount specified in clause 1 shall be without prejudice to any other mode of recovery from the operator [7]. The clause 3 of section 52 deals with the time provided for the operator to collect the amount and to be paid to the government of India. It states that the amount collected under clause 1 shall be paid to the Government by the operator within ten days after the end of the month in which such collection is made, in such manner as may be prescribed [8].

The amount collected within the time frame has to be remitted to the government along with a statement containing all relevant transaction on the supply of goods and services. The clause 4 of section 52 of the Good and services act deals with the time prescribed by the government for the producing such statement. It states that every operator who collects the amount specified in clause 1 shall furnish a statement, electronically, containing the details of outward supplies of goods or services or both effected through it, including the supplies of goods or services or both returned through it, and the amount collected under clause 1 during a month, in such form and manner as may be prescribed, within ten days after the end of such month [9].

85. THE CENTRAL GOODS AND SERVICES TAX ACT, 2017-Chapter-10- Section-52- Clause (1)-para 1-CGST Act-Pg no-62
86. THE CENTRAL GOODS AND SERVICES TAX ACT, 2017-Chapter-10- Section-52- Clause (2)-CGST Act-Pg no-62
87. THE CENTRAL GOODS AND SERVICES TAX ACT, 2017-Chapter-10- Section-52- Clause (3)-CGST Act-Pg no-62
88. THE CENTRAL GOODS AND SERVICES TAX ACT, 2017-Chapter-10- Section-52- Clause (4)-CGST Act-Pg no-62

The clause 5 of section 52 of the Goods and Services act deals with the time period provided for the e-commerce operator to produce the annual financial statement. The annual statement or an annual report is a document which contains all transactions of the company in the financial year. The clause 5 of section 52 of the Goods and Services Act makes it mandatory for the e-commerce providers to submit their annual statement at the end of every financial year which is the 31st of December [89].

The clause 5 of section 52 of Goods and Services Tax act states that every operator who collects the amount specified in clause-1 shall furnish an annual statement, electronically, containing the details of outward supplies of goods or services or both effected through it, including the supplies of goods or services or both returned through it, and the amount collected under the said sub-section during the financial year, in such form and manner as may be prescribed, before the thirty first day of December following the end of such financial year[90]. This makes it more transparent for the government to analyze the business activities of e-commerce operators and makes it easier for the tax compliance.

The clause 6 of section 52 of Goods and Service Tax act provides an opportunity to rectify if there is any mistake in the monthly statement produced by the e-commerce operator under clause 4 of section 52 of the Goods and Services Tax. This correction is not supposed to be an outcome of scrutiny, audit, inspection or enforcement action by the tax authorities [91]. These are considered to be an exemption to the clause 6 of section 52 of the Goods and Services Tax act. It states that if any operator after furnishing a statement under clause 4 discovers any omission or incorrect particulars therein, other than as a result of scrutiny, audit, inspection or enforcement action by the tax authorities, he shall rectify such omission or incorrect particulars in the statement to be furnished for the month during which such omission or incorrect particulars are noticed, subject to payment of interest, as specified in clause 1 of section 50 [92].

The clause 7 of section 52 deals with the credit mechanism under the Goods and Services Tax act for the e-commerce operators. The e-commerce supplier of goods and services can obtain a credit in his cash ledger under this section in accordance to the monthly returns submitted under section 52 (4) of the GST act [93]. It states that the supplier who has supplied the goods or services or both through the operator shall claim credit, in his electronic cash ledger, of the amount collected and reflected in the statement of the operator furnished under clause 4, and in such manner as may be prescribed [94]. Following clause 7 the next clause makes it mandate for the e-commerce operator to be in accordance with the prescribed manner under the Goods and Services Tax act.

89. Study Paper on Taxation of E-Commerce under GST- The Institute of Chartered Accountants of India- Second Edition : August, 2017
90. THE CENTRAL GOODS AND SERVICES TAX ACT, 2017-Chapter-10- Section-52- Clause (6)-CGST Act-Pg no-62
91. Study Paper on Taxation of E-Commerce under GST- The Institute of Chartered Accountants of India- Second Edition: August, 2017
92. THE CENTRAL GOODS AND SERVICES TAX ACT, 2017-Chapter-10- Section-52- Clause (6)-CGST Act-Pg no-62
93. Study Paper on Taxation of E-Commerce under GST- The Institute of Chartered Accountants of India- Second Edition: August, 2017
94. THE CENTRAL GOODS AND SERVICES TAX ACT, 2017-Chapter-10- Section-52- Clause (6)-CGST Act-Pg no-62

The clause 8 of Section 52 of the Goods and Services Act is one of the significant among all its provisions. It deals with the matching details between the e-commerce operator and the supplier. The details furnished by the e-commerce operator under section 52 (4) should match with details furnished by the supplier who supplied the goods [95]. It states that the details of supplies furnished by every operator under clause 4 shall be matched with the corresponding details of outward supplies furnished by the concerned supplier registered under this Act in such manner and within such time as may be prescribed.

In case if the details furnished by the e-commerce operator are not matching with the details furnished by the supplier then clause 9 applies. The clause 9 of section 52 of the Goods and Services act mandates the e-commerce operator to communicate about the discrepancy with the supplier in case if the detail furnished by the e-commerce operator does not match with the details of the supplier. It states that where the details of outward supplies furnished by the operator under clause 4 do not match with the corresponding details furnished by the supplier under section 37, the discrepancy shall be communicated to both persons in such manner and within such time as may be prescribed[96].

If the e-commerce operator communicates with the supplier about such discrepancy and the supplier fails to rectify the differences with the details within the specific period of time then the consequence of such a failure is dealt with clause 10 of section 52 of the Goods and Services act. In such a case the mismatch shall be added to the output tax liability of the said supplier.

Here the condition is that value of outward supplies established by the e-commerce operator should be more than the value of outward supplies established by the supplier in his return for the month succeeding the month in which the discrepancy is communicated [97].

