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Business Environment and Data Analytics: Enablers For Sustainable Economic Growth

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***Abstract*---- In recent years, both industry and the Governments have high focus on sustainable economic growth. This paper examines how business environment and business analytics can be key enablers towards these goals. In the 1st part, this paper uses a structural equation model (SEM) that demonstrates the association of good business environment on attracting Foreign direct Investment (FDI), which in turn helps in the economic growth or GDP. The World Bank's ease of doing business (EODB) scores are used for a fair indication on the business environment. The results highlight the importance that good business environment have in global competitiveness and the SEM model reveal a strong association of EODB or the business environment with the FDI inflow. The analysis also confirms positive association of FDI inflow with the GDP growth in the country. The 2nd part analyses how vast amount of data could be used by the industry to achieve sustainable and growing business with right products, right quality and right costs. For this purpose, in-depth interviews were conducted with some senior managers and entrepreneurs to understand the perspectives on how data analytics could help the organizations in better supply chain optimization, scientific demand planning, cost optimization and performance management to stay ahead in the competitive world and build sustainable supply chains for competitive advantage. Interviews were focused on business needs for various purposes like performance management, Predictive Analytics, forecasting and strategic planning and their expectations for a perceived success.**

***Keywords*--- Sustainability, Analytics, business environment, Ease of Doing Business, Competitiveness, FDI, Economic growth**

I. INTRODUCTION

For a country to be self-reliant and achieve sustainable economic growth, the government needs to provide a business-friendly and favorable business environment through policies to attract foreign investment, which not only creates local employment but also brings in new technology and can increase exports. Once the environment is set, it's the turn of the industry to use the opportunity to use the investments and right technology to achieve sustainable growth. These 2 are connected by the infrastructure and resources like land, labour and the entire system then can propel the economic growth of the economy seamlessly to achieve a sustainable economic growth as picturized in ***Figure 1***.

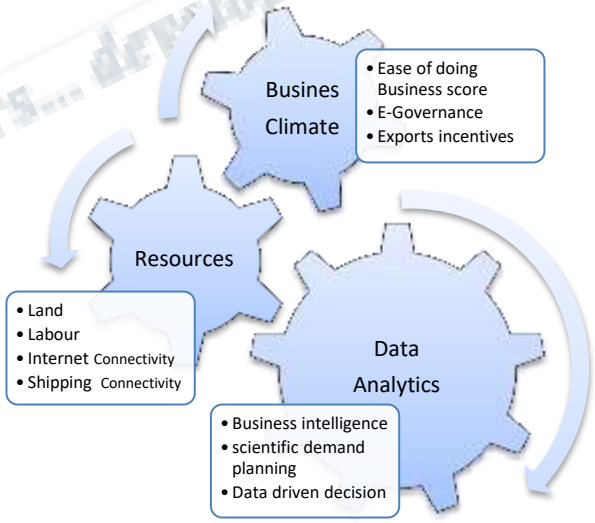

Figure 1: Gears of Economic Growth

Presently, India is gearing up to become a 5 Trillion Dollar economy by 2024-25 and with the economic slowdown post Covid pandemic makes sustainable economic growth extremely critical and important for India. A sustainable growing economy needs a healthy

private sector that create jobs and generate income that can be spent and invested domestically. Doing Business reports by (The World Bank Group, 2019) continues to enable regulators to assess and benchmark their domestic business regulatory environments. While the Government is responsible to set the business environment, the industry or corporate world should take the advantage of business analytics and new technologies to use the conducive business environment and drive the business to the next level to position India as a world supplier of high-quality products.

Figure 2 presents business environment and Business Analytics as two wheels of the sustainable economic growth, complementing each other and achieving a common goal.