The clause 11 of Section 52 of the Goods and Services Tax act deals with the tax liability of addition which arises due to the failure of rectification mentioned in clause 10. It mandates the supplier to pay the amount of tax for the difference in the amount from the statement of the e-commerce operator. The clause 12 provides the power to any authority of tax administration, who is not ranked below deputy commissioner to provide a notice to produce any required details from the operator or supplier. When the notice is issued the time limit prescribed to respond to the notice is dealt in clause 13 of Section 52. It states that within the fifteen days the supplier or the e-commerce operator to whom the notice has been issued should respond to the concerned authority by providing the required details. If the required details are not provided under the specific period of time a penalty of rupees 25000 can be imposed under the clause 14 of Section 52

95. Study Paper on Taxation of E-Commerce under GST- The Institute of Chartered Accountants of India- Second Edition : August, 2017
96. THE CENTRAL GOODS AND SERVICES TAX ACT, 2017-Chapter-10- Section-52- Clause (6)-CGST Act-Pg no-62
97. Study Paper on Taxation of E-Commerce under GST- The Institute of Chartered Accountants of India- Second Edition: August, 2017

5.3 Return Mechanism under GST

The Indian Goods and Services Tax mandates all registered person is to furnish details of outward and inward supplies of goods and services, input tax credit availed, tax payable, tax paid etc. on a monthly basis with an exception of person opting for composition scheme, Input Service Distributor (ISD), non-resident taxable person or person required to deduct or collect tax at source [98]. One of the significant features of GST is that it is not necessary for the taxpayer to submit all types of returns but they are supposed to be filed depending on the performance of their activities[99].

It is a favorable provision for the e-commerce industry because the activities of the e-commerce companies differ in accordance with the business model they adopt as their strategy. The business strategy of the open business model and managed marketplace models are very different. Even though there are similarities in their activities the way these two models work is entirely different. In the previous tax system, there is no differentiation in tax treatment in accordance with the business activity. From a business perspective, it is considered to be very unfavorable. The implementation of Goods and Services Tax has made it possible for the companies to file their returns in accordance with their relevant business activity.

According to the Goods and Services Tax act, a regular taxpayer needs to furnish monthly returns and one annual return [100]. The structure of the return mechanism in Goods and Service Tax consists of electronic filing of returns, uploading of invoice level information, auto-population of information relating to input tax credit from returns of the supplier to that of the recipient, invoice level information matching and auto-reversal of input tax credit in case of mismatch [101]. Depending on several factors the Indian GST returns are filed under thirteen provisions. The provision under the Indian Good and Service Tax are GSTR-1, GSTR-2, GSTR-3, GSTR-3B, GSTR-4, GSTR-5, GSTR-5A, GSTR-6, GSTR-7, GSTR-8, GSTR-9, GSTR-9A, and GSTR-10.

In the Goods and Service Tax, the returns are to be filed through online and in case offline it should be filed only through prescribed ways. There are three ways through which the GST returns can be filed. The first means to file the Goods and Services Tax is through the GSTN portal by means of the government's website that is www.gst.gov.in, the second is through the Offline utilities provided by Goods and Service Tax Network and the third is by means of the GST Suvidha Providers (GSPs) where if a taxpayer is already using the services of an ERP providers such as Tally, SAP,

98. Manual on Returns & Payment Under GST-The goods and service tax manual-Research article-FCI
99. GST - CENTRAL BOARD OF EXCISE & CUSTOMS NEW DELHI- Research paper- National Academy of Customs, Indirect Taxes, &Narcotics (NACIN)
100. Returns in GST(Goods & Services Tax)-Research article-Central Board of Excise and Customs
101. GST - CENTRAL BOARD OF EXCISE & CUSTOMS NEW DELHI- Research paper- National Academy of Customs, Indirect Taxes, &Narcotics (NACIN)

Oracle etc., it is mandatory for the ERP providers to provide inbuilt provisions to file the GST returns in the existing ERP systems [102].

The Rule 67 of the Central Goods and Services Tax Rules is applicable for the e-commerce operators for filing their tax returns. The rule 67 of the Central Goods and Services Tax emphasizes section 52 of the Good and Services Act. It has two sub-clauses. The clause one of rule 67 of the central goods and Services act edicts every e-commerce operator to collect tax at the source to be filed under Form GSTR-8 in accordance with section 52 of the Goods and Services Tax. The second clause of Rule 67 of the CGST states that the details provided by the e-commerce operator in Form GSTR-8 shall be made available for all the suppliers through Part-C of Form GSTR-2A electronically [103].

The Rule 78 of the Central Goods and Service Tax Rules edicts that the details produced by the e-commerce have to match with the details produced by the supplier. It means that the tax information in the Form GSTR-8 which is filed by the e-commerce has to match with the Form GSTR-1 which is filed by the supplier. The Rule 79 of the Central Goods and Services Tax Rules deals with the communication and rectification of discrepancy in details furnished by the e-commerce operator and the supplier. These are the rules to be followed by the e-commerce operator while filing tax returns under the Good and Service Tax.

102. Returns in GST(Goods & Services Tax)-Research article-Central Board of Excise and Customs
103. Study Paper on Taxation of E-Commerce under GST- The Institute of Chartered Accountants of India- Second Edition: August, 2017

5.4 Comparison of GST with the Previous Tax system in India

The tax compliance for indirect taxes is quite burdensome in the previous tax system in India. The taxes such as Central Excise duty, Additional duties of excise, Excise duty levied under Medicinal & Toilet Preparation Act, Additional duties of customs (CVD &SAD), Service Tax, Central Sales Tax, Surcharges & Cesses, State VAT / Sales Tax, Purchase Tax, Entertainment Tax (other than those levied by local bodies) Luxury Tax, Entry Tax (All forms), Taxes on lottery, betting & gambling, Surcharges & Cesses, are some of the indirect taxes prevailed in the previous tax system in India [104]. The implementation of the Goods and Services tax could effectively subsume and replace all these taxes and could reduce the compliance burden to a greater extent.

It is also to be noted that in the previous tax system there were separate taxes levied for goods and services whereas, in the newly implemented GST, the goods and services are brought under a single framework. This makes the companies avoid being followed by different government bodies. Since there were several taxes there were several governing bodies for Central Excise, VAT, and Service Tax and multiple registrations were required to be taken under each of the laws, returns were to be filed and assessments, appeals etc. would have to be faced multiple times on the same business transactions over and over again [105]. This implementation of the Goods and Services Tax could effectively avoid such compliance burden and improve more efficiency in tax compliance as well.

Another important disadvantage of the previously existing Indian indirect tax system is the cascading effect prevailing in taxes. The problem of cascading effect arises due to the unavailability of the tax credit in Central Sales Tax and many other taxes in India [106]. It is also to be noted that there were several uncertainties prevailing in the classification of goods and services for which the tax credit can be obtained in the previous tax system. In the new Goods and Services Tax, it is very clear and certain in the classification of goods and services for which tax credit can be applied.

It is also possible for the Good and Services Tax to completely eliminate the problem of cascading effect. This is because in the GST regime goods and services are taxed at multiple levels and since the credit mechanism is efficient it is possible to avoid cascading. Since cascading is avoided the taxes that became a part of the cost of certain goods or services were eliminated and by thus resulting in the reduction of the cost of some good and services benefitting the consumers. In the previous tax system, the transparency was also a matter of concern.