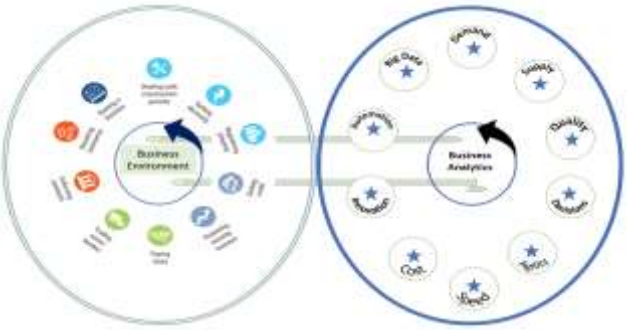

Figure 2 : Wheels of Business Environment and Business Analytics

This study examines the sustainable growth in India using the World Bank's Ease of Doing Business (EODB) scores and highlights the industrial sustainability through effective use of data analytics to optimize cost, demand planning, supply chain management and performance to build a more resilient enterprise. The paper tries to explore the possibilities of how public and industry could efficiently work together towards a common goal of sustainable economic growth.

II. BUSINESS ENVIRONMENT

Doing Business report describes the **business environment**, through quantitative and qualitative indicators of the functioning of representative institutions and comparing business regulations in 12 areas of business activity in 190 global economies (The World Bank Group, 2020). The business environment is also linked to the institutional environment and countries with strong institutions and better policies help improving the business efficiency and attract more FDI business friendly policies as per (Janaćković & Petrović-Ranđelović, 2019). A better business environment is more likely to attract greater amounts of **foreign direct investment** (FDI), especially in case of developing countries as stated by (Olival, 2012). FDI has received the attention of a vast literature that focuses on both determinants and consequences. One theory argues that FDI is drawn to countries with **lower wages and more abundant natural resources** while the other – "new trade theory" suggests that **economies of scale** are a driving force of FDI as per (Kinoshita & Campos, 2003). A study by (Gillanders, Robert; Whelan, 2010) find that a country's EODB rank dominates a range of measures of legal and political institutional quality and has a significant association with GDP per capita income.

The discussion on FDI often focuses on cheap labor and tax benefits as important determinants, however (Wei, 2000) in his paper argues that the quality of public governance or business environment is equally important determinant of FDI inflow. In his working paper, (Tokuoka, 2012) states that since the global financial crisis, corporate investment has been weak in India and analyze how India can boost corporate investment. Analysis of macro data indicates that macroeconomic factors can largely explain corporate investment but that they do not appear to account fully for recent weak performance, suggesting a **key role of the business environment** in reviving corporate investment. Analysis of suggests that improving the business environment by reducing costs of doing business, and conclude that developing infrastructure, especially transport, could support corporate investment.

The "MAKE IN INDIA" initiative by Prime Minister Mr Modi is aimed at showcasing India as a global investment destination and it is very aptly supported by other initiatives like Digital India to create a **positive business environment** in the country as stated by (R. Geetha, 2016).

Make in India also focuses on zero defects with zero effects on the environment and boost the national economy by making India self-reliant with global recognition. (Kaur, 2019) rightly states that **we need to be par with the latest technology** and there is a need to have more clarity, maturity and intensity on product quality aspects. The government should take more initiatives towards skill development, innovative methods of manufacturing, liberalizing clearance points for starting a business to provide essential support to make in India to thrive.

(Dhawan, 2013) stated that **India needs to self-sufficient and dynamic** in technological competition and suggested expansion of the domestic market. He adds that India needs and can afford a large – sized sector of capital

goods industries , which are also needed for security purposes. (Singh, 2016) also suggests that the country needs to focus on technology upgradation and skill development to match up the international benchmark and standards. As stated by (Sharma, M., Khattar, C. S., & Trivedi, 2018), India is fast moving from exporting low-value goods to developing countries to exporting high-value goods to developed countries. Government initiatives such as Make in India, Digital India and Start Up India are few policy measures which have improved investment ENVIRONMENT of the country and created conducive Start Up Ecosystem as stated by (Tyagi, A., Gulati, M. S., & Misra, 2016).