104. Study on New GST Era and its Impact on Small Businesses Entrepreneurs-Saurabh Suman-Research Article-Journal of Accounting, Finance& Marketing Technology Vol. 1, Issue, 02. 24-36p, August, 2017
105. Advantages and Dis-advantages of Goods and Services Tax-Madhukar N Hiregange, Ravi Kumar Somani-published on 30 December 2017
106. Goods and Services Tax-A benchmark transformation from present tax regime to the unified tax framework-Edition 2 September 15, 2016-© 2016 NBC

This resulted in corruption in tax administration and compliance. This is expected to be removed by the Goods and Service tax since the structure of the tax system is transparent and ease in compliance.

In the case of e-commerce, the tax treatment under the new Good and Service tax system depends on the nature of business model adopted by the e-commerce company. For example, in case of the open business model which works in stocking and selling goods, GST would be levied on the entire value of goods and shall be paid by the owner of the goods and also the online platform whereas in case of the marketplace business model, GST would be applicable on transaction between seller and buyer and between seller and marketplace. This is the reason for the Indian economist to consider the Goods and Services Tax more certain the previously existing indirect tax system.

In the new Goods and Service tax system the digital goods and digital products are not tangible goods so they are considered as services and were also governed by rules applicable for services under the Goods and Services Tax. In the previous tax system services had separate tax being levied but intangibles were not included under the previous service tax. The determination of the place of supply is also very simple. A taxable person is a registered person and place of supply is the location of the registered person. If a service is supplied to a non-registered person i.e. a private individual then the place of supply is the address of the recipient which is basically in line with the destination principle. The destination principle is applied to both B to C and B to B supplies.

The exception to this is if the supplier doesn't know the address, doesn't know where the recipient is located then the supplier can use the origin principle then the place of supply is the location of the supplier of service. This quite a simplification especially in e-commerce transaction suppliers may not know where customers are established. If a customer buys digital goods and pays through intermediary transactions then the supplier will not get all relevant data so Goods and Services Tax Law is very clear, in this case, the place of supply is considered as the business location whereas in the previously existing tax system there were several confusion in regards to determination of place of supply and by thus leading to the tax litigations.

5.5 Comparison of Indian GST with Tax system of other countries

The Indian Goods and Service Tax is a form of indirect tax based on the Value Added Tax or Consumption Tax mechanism. It is to be noted that according to popular tax firm KPMG more than 140 countries have implemented the Value Added Tax in their respective states. Even though these countries follow the VAT type of the indirect tax system, every state has its own similarities and differences. One of the prime differences in these systems is based on the single or multiple tax rates. The countries like Singapore and Malaysia adopt a single rate for almost all the goods whereas India follows multiple tax rate system in the newly implemented Goods and Service Tax [107].

The second difference is the purpose for which the tax reform was executed by the specific states. The principal reason for the government of India to implement the Good and Services Tax is to bring uniformity in the tax structure and reduce the cascading effect of taxes whereas the government of Malaysia wanted to widen its tax base and include more citizens in the tax-paying process [108]. This shows us that as per the purpose and requirements the structure of the tax system varies from every state. When comparing the indirect tax system of Malaysia and India, the Indian Goods and Services Tax system is considered to be a complicated one. It is because of the five different rates and allocation of different goods under these different rates. The main difference in the structure of indirect tax system between India, Singapore, and Malaysia is given below.

Source: Cleartax

Differences	India	Singapore	Malaysia
Standard Rate	0% (for food staples), 5%, 12%, 18% and 28%(+cess for luxury items)	7% Reduced rates- Zero rated, exempt	6%
Threshold exemption Limit	20 lakhs (10 lakhs for NE states)	Singapore $ 1 million (Approx Rs. 4.8 crore)	MYR 500,000 (Approx Rs. 75 lakhs)

107. GOODS AND SERVICE TAX–A GLOBAL EXPERIENCE- Concept Paper - Goods & Services Tax in India & Role of Chartered Accountants,
108. GOODS AND SERIVICES TAX IN INDIA AND MALAYSIA:DIFFERENCES AND SIMILARITIES- ANUBHUTI YADAV- KAAV INTERNATIONAL JOURNAL OF LAW,FINANCE & INDUSTRIAL RELATIONS
109. Comparision Table- How Indian GST model compares with GST in other countries- Archit Gupta-Cleartax-{ https://cleartax.in/s/gst-india-and-other-countries-comparison}

Liability arises on	Accrual basis: Issue of invoice OR Receipt of payment -earlier	Accrual Basis: Issue of invoice OR Receipt of payment OR Supply - earliest Cash basis:(T/O to SGD$1mn): Payment	Accrual Basis: Delivery of goods OR Issue of invoice OR Receipt of payment
Returns and payments	Monthly and 1 annual return	Usually quarterly Business option-Monthly returns.	Large organisations-Monthly
Reverse charge Mechanism	Apply on goods (new) as well as services (currently under Service tax)	Reverse charge applies to supply of services	Reverse charge applies to imported services
Exempt services	Manufacture of exempted goods or Provision of exempted services (to be notified)	Real estate, Financial services, Residential rental	Basic food, Health Transportation, Residential property, Agricultural land

Source: Cleartax

India also has special regimes in non-resident suppliers of services but its regime is quite burdensome because the non-resident suppliers should register in India and that registration is valid for only 90 days and has to be extended for only another ninety days. They also need to provide a deposit in advance. Thus it is a burdensome approach compared to the approaches followed in European Union, Australia, New Zealand. All these countries apply simplified registration mechanisms. You can do everything online, you can submit your tax returns online; you are not bothered by any bookkeeping requirements.

In India, it is a different situation. The non-resident suppliers have to apply for a certificate of registration which is not valid indefinite, only ninety days. Then you have to extend and reapply and also you need to provide a deposit in advance. Thus India didn't introduce very business friendly rules for non-resident suppliers. The very interesting feature in the Indian GST law is that it has a separate chapter for intermediaries involved in e-commerce transactions. There are special rules for online platform operators in European Union, Australia, New Zealand and all most everywhere but in India, they distinguish two types of operators.

110. Comparision Table- How Indian GST model compares with GST in other countries- Archit Gupta-Cleartax-{ https://cleartax.in/s/gst-india-and-other-countries-comparison}

That is considered to be a different approach. India distinguishes between aggregators and operators. The difference between the two is that whether the services are provided under a brand name of that particular person or not. That is also quite difficult to apply in practice because in case of other countries they have specific rules but for India, we need to take a more detailed look. It is necessary to examine the situation more carefully in order to identify as an operator or aggregator.

The basic definition for both operator and aggregator are the same. They both operate in the electronic platform to provide electronic services and differences are only the aggregator acts in his own brand name whereas the operator acts on behalf of other. There are quite different consequences for these two concepts. If you are an aggregator (Albert Heijn), if you provide services under your own brand name, you are treated as a supplier of services. Basically, all the rules applicable to the suppliers are applicable to you. However, if you are an operator (Amazon), if you operate a platform and provide digital services on behalf of others, you are not a supplier but you have other compliance obligation. In this case, you have a withholding obligation and so you act as a withholding agent for GST and also you have to provide periodical returns and mention all the GST you collected for the supplies made via your platform. Thus aggregator is a supplier and operator is not a supplier and operator has a quite burdensome compliance obligation. It acts as a withholding agent and it needs to submit periodical returns of GST collected via its platform.

5.6 Reformation in Logistics

If the internet is the backbone of the e-commerce industry then logistics, warehousing, and supply chain management are the ligaments that connect the spine together. The logistics management is a tranche of the supply chain management where management of goods is dealt in an efficient way[111]. One of the key strategies of most of the business models in the e-commerce industry is to effectively manage goods and efficiently deliver it on time. This is also a key difference between the managed marketplace business models that concentrate on the quality of experience of the buyers and open business model which is open to all sellers. Warehouses are not only the place to store the goods of sellers but also it is also the place where the firms check the quality of the products before publishing in their online platforms. In this way, logistics plays a vital role in the development of e-commerce industry.

India has grown significantly in the logistics and warehousing industry since the advent and success of the Indian e-commerce industry. The Indian logistics industry is estimated to be worth about USD 130 billion in the year 2013 with a growth rate of sixteen percent over the last five years and has been rapidly growing [112]. A popular survey conducted in the year 2016 states that the Indian e-commerce market was estimated at USD 27.5 billion [113]**.** When we analyze the provisions for logistics industry in the previous tax system we could find that there are so many shortcomings that were hindering the growth of this industry. Here we could see that there is a significant development in the field of Logistics Industry even without the any when the legislation is not supportive.

These estimated figures show us that there is a necessity in the reformation in the provision of legislation relating to logistics. There are many difficulties imposed by the previous tax system over the Logistics Industry. For example, in the previous tax system, the entry of goods is taxed on the borders of the states. All 29 states were levying this entry tax when goods enter into their states. Not only the entry tax but the transfer of goods is subjected to several other taxes as well. The possible levy of taxes when goods are transferred inter-state would be Central sales tax, State level sales tax, entry tax, stamp duty, telecom license fees, turnover tax, tax on consumption of electricity, taxes on transportation of goods and so on [114]. Here we could see a situation similar to the indirect tax treatment for the sale of goods and services.

111. Difference between Logistics and Supply Chain Management-Sanjeev Bagal-Published on December 28, 2015
112. Indian Logistics Industry Gaining Momentum - Neeraj Arya-November 2013- Research Paper- Indian Brand Equity Foundation.
113. KPMG in India analysis, 2015, based on industry observations and sector progress in 2016
114. IMPACT OF GOODS AND SERVICE TAX ON WAREHOUSING INDUSTRY IN INDIA-R. Swathi- International Journal of Management (IJM)-Volume 8, Issue 5, Sep–Oct 2017, pp. 111–115,

In order to avoid this situation, the companies were forced to rent or build warehouses around the nation. The reason for the companies to rent or build a warehouse is that they can make the inter-state transfer to come under the purview of “stock transfer within one’s own warehouses” which is non-taxable under the Central Sales Tax [115].

The supply chain models were also based upon tax considerations and tax planning strategies adopted by the companies during the previous tax system [116]. The companies operate multiple warehouse strategies by placing warehouses in metropolitan cities like Kolkata, Bangalore, Mumbai, New Delhi, Chennai, etc., in order to get tax considerations [117]. After the implementation of GST, this model of placing multiple warehouses strategy crumbled and became unnecessary. It is because under GST the whole country is under one tax regime. The movement of goods from one state to another cannot be subjected to any other indirect taxes unless and otherwise explicitly provided in the GST legislation.

This is helpful in many ways for both e-commerce and logistics companies. In the case of logistics industry, there is no need for multiple warehouses. The goods can be transferred within the country with the privileges provided under the GST act. In the case of the e-commerce industry, such a facility will decrease the cost of production. The warehouse rental cost, maintenance cost, labor wages in the warehousing at the end of the day implicitly influence the price of goods and services provided to the consumer. When these costs are reduced the possibility of providing quality services at reasonable prices can be achieved at arm’s length. If the cost of goods or services can be reduced without compromising its quality then it is also beneficial from a consumer’s perspective. It is also an undeniable fact that best quality with attractive prices attracts more consumers to e-commerce from the regular retailers.

Another important issue is the time delay occurred due to the transfer of goods between the warehouses inter-state. For example if the e-commerce operator is located in New Delhi, which is the capital of India and the goods are transferred to Kochi, which is in the far south and that is supposed to be the place of sale, then the amount of paperwork and tax procedures would ultimately be one of the reason for the delay of goods. In a competitive market like India, if the goods or service provider faces a time delay, it affects not only affects consumer’s buying experience but also the brand value of the company. This time delay is not only a hindrance for the e-commerce companies but also for companies which directly sell goods or services to the sellers. It is estimated that for every VAT check post there would be there are an extra 5-7 hours added to the transport time for inter-state transport of goods and in order to tackle this the companies adopted the 'hub and spoke' model in which less but bigger trucks will move between bigger warehouses [118].

115. GST Impact on Logistic Industries in India- Research paper-SKP-published on 2015
116. Goods and Services TaxTransport and logistics (T&L) sector-Research Paper- PWC –Published on 2016.
117. GOODS & SERVICE TAX-Impact analysis on various sectors-AJSH-India-Published on May 2017
118. Impact of Goods and Service Tax (GST) on Logistics Sector in India-Dr.Anitha.M.N-SSRG International Journal of Economics and Management Studies (SSRG-IJEMS) – volume3 issue8 Aug 2016

This so-called “hub and spoke” strategy created more challenges to the government of India. It is because the roads were not sufficient and safe enough for the transport of big trucks. The Government had to create new highways connecting major cities across the country to solve this problem. This is one of the reasons for the government to approve “Golden Quadrilateral” project. The aim of the project is to connect several metropolitan cities across India. This project started in 2001 and was completed in 2012 and was costing about USD 9.2 billion [119]. Further in the 2017-2018 union budget an allocation of INR 64,900 crore to accelerate laying new roads, expansion of existing national highways and in addition to that an amount of INR 27,000 crore (along with the state governments) is allocated on rural roads aiming at improving the standards to first and last mile transport and also to provide seamless connectivity [120].