Big data is being implemented successfully in the industry but the public sector seems to be lagging behind, despite the potential **value addition for government** as per (Klievink et al., 2017). Such large amount of data, when coupled with unstructured citizens' data generated through other digital devices, holds immense potential to revolutionize governance processes by providing a foundation for data-backed decision-making. Hence, such structured baseline data and unstructured citizens' data must be continuously combined and analyzed by application of **Big Data Analytics as wisely stated by** (Malhotra et al., 2018).

III. BUSINESS ANALYTICS

India is perceived to be the world leader in data analytics and information technology and with the growing importance of the technology, digitization and data analytics would indeed be an important factor in the growth of India. Today's world is technology driven and with the emergence of 4th Industrial Revolution, it is of utmost importance to harness the **power of technology** for the collective good of more than a billion people living in India as per (Mishra et al., 2020). India has a number of favorable factors, including a vast - growing market, a large diversified workforce, English-speaking scientists and engineers and good R&D centers as per (Kumar, 2018). Advanced **analytics**-driven data analyses allow enterprises to have a complete or "360 degrees" view of their operations and customers to direct, optimize, and automate their decision making to successfully achieve their organizational goals. Advanced analytics, also known as predictive analytics, help turn operational data into strategic information, which is used in decision making to gain competitive (Bose, 2009)

(Gupta & George, 2016) collected data from some Chief Data Officers and the results showed that data analytics has significant positive association with **market performance and operational performance.** Today, the world contains a massive amount of digital information and this kind of large amounts of data can be used by the industry in decision-making to generate value for the companies. Currently, many organizations are investing heavily in data analytics for gaining insights and transform data into business opportunities. (Morro & Ye, 2018). In an exploratory study on use of analytics in Indian enterprises by (Xavier et al., 2011), it was found that an effective understanding of **analytics as a tool for decision making.**

Demand forecasting in a volatile an uncertain environment creates specific challenges and an accurate forecasting is critical in the process industry and it enables future-oriented inventory structures, higher delivery capability and flexibility, and an overall reduction of supply chain costs as per (Blackburn et al., 2015). The results of study by (Dubey et al., 2019) suggest that big data analytics capability has a positive and significant effect on **supply chain agility** , supply chain performance and hence enhances competitive advantage. The results reinforce the significance of use of planning and making decisions can affect the performance of supply chain. (Khan, 2013) in his study states that companies with better planning are more capable to perform better.

Predictive analytics enables organizations to reduce risks and make intelligent decisions thereby creating differentiated customer experiences. Predictive analytics solutions can identify potential delays ahead of time and provides an opportunity to take actions in time s per (Attaran & Attaran, 2018)

Agility is the dynamic capability within firms to identify and effectively respond to threats and opportunities with speed and data analytics helps to increase firm agility as per (Ghasemaghaei et al., 2017). To address issues like uncoordinated waiting times, inflexibility and costly communication, (Gröger et al., 2013) presented a mobile dashboard for shop floor workers. Such technical dashboards can help to identify the waiting time , resource utilization, quality issues and in turn help to improve the efficiency and quality levels. Analytics help in **performance measurement** systems and assists organizations to take effective decisions for better performance even in changing environment (Kennerley & Neely, 2003).

Big data offers **business intelligence (BI)** concerning the habits of consumers and rivals, but also to herald a revolution in the way in which business are organized and run as per (Kimble & Milolidakis, 2015). BI allows managers to have better insights into their operations and the big data provide enormous possibilities to improve business performance and allow for the creation of smart

factories with the help of technology and data (Tan et al., 2017). Study by (Elbashir et al., 2008) confirm that the analytics and BI systems have a significant positive impact on the business process performance and organizational performance. The study showed enhanced profit margin, improved competitive advantage, increased sales, better productivity, reduction in cost, which in turn shows that BI and analytics lead to **sustainable economic growth.** An increase in levels of data and technological capabilities is redefining **innovation, competition, and productivity** as stated by (Mazzei & Noble, 2017) that identifies how big data improves functional capabilities. Analytics can provide various insights to the decision makers that in turn help with the **frugal innovation** (a process of reducing the complexity and cost of a good and its production). Such a continual improvement process leads to sustainability and growth.

IV. RESEARCH GAPS

There are various previous studies on **business environment** and **business analytics** separately, but there is little research on how these two can **complement** each other for the national economic growth and sustainability. For the quantitative study on business environment, we have used the **latest 2019 data** published by the World Bank as against older data by previous researchers. Most past research has been focused only on FDI inflow, whereas this study **also includes focus on GDP per Capita** as a key parameter of economic growth as suggested by (Natarajan & Raza, 2017) and we have also evaluated effects of imports and exports on the GDP. Focus on India as large population , growing economy also supports the suggestions by (Hossain, M. T., Hassan, Z., Shafiq, S., & Basit, 2018).

V. OBJECTIVES OF THE STUDY

The objective of the study is to analyze the export performance of Indian products and analyses the performance of India's exports and the various economic factors which have contributed to its growth. The objective of this paper is to

1. To analyze the indicators of business environment using EODB score.
2. To study about the role of Foreign Direct Investments inflows and its influence on GDP per capita.
3. To study India's current import-exports data.
4. To investigate potential use of data in improving organizational economic growth.

VI. RESEARCH DESIGN

For the 1st part of the study, the secondary quantitative data by the World Bank's Doing Business reports are used. SEM is used to find a connection between changes in FDI inflows and the Doing Business rank of each country. The secondary data published by the World Bank on EODB are used - 149 countries data - **period 2016 to 2019 (524 lines / samples).**

For the 2nd part of the study, Interviews with senior management professionals were focused on utilization of vast amount of data for improving the operational efficiency and achieve economic sustainability. The interview method allowed two-way communication that helped in seeking more detailed and in-depth information through open ended questions. Focus of these interviews was to analyze how the data is utilized for demand planning, Customer satisfaction, optimization, predictive analytics and frugal innovation.

Interviews also focused to study the impact of size of the organization, user level, and user knowledge and data quality.

VII. DATA ANALYSIS

This paper is organized in 2 parts:

1. The 1st part focuses on the business environment in the country assessed using the Ease of Doing business (EODB) score published by the World Bank. This analyses how India can attract more FDI using business centric policies and how FDI can help in bringing better technology and create more employment opportunities. It also analyses impact on import reduction as increase in exports of products and services.
2. Once the business environment is set right by the Government, it is the turn of the industry to make best use of the environment and use the opportunity to produce high quality products and services and help in the economic growth through higher quality, efficiency and exports. The 2nd part focuses on how the industry and Corporates can utilize business analytics to transform vast amount of data into meaningful insights and help to focus on the right products based on the import and consumption data, use data for improving quality and efficiency and reduce the costs, thereby making Indian products competitive in the Global markets.

For the quantitative analysis for the Business environment study, the secondary data on Doing Business is collected through World Bank's data published on its website. The lines with missing values were removed to have cleaned up data of 149 global economies during the

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period 2016-2019. The SPSS analysis was carried out on these 524 lines / samples , which resulted in favorable Cronbach's Alpha of 0.899, representing excellent reliability (Chawla, D., & Sodhi, 2015). The data analysis was carried out using AMOS Structural Equation Modelling (SEM) tool. The below research hypothesis were tested using SEM approach:

H1 : The EODB scores and FDI inflow has association with GDP Per Capita income.

H2 : There is a positive relation FDI inflow and GDP per Capita income.

H3 : There is a positive relation National Exports and Nation's GDP

H4 : Imports and Internet connectivity have significant influence on the FDI inflow

H5 : Imports and Shipping connectivity have significant influence on the Exports.

Figure 3 shows the path diagram with the hypothesized relationship among EODB construct. AMOS 20 software package is used for SEM analysis. The weights are significant with p value less than 0.05 (Hair Jr et al., 2009). The path diagram with the relationship of EODB scores, Imports, Exports, Shipping connectivity and internet connections with the FDI inflow, GDP per capita income and total GDP.