The implementation of Good and Services Tax has also implicitly made its influence in Warehousing Technology. As mentioned earlier the companies were subjected to have several small warehouses around India for avoiding the tax on the transfer of goods. The small warehouses cannot be monitored efficiently with the technological updates in the warehousing industry. The Warehouse Management Systems (WMS) is a software application, designed to support and optimize warehouse or distribution centre management in the everyday activities such as organizing, staffing, directing, and controlling the utilization of available resources, to move and store materials into, within, and out of a warehouse, while supporting staff in the performance of material movement and storage in and around a warehouse [121].

The Warehouse Management System and advanced Robotics can be more efficiently utilized in case of consolidated large warehouses than the small warehouses[122]**.** In the case of small warehouses this advanced machinery cannot be used and in order to perform these tasks, more amount labors will be required. This will lead to more wage expenses and also result in an increase in prices of goods and services. The implementation of GST made it possible to reducing the number of warehouses which made it possible for the companies to invest in building large infrastructures for warehousing and use of upgraded machinery.

It is also to be noted that the locality of warehouses in the previous tax system is based mostly on big cities whereas after the implementation of GST it is also possible for the companies to effectively choose the locality as per their requirement. This place can also be located in a town or village near these cities where they can also manage the goods efficiently and also reduce the price of building these structures. In Government perspective, it is also beneficial to locate these warehouses a bit far from the city in order to effectively manage the population density of urban areas and form structures that could support the concept of urban agglomeration.

119. Goods and Services TaxTransport and logistics (T&L) sector-Research Paper- PWC –Published on 2016.
120. GOODS & SERVICE TAX-Impact analysis on various sectors-AJSH-India-Published on May 2017
121. IMPACT OF GOODS AND SERVICE TAX ON WAREHOUSING INDUSTRY IN INDIA-R. Swathi- International Journal of Management (IJM)-Volume 8, Issue 5, Sep–Oct 2017, pp. 111–115,
122. National Highways Authority of India-Wikipedia- (https://en.wikipedia.org/wiki/National_Highways_Authority_of_India#cite_note-11)

The Good and Service Tax implementation has also its implementation on inventories. The inventory control management was very hectic and disorganized for the companies which actively participate in the Indian Market. It is because of the numerous numbers of the warehouses the companies had to manage. Since the GST could eliminate this problem the inventories are less burdened and also there would be an opportunity for predicting the increase in the demand and supply of goods[123].

There are instances where the demand for certain goods increases drastically in a very short period of time. For example, the first launched iPhone models and Samsung Galaxy phone models were on demand whenever they released new versions. There are instances where the same companies fail to attract consumers to buy their products as well. In cases when the demand increases the supply of the product should be flawless in the perspective of the e-commerce platform firm to utilize the opportunity to the maximum extent. A disorganized supply chain structure can never help this kind of situations.

The success of an e-commerce company lies also in delivering goods or services on time. During this situation, the supply chain management plays an important role. When we analyze all these factors in one or other way everything is interrelated and by this tax reformation all these barriers are broken. There are also several other factors supporting the same cause to achieve this result and out of which the implementation of GST is one of them. It is also a fact that GST is supportive of the start-up companies.

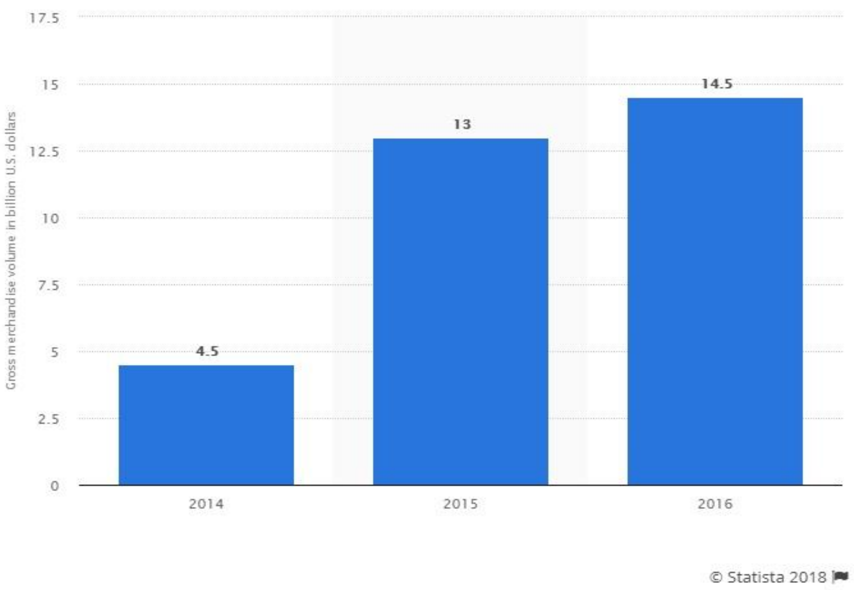
The start-up companies which adopt the managed marketplace model can easily manage their stocks in consolidated warehouses and the ones which adopt an open-marketplace model by just connecting the sellers without the help of many warehouses can also thrive under this tax regime. In the case of companies which adopt an open-marketplace model the role of third party logistic (3PL) providers are noteworthy. In India, there are three types of prominent 3PL providers. They are the Captive logistics arms, Traditional logistics service providers and E-commerce retail focussed logistics service providers [124]. Under the GST regime, it is also favorable for the third-party logistics providers to build more warehouses for renting other companies and flourish as an independent business model in the Indian market.

123. IMPACT OF GOODS AND SERVICE TAX ON WAREHOUSING INDUSTRY IN INDIA-R. Swathi- International Journal of Management (IJM)-Volume 8, Issue 5, Sep–Oct 2017.
124. India’s e-commerce retail logistics growth story-Research paper-KPMG-published on 2016

6. The Short and Long-term results

The recent estimates predict that the Indian e-commerce industry is expected to reach around $ 100 billion by 2025 from $4.5 billion in 2014 growing at a compound annual growth rate of 47% [125]. Even though there are several reasons for such a growth the most prominent one for such a growth rate is considered to be the implementation of the Goods and Services Tax reform. As mentioned in the previous chapter after the year 2014 e-commerce industry in India was not growing in a progressive manner. The statistics show that after 2013 there was a slowdown in the growth of the e-commerce industry [126]. This slowdown is due to several limitations imposed upon the e-commerce industry.