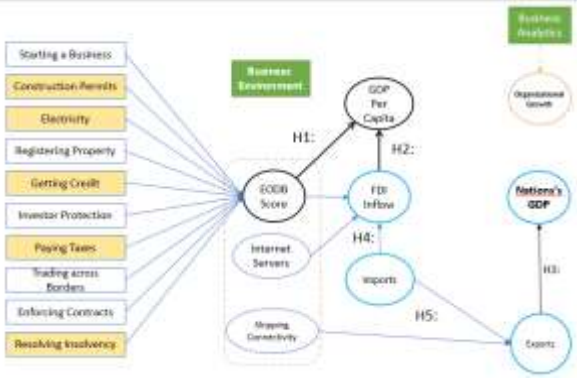

Figure 3 : Conceptual Model of EODB Scores, FDI Inflow and GDP

VIII. MODEL FIT STATISTICS

The structural equation modeling was analyzed with AMOS and the model fit indices were found to be very good. **NFI, CFI, TLI, IFI, RFI, and GFI are all greater than 0.9, which is excellent. RMSEA should be less than 0.05 and** signifies that the measurement and structural models fit well. As the structural model has good fit as per ***Table 1***, the standardized path coefficients could be used for testing hypothesis.

Table 1 - GDP Per capia model fit

Model fit indices	Model	Recommended Values	**Estimate**	Interpretation
χ^2 / df (use as p for probability)	χ^2 / df	1 to 3	**2.617**	**Excellent**
Goodness-of-fit index	GFI	>= 0.9	**0.994**	**Excellent**
Adjusted goodness-of-fit index	AGFI	>=.8	**0.955**	**Excellent**
Normed Fit Index	NFI	>= 0.9	**0.997**	**Excellent**
Relative Fit Index	RFI	>= 0.9	**0.985**	**Excellent**
Comparative fit index	CFI	>= 0.9	**0.998**	**Excellent**
Incremental Fit Index	IFI	>= 0.9	**0.998**	**Excellent**
Tucker-Lewis index	TLI	>= 0.9	**0.991**	**Excellent**
Root mean square error of approximation	RMSEA	< 0.08	**0.056**	**Excellent**
PCLOSE	PCLOSE	>0.05	**0.345**	**Excellent**
SRMR	SRMR	<0.08	**0.039**	**Excellent**

The **Table 2** shows the results of GDP per capita model

Table 2: GDP Per Capita Model

Hypothesis	Independent Variable		Dependent Variable	Estimate	P	R Square
H1:	EODB_Score	--->	GDP_PC_USD	0.534	***	**0.472**
	FDIp_IN_BDol	**--->**	**GDP_PC_USD**	**0.292**	***	
H3:	**Exports_BDOL**	**--->**	**GDP_BDol**	**0.327**	***	**0.406**
H4	Internet_Servers	--->	FDIp_IN_BDol	0.385	***	0.690
	Imports_Bdol	--->	FDIp_IN_BDol	0.662	***	
H5:	Imports_Bdol	--->	Exports_BDOL	0.695	***	0.946
	Shipping_Conn	--->	Exports_BDOL	0.239	***	

1) SEM Model for GDP :

A simplified model as shown in ***Figure 4*** shows association of FDI inflow and the National GDP. The model has a good fit.

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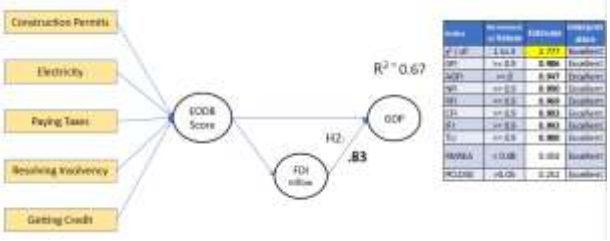

Figure 4 : National GDP Model and SEM model fit indices

The
Table 3 shows the results of the GDP model.