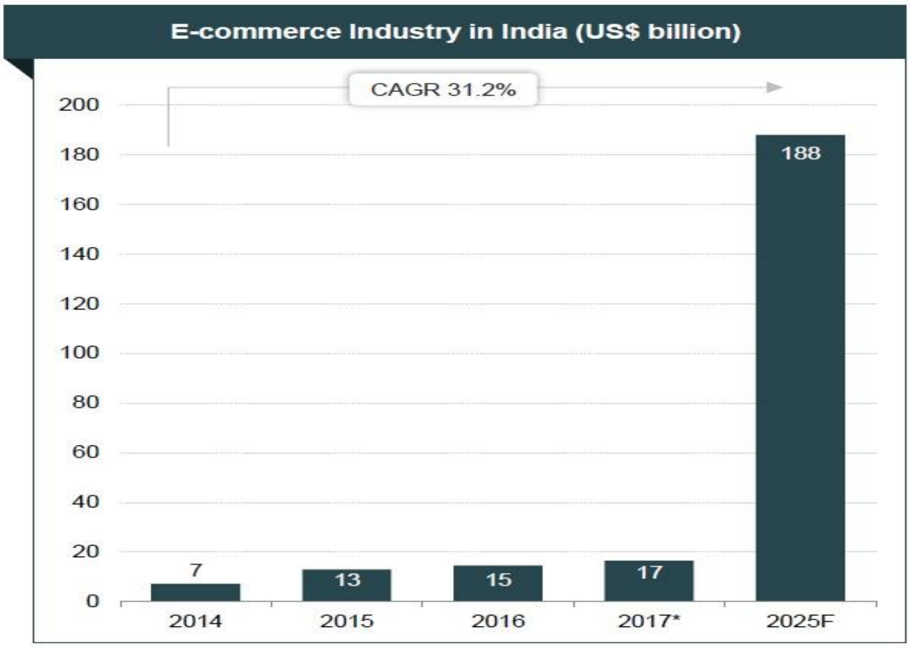
E-tailing gross merchandise volume across India from 2014 to 2016 (in billion U.S. dollars)



It is estimated that the e-commerce retail in India in the year 2016 is 14.5 billion U.S dollars [127]. Here we see that in 2014 the amount of merchandise is 4.5 billion U.S dollars. In the year 2015, it has increased up to 13 billion U.S dollars which is 8.5 billion increase in sale compared to the previous year. In 2016, it has just increased a 1.5 billion more and has achieved 14.5 billion U.S dollars and has its slow down. Here we see that the estimate shows that there is a drastic increase from an amount of 14.5 billion U.S dollars to a projection of $100 billion U.S dollars by researchers of Indian Institute of Management.

125. FUTURE PROSPECTS FOR INDIAN E-COMMERCE INDUSTRY-Research Paper- Kanse Gajendra Vinayak, Tara Chand Khorwal-supervised by Prof Ganesh Prabhu- Indian Institute of Management Bangalore
126. Online shopping frequency among digital buyers in India from 2013 to 2015-Statista Charts- India digital shopping frequency 2013-2015
127. E-tailing gross merchandise volume across India from 2014 to 2016 (in billion U.S. dollars)- Published on 2018-Statista Charts.

The reason for coming to a conclusion that the implementation of the Goods and Services Tax is one of the main reasons for the e-commerce industry to achieve this amount of estimated growth is that all these surveys and demographics show us a raise only after the year 2017. The Indian government implemented the Goods and Services Tax in the year 2017. As we have already seen the Good and Services Tax not only reformed the indirect tax system in India but also it has positive impacts on most of the sectors that are associated with the e-commerce industry. The Indian brand equity foundation also has the similar opinion to the estimated figures of the researchers from the IIM. They predict that the Indian e-commerce industry will reach an amount of $188 billion U.S dollars 2025 [128]. This estimation of the IBEF is a result of data collected from the source of expert opinion from Economic Times, PWC, and Financial Express.

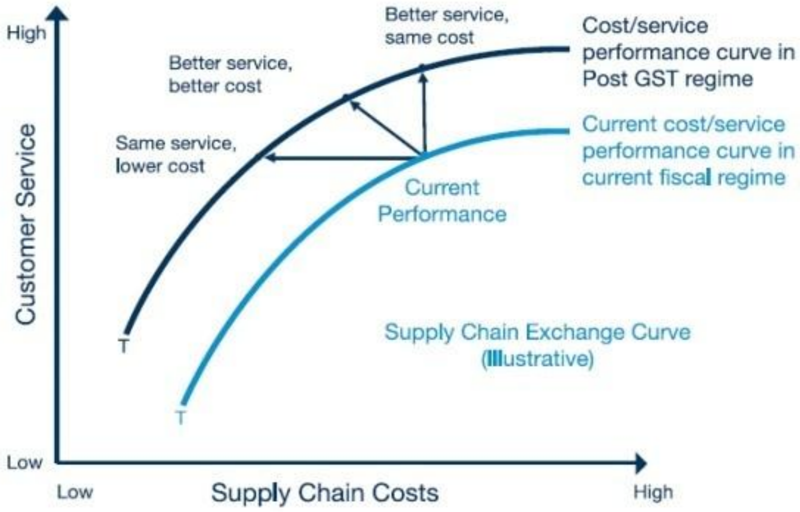


The Hindu Business Line, in its survey, estimates that up till the end of 2017 the total amount of retaining of Indian e-commerce industry is $38.5 billion US dollars and is expected to cross to 50 billion US dollars by the end of this year [129].

The Confederation of Indian Industries registers its opinion about GST stating that the implementation of the Goods and Services Tax will enhance operational efficiency of the e-Commerce industry by increasing the transparency and simplification of taxes across the borders in India , by the elimination of the incidence of double-taxation and improvement in the efficiency of supply chain and by providing the opportunity to the logistics service providers to leverage seamless hub-and-spoke models for delivery resulting in lower costs [130].

128. E-COMMERCE-Research Article- Published in 2017-Indian Brand Equity Foundation-Based on Economic Times, PWC, Financial Express
129. E-commerce market Survey-Hindu Business Line-published on Dec 2017
130. E-Commerce in India a Game Changer for the Economy-Research paper- Confederation of Indian Industry and in association with Deloitte

The implementation of the Goods and Service Tax has also a positive impact on the supply chain by reforming the logistics industry. The result of such a reformation is ultimately the increase in the quality, quantity of goods with the decrease in the cost price of manufacturing such goods. Here we can see a win-win situation from a government perspective by achieving ease of tax administration, from a corporate perspective by the ease of tax compliance and from consumer's perspective by achieving quality products for a reasonable price.



Source: PWC Report

The graph above is a symbolic representation of the result of the study conducted by PWC, one of the big four tax firms in the world. Here we could see that with the same amount of cost, quality service is possible for the e-commerce operators to provide to their customers after the implementation of the Goods and Services Tax. There are several reasons for the Goods and Services Tax to have such an impact. In the GST regime, the tax paid by the logistics company can be offset later on in the chain, reducing the cost of outsourcing and providing an impetus to third-party logistics players and also it made the tax efficiency considerations not to overwhelm other factors in warehouse location decisions [132]. Out of several reforms, these two are considered to be the main reason for creating such a change in the e-commerce industry in India by the implementation of the Goods and Service Tax.

131. The graph diagram- Research paper- published on 2017-PWC – Reference-IOSR Journal of Business and Management (IOSR-JBM)
132. The Force behind E-Commerce-Mr. Rahul Malkani,Dr. Suchismitaa Sengupta-IOSR Journal of Business and Management (IOSR-JBM)- e-ISSN: 2278-487X, p- ISSN: 2319-7668.

7. Shortcomings of Indian GST

Before the implementation of the Goods and Services Tax, the government of India has appointed a Revenue Neutral Rate committee under the leadership of Dr. Arvind Subramanian [133]. The purpose of this committee is to calculate the revenue neutral rate. The Revenue Neutral is a taxing procedure that a government undertakes when there are changes in taxing policy or amendments in tax laws in order to secure the amount of tax revenue irrespective of the impact of the changes made [134]. The action of the government by forming such a committee is to ensure that the tax collected after the implementation of the Goods and Services Tax equals the tax amount collected in the previous tax system.

The finance commission working under the government of India prescribed that the revenue neutral rate should be 15 % to 20% [135]. This is considered to be very high demand rate for revenue neutrality. The previous tax system has a high cascading effect. The cascading effect is also one of the major disadvantages of the previous existing tax system in India. The credit system of the previous tax system was also not efficiently handled so it is a huge burden for the companies and manufacturers. Now here the government wants to reach a target of the amount of tax revenue obtained by the previous tax system through the newly implemented Goods and Services Tax system.

This high demanding revenue neutral percentage rate also has its reflection on the allocation of a percentage of tax percentage. When analyzing the Goods and Services Tax, the rate for the mobile phones and fast moving consumer durables is allocated under the highest percentage category of 12% and 28% tax rates respectively [136]. In the case of e-commerce, the most sold is a mobile phone and fast moving consumer durables. When imposing such a high rate imposes difficulty on the e-commerce operators. Here the most vulnerable would be Indian e-commerce companies who compete with e-commerce giants like Amazon and eBay.

One of the possible results of the government's demanding approach is that the e-commerce world giants might acquire or merge the upcoming Indian e-commerce. This is because taxation policies are always has a huge impact in several sectors of a countries economy. The demanding revenue rate resulted in allocating fast moving goods in a higher tax rate scope which in end will force the e-commerce start-ups to raise the price for these goods which contributes the main source of their sales.

133. Press Information Bureau Government of India Ministry of Finance-(http://pib.nic.in/newsite/PrintRelease.aspx?relid=132570)
134. Definition- Revenue neutral-(http://www.investorwords.com/8338/revenue_neutral.html)
135. Report on the Revenue Neutral Rate and Structure of Rates for the Goods and Services Tax (GST)-Govt of India- Published on December 4, 2015
136. GST RATE SCHEDULE FOR ELECTRONICS SECTOR-Govt of India-[As per discussions in the GST Council Meetings held on 18.05.2017 & 03.06.2017}

Now here we could see that the Indian e-commerce companies pushed to an extent of competing with the e-commerce giants and also normal domestic retailers and in the end, this scenario might lead to Indian e-commerce companies being taken over by the e-commerce giants like Amazon and eBay.

In the perspective of the government of states, the implementation of the Goods and Services Tax is a loss of a considerable amount of tax revenue for state governments. It is because every state of India has a different economic policy and has invested a considerable of money on a different field to secure taxable revenue. Let us take two southern states of India as an example. The state of Andhra Pradesh the present day state of Telangana invested so much money in developing the field of Information and Communication Technology which were providing electronic services and made its state capital as a cyber city. The state of Karnataka also had the same approach they invested more in the ICT and created their capital Bengaluru to be favorable for the corporates.

The favorable condition created by the government of these states attracted the companies to invest in these states and also made them come to a decision to choose their place of effective management in their state. The primary aim of implementation of GST is to make India a single taxable regime and make the single indirect tax law applicable to the whole of India. It is also to be noted that it is a loss for the State government in its sovereignty over indirect taxation. The abolishment of the taxes such as entry tax and other indirect taxes made the states to loses their advantage over other states because the tax benefits in case of indirect taxation provided by these are no longer valid.

The implementation of the Goods and services tax is considered to be a prominent reason for the decrease in the amount of taxable revenue of the states because indirect taxes are considered to be the main source of the taxable income. In order to compensate the revenue losses of the states, the central government of India empowered the fourteenth finance commission union to compensate states for a maximum of five years with tapering effects with first three years 100% compensation reduced to 75%and 50% in a fourth and fifth year respectively [137]. This move of the government will not only fail in case of satisfying the revenue loss of the states but also the target of revenue neutral rate fixed by the central government.

Another issue to be taken into consideration is the issues of Goods and Service Tax-IT Network. The Goods and Service Tax Network is a non-governmental and non-profitable company which is incorporated under section 8 of the Indian Companies Act 2013 with the government of India holding 24.5% equity in GSTN and all States of the Indian Union, including NCT of Delhi and Puducherry, and the Empowered Committee of State Finance Ministers (EC), together hold another 24.5% and the balance 51% equity is with non-Government financial institutions [138].

137. GST IN INDIA: A KEY TAX REFORM-International Journal of Research – GRANTHAALAYAH-Monika Sehrawat , Upasana Dhanda-Delhi University, INDIA

By the approval of the Empowered Committee an Empowered Group on IT Infrastructure for GST (EG) was planned to be created under the chairmanship of Dr. Nandan Nilekani along with five state commissioners of Trade Taxes on committee gathering on twenty-sevenths of July in the year of 2010 and the government sanctioned its existence on 12th April 2012 [139].

The main objective of forming such an institution is to develop, operate and maintain a common GST portal which would provide a common and shared IT infrastructure between Central and State Governments, Banks, CBEC, Reserve Bank of India etc and for the purpose of simplicity for taxpayer, uniformity of tax administration, digitization of all documents related to tax administration and automation of related processes such as common PAN-based registration; common standardized return for all taxes; common standardized challan (forms) for all taxes etc [140].

Here we could see that the ownership of the Goods and Service Tax Network is with other non-governmental organizations. The 51% of the shares of this institution is with other non-governmental organization and the government owns 49% of shares. Even though the structure in which this institution is framed in such a way that the government has a direct control over the activities of this organization because the activities pursued by it is very sensitive, it is the duty of the government to have two third of the total shares to maintain its ownership. Since 51% of the shares are with non-governmental institution those who possess it will have influence over its activities.