Table 3 : GDP Model Summary

Hypothesis	Independent Variable		Dependent Variable	Estimate	P	R Square
	ResolvInsolv	--->	EODB_Score	0.306	***	0.931
	PayTaxes	--->	EODB_Score	0.269	***	
	GetElectricity	--->	EODB_Score	0.258	***	
	ConstrPermits	--->	EODB_Score	0.181	***	
	GetCredit	--->	EODB_Score	0.289	***	
H2:	FDIp_IN_BDol	--->	GDP_BDol	0.826	***	0.666
	EODB_Score	--->	GDP_BDol	-0.034	0.208	

IX. RESULTS AND DISCUSSIONS

The hypothesis testing was done based on the SEM model in AMOS and Based on
:

- Hypothesis H1 is accepted and the results shows that the business environment (measured quantitatively with EODB scores) has significant positive relationship with GDP Per Capita income. **5 EODB parameters** have significant impact on GDP per capita. **47%** of variation in GDP per capita can be explained by change in FDI inflow & EODB Scores.
- Hypothesis H2 is accepted and the results confirm that FDI inflow has a significant positive relationship with the GDP and upto **67%** of variation in Nation's GDP can be explained by change in FDI inflow.
- Hypothesis H3 is accepted and there is a positive relation National Exports and Nation's GDP.
- Hypothesis H4 is accepted and there is a positive relationship between the Imports and FDI inflow. Imports and Internet (Servers) Connectivity seems to explain **69% of variation in FDI inflow** in the country, which means most of the foreign investors consider high focus on exports and digital resources.
- Hypothesis H4 is accepted and **95% of variation in Exports** can be explained by change in Imports value and Shipping connectivity, which seems logical.

To study the objective #3 , line graph of Indian imports , exports and FDI values are plotted in the chart in Figure 5, which shows that India's imports has been consistently higher than its exports and the gap has slightly reduced in 2019, which is a positive sign and indicates that the "make in India" could have its influence in the reduction of imports. Between 2009 to 2019, the exports have doubled, which is very positive but the imports have increased by 88%, which indicates that more efforts were need to make products domestically in early 2000s.

The FDI inflow has increased from $7.27 Billion in 2005 to $50.61 Billion in 2019 with an increase of **7 times over 15 years period** as seen in **Figure 5**. Foreign direct investment into India rose 13% to a record $50 billion in 2019 with a **20% significant increase from previous year**. The study by (Govindan, 2019) found that the before implementing make India campaign total 141 countries FDI inflows in India after introducing this major initiatives brings into 16 new entrant FDI inflows into India. It is also concluded that the after implementing make in India campaign 157 investing countries in average annual FDI inflows are increased by 42% over a short period of 4 years.

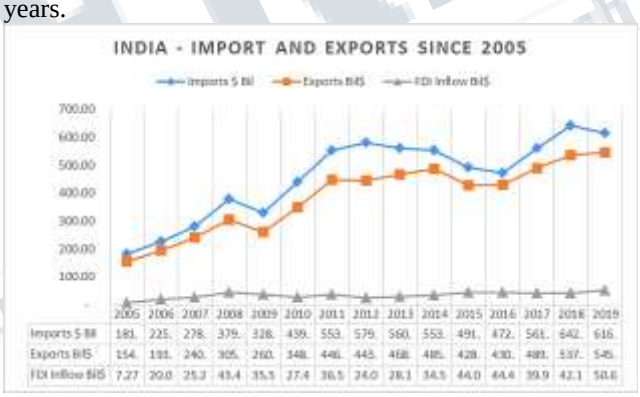

Figure 5 - India's Imports and Exports since 2005 in Billion $

To study the objective #3 further in terms of focus on the imports, some of the products with high $ value of imports from China are shown in the ***Table 4***.