It is also to be noted that when the Goods and Service Tax Network started to perform its activities, it faced a severe cyber-attacks. In the method of Distributed Denial of Service Attack, multiple viruses were targeted toward the Goods and Service Tax Network. In the end, GSTN could survive and sustain and the organization under the leadership of Prakash Kumar assured safety and believed to be maintaining strict measures to fight against further such encounters. It is also to be noted that the government of India has failed to secure the data in the Aadhaar biometric identity database and was accused of its ignorance [141]. In the case of GSTN, it is also not sure too about the strength of the security of the network. Since global IT giants like Infosys is backing up this network, it is believed to be secure for now.

138. Genesis and Structure of GSTN-Goods and Services Tax Network (GSTN) official statement-{https://www.gstn.org/about-us/}

139. GSTN- Economic Times- Research Article-published on May 10, 2017-{https://economictimes.indiatimes.com/what-is- gstn/articleshow/58590470.cms}

140. Goods and Services Tax in India- Research Article- ASSOCHAM- Deloitte-published on 2015

141. Aadhaar data leak via two PSEs, fixed a month after alert: Experts-Mar 26, 2018-Rachel Chitra-The Times of India-{https://timesofindia.indiatimes.com/india/aadhaar-data-leak-via- two-pses-fixed-a-month-after-alert-experts/articleshow/63457834.cms}

8. Conclusion

The implementation of the Goods and Service Tax is one of the most significant achievements of the government of India. The vision of making India as a single tax regime is considered to be beneficial for different sectors of the Indian Economy. In reality, the government of India couldn't achieve it completely. The Central Goods and Services Act (CGST) is the same all around India but in case of the State Good and Services Act (SGST), there are still variations for every state. It is because of the special privileges demanded by certain states and the hastened attitude of the government to implement the Goods and Services Tax as early as possible. This is considered to be another drawback for the Goods and Services Act.

The move of demonetizing Indian Rupee made Indian consumers to face so many economic challenges. The everyday limit for withdrawing money from banks or ATM machines was taken back in May 2017. It is to be noted that sufficiency of newly printed Rupee notes was not completely attained at this moment. Within a span of one month i.e. in July 2017, the government of India is introducing Goods and Services Tax. This resulted in inflation in the Indian economy. Goldman Sachs, a popular Wall Street firm, in a note 'India: Q and A on GST- Growth Impact Could Be Muted', has put out estimates that shows that the Modi Government's model for the Goods and Services Tax (GST) will not raise growth, will push up consumer prices inflation and may not result in increased tax revenue collections [142].

One of the major advantages of the Goods and Services Tax is that it eliminated several other indirect taxes. In the central level taxes such as Central Excise duty, Additional duties of excise, Excise duty levied under Medicinal & Toilet Preparation Act, Additional duties of customs (CVD &SAD), Service Tax, Central Sales Tax, Surcharges & Cesses and in the state level taxes such as State VAT / Sales Tax, Purchase Tax, Entertainment Tax (other than those levied by local bodies) Luxury Tax, Entry Tax (All forms), Taxes on lottery, betting & gambling, Surcharges & Cesses, are eliminated after the introduction of the Goods and Services Tax. This made tax compliance less burdensome. On the contrary, the elimination of these taxes also eliminated the tax incentives and benefits provided by them. This created a huge economic crisis for industries which have set up its business in various states especially in northeastern states based on various tax incentives promised by the government [143].

142. A Research Paper on an Impact of Goods and Service Tax (GST) on Indian Economy- Shefali Dani- Research Article- OMICS International- Business and Economics Journal
143. Advantages and Dis-advantages of GST- Madhukar N Hiregange, Ravi Kumar Somani-Research Article- published on 30.12.2017.

The next issue is about awareness about the tax reform in the corporates, operators, suppliers, and consumers. The Canadian Government during the implementation of the GST spent about $ 11.6 million USD for creating the awareness about the tax reform and its importance [144]. In the case of creating public awareness about Goods and Services Tax among the companies and consumers, the government of India has not performed efficiently. The most Indian consumers had a negative opinion about the implementation of the Good and Service Tax. This is also another reason for the economists to come to an opinion that the government of India should not have been taken a reckless and scurried stand in the implementation of the Goods and Services Tax.

After analyzing the demerits and limitations of the implementation of the Goods and Services Tax, we cannot come to a conclusion that the Goods and Services Tax is an inappropriate tax measure from the government of India. It is because the benefits that Goods and Services Tax is expected to bring to the Indian economy is greater than the shortcomings of its implementation and also it is to be noted that it is not prudent to come to any conclusions within a short span of time after the implementation of the reform. In a vast democratic country like India, with more than one billion population, any governmental measure is difficult to get implemented. It is also to be noted that tax measures in itself are not politically very welcoming by people. In a political perspective such a measure would ultimately result in a negative impact in the next elections but in case of the Goods and Services Tax, it is the contrary. The government of India has successfully tackled all political hassle created by the opposition and critics.

In the case of e-commerce, the implementation of the Goods and Services Tax is defiantly considered to be a boon and blessing because of several reasons. The removal of state barriers made free flow of goods around the Indian nation. The reformation in logistics due to the removal of entry tax is another reason for the e-commerce operators to support the implementation of the Goods and Services Tax. The certainty and clarity of the legislation have provided less compliance burden and also it is presumed to tackle corruption in the tax administration. These reforms create favorable economic condition and a business environment which will result in attracting more investments to the Indian market.

The primary aim of this paper was to analyze the implementation of the Goods and Services Tax has a positive and negative on the Indian e-commerce industry. Several factors influencing the field of e-commerce after the implementation of the Goods and Services tax is taken into consideration. It is of my opinion that the implementation of the Goods and Services Tax is a necessary measure for the development of Indian economy. It would be one of the most successful tax measures if the government would have taken time to create more awareness and provide some time for recovery of losses incurred from demonetization.

144. Goods and service tax in India: problems and prospects-Pankaj Kumar, Subhrangshu Sekhar Sarkar-ASIAN JOURNAL OF MANAGEMENT RESEARCH-ISSN 2229 – 3795

It is a fact that the demonetization of the Indian rupee had made the companies and consumers to a lamentable economic crisis and the sufficiency of rupee notes was only achieved at the end of the year after the implementation of the Goods and Services Tax.

In my opinion, the dual tax model followed in the Goods and Service Tax will be very efficient for the tax administration of both state and central government. It is because the equal distribution of the tax revenue between central and state government will be helpful in satisfying the needs of both the governments. The multiple rates are also considered to be a good prudent approach. The allocation of basic goods to the zero-rated and very minimum rated is possible because of multiple rate approach. From an economic perspective, it is obvious that the implementation of the Goods and Services Tax will have a positive impact not only in the field of e-commerce but also other sectors of the Indian Economy.

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