HSCode	Commodity	2018-2019	2019-2020(P)
85	**ELECTRICAL MACHINERY AND EQUIPMENT** AND PARTS THEREOF; SOUND RECORDERS AND REPRODUCERS, **TELEVISION** IMAGE AND SOUND RECORDERS AND REPRODUCERS, & PARTS.	20,627.56	19,103.01
84	NUCLEAR REACTORS, BOILERS, **MACHINERY AND MECHANICAL APPLIANCES**; PARTS THEREOF.	13,383.76	13,322.13

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29	ORGANIC **CHEMICALS**	8,596.25	7,970.43
39	**PLASTIC** AND ARTICLES THEREOF.	2,722.60	2,714.82
31	FERTILISERS.	2,053.22	1,820.88
73	ARTICLES OF **IRON OR STEEL**	1,735.33	1,588.76
90	OPTICAL, PHOTOGRAPHIC CINEMATOGRAPHIC MEASURING, CHECKING PRECISION, **MEDICAL OR SURGICAL INST**. AND APPARATUS PARTS AND ACCESSORIES THEREOF;	1,587.69	1,341.53
87	**VEHICLES** OTHER THAN RAILWAY OR TRAMWAY ROLLING STOCK, AND PARTS AND ACCESSORIES THEREOF.	1,521.10	1,273.88
72	**IRON AND STEEL**	1,422.37	1,121.33
38	MISCELLANEOUS **CHEMICAL** PRODUCTS.	1,290.59	1,205.06
76	**ALUMINIUM** AND ARTICLES THEREOF.	1,174.62	957.33
28	INORGANIC **CHEMICALS**; ORGANIC OR INORGANIC COMPOUNDS OF **PRECIOUS METALS, OF RARE-EARTH METALS**, OR RADI. ELEM. OR OF **ISOTOPES**.	1,050.23	746.71

Table 4 : India's Major imports from China

As can be seen, India has been over-dependent on Chinese imports and Indian industry now has a great opportunity to manufacture various products including electrical machines, equipment, plastic items, toys, chemicals, iron and steel items.

There is a need to manufacture various active pharmaceutical ingredients (APIs) , pharmaceutical formulations. There is also a huge demand for medical and surgical equipment, which can be manufactured and supplied by Indian manufacturers for domestic consumption as well as for exports in future. When deciding what to make in India, it makes sense to identify the current imports, especially from China, which gives a clear overview of the unmet domestic demand. The import data shows over-dependence on China for many products including electronics (TVs, laptops, mobiles), Solar cells, equipment, Chemicals and pharma APIs, steel, automotive products, Medical or surgical products, plastics and its products to name a few. Analysis of this import data would reveal that many of these products can be easily made in India and it can generate millions of employment opportunities. Further analysis would provide insights on the reasons for imports instead of manufacturing. These could be:

- The manufacturing cost in India may be higher due to lack of automation and technology.
- Lack of technology and research.
- Lack of right skills and competencies.
- Complex regulations in terms of land acquisitions, labor union issues, corruption, etc.

2) Qualitative Analysis – Business Analytics

To address objective #4, qualitative Analysis was conducted via in-depth interviews with some senior management professionals and entrepreneurs to understand their perception on how data analytics can help the corporates / industry to enhance the organizational growth. Each were asked to discuss about how they perceive use of data analytics for enhancing the organizational performance and sustainable economic growth. The interview gave us lot of pertinent information and insights – some of the excerpts from the interviews are listed below:

1. What to make in India: "We support Mr Modi's self-reliant India campaign and have started using the import data, primarily from China, to evaluate the **demand** of products for Indian consumption. We also maintain database of local consumption through other mechanisms", says an engineering entrepreneur.
2. Where to **supply**? "As per some studies, the medical devices market value is expected to be a USD 25-30 billion in India by 2025. We have started collecting the domestic consumption data and we also use the exports data to obtain the insights on the global demand. Data analytics can indeed give extremely useful insights and its predictive analytics features help to assess future trends in a scientific manner" says an entrepreneur.
3. What improvements are needed to match global standards? "If we have to supply high **quality** products to the world, it is extremely important that we focus to improve the quality of products and services. Often the lead time becomes a key factor and we have started investing in advanced technology that helps us to produce products at higher speeds as well as with better accuracy. Such automation also generates huge data that we use for further analysis to improve our quality standards" - states a quality director of a manufacturing company.
4. **Automation** for high speed and accuracy: "We had to pack a huge quantity for a large project and the time was very limited. Considering the requirement of high **speed** and accuracy, we had to adopt automation, that not only helped us to complete the project on time, but also provided a huge data that we could use to improve our production lines" states an Operations manager.
5. "**Traceability** becomes very important for many

products including food , pharma , FMCG. We have recently implemented GS1 barcoding system that helped us to have a complete traceability throughout the supply chain. The barcoding also helped us to increase the efficiency and accuracy of goods receiving as well as the manufacturing operations. The system generated huge data that is being used by our analyst to improve the efficiency" say a senior production manager.

6. Use of data analytics for **cost** optimization: "In a highly competitive market, we need to focus on cost, efficiency and optimization. As a major part of our business is tender based, we must be very sharp in quoting the prices. The data analytics and business intelligence help us a lot to analyze our costs and prices and has enabled us to win some of the key projects" says a Sales Director.
7. Supply Chain analytics and **Agility**: "Some of our customers have demands for high on-time readiness and timely information and data supply. The data analytics dashboards help us to provide accurate and timely business insights that help us to be on track and deliver products as per the customer demands" states a global supply chain manager.
8. **Decision Making**: "We use customer purchase data to study the buying behavior and make special offers to loyal customers. It also helps us to order the right products in right quantities and has also helped us to make scientific decisions that helped to minimize the quantity of non-moving and slow-moving inventory" says the Operations manager of a large supermarket chain.
9. "The predictive Analytics provide forecasts and insights about likely future outcomes which greatly help organizations working in challenging conditions. We help our clients by providing dashboards that help them to have a fair futuristic view / forecast based on the historic data pattern. Inventory forecast dashboards based on predictive analytics, for example, are highly appreciated by our clients handling complex supply chain operations," says a senior BI Analyst and adds -" We encourage our clients to use the mobile dashboard features and many of them use these features for their KPI measurements and communication across teams. Top management highly prefer scorecards for their strategic planning and performance management"
10. **Innovation** and Lean: "We have been using our production data to study the production time, inventory holding days and the quality deviations. This data analysis has helped us to minimize the down-time and improve the operational efficiency. Many of the manufacturing defects and deviations are surfaced at early stage and it helped us to reduce the quality claims to a great extent" states the production head of a large manufacturing organization.

X. CONCLUSION

The main objective of this research was to explore the impact of EODB on FDI inflow based on 149 countries during 2016-2019 based on the World Bank's EODB data. The aim of this study is to measure the relationship between EODB and FDI inflow and further analyze the impact of FDI inflow on the economic growth using GDP per capita as a measurement parameter. This study results confirm that **FDI inflow has high correlation with the GDP per Capita** income during the period. Results also showed statistically significant relationship between EODB score and FDI inflow.

The results show that there is a **significant relationship between EODB and GDP per capita** and also confirms a direct link between FDI and actions undertaken by the government. This suggests that Indian government should encourage more export oriented FDI to have a direct effect on export growth leading to growth of the economy in its journey to become self-reliant India. The findings of these qualitative study on business analytics indicate that data analysis helps organizations to **improve the operational efficiency** and results in **enhanced economic growth**. Supply chain analytics helps to improve the much-needed **agility** and provide **competitive advantage** to the organization. The qualitative study supports that analytics can play an important role in the industry to improve the organizational efficiency and remain competitive to supply quality products not only domestically, but also globally.

XI. LIMITATIONS AND FUTURE RESEARCH

This study is not without limitations. The study relies on secondary macroeconomic data from the World Bank available till early 2020 and study can be further conducted with latest data. This study has a higher focus on India and opens up a number of new directions for further research to unearth patterns from another country perspective. This paper uses qualitative analysis for the business analytics and this can be verified in future through a quantitative study.

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