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# A Study on Techno-Nationalism, an Emerging Trend in the 21<sup>st</sup> Century India

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## Abstract

*Techno-nationalism is a nationalistic and ideological movement that also serves to understand the social and cultural effects of technology on the citizens of a country. Techno-nationalism is a fusion of the two words "Technology and Nationalism," in which they are politically focused together on the advancement of the country in terms of technology and its related dynamics. Initially, it was started in Europe and North America, then later in the twentieth century, various nations begin to make use of Techno-nationalism, and China has mastered this concept for their advancement. anyway, the main objective of this paper is to examine and prove the roots and growth of the Techno-nationalist movement in the world as well as in India and China's hostility to the emergence of Techno-nationalism in India and in its citizens with the support of different eminent references. In this context, a survey also conducted to prove the emergence of the Techno-nationalism in India. Respondents are common Indian people who will fall within the categories of different sectors and analyzed this data through the references of many technological, cultural, scientific, social, historical theories respectively.*

**Keywords—** Covid-19, Economy, Industries, Indians, Imports, Make in India, Media, Nationalism, Startups, Social, Technology, Trade, Trend, 4.0

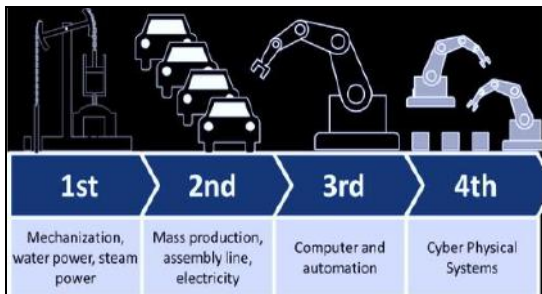
## I. INTRODUCTION

The combination of Techno-nationalism is different and unique in its way, which means It is a combination of two words nationalism plus technology which shows the autonomous and innovation of a nation's technology. The term "Techno-Nationalism" is one of the popular technological trends and well-played strategy by the western countries such as Britain, America, Germany, Canada, and Japan in the past, China later completely uses this technique. This theory has linked the two strengths

from history to contemporary times, like China utilizes this idea after the decline of west-led dominance after 1945, and secondly, there is a tough fight between western companies and Chinese rivals in the 21<sup>st</sup> century. In countries like India, Indonesia, and Saudi Arabia in the 21st century this techno trend is also evolving and still at the beginning stage. Therefore, the Techno-nationalism was born in the west and later used by China. Nevertheless, before exploring the scope of that subject it is also important to define Techno-nationalism, according

to Wikipedia the basic definition is "Techno-nationalism is a way of understanding how technology affects the society and culture of a nation" (Techno-nationalism,2007). One common example is the use of technology as a key subject in a nationalist project, intending to promote connectedness and a stronger national identity". This technological ideology's main aim is thus to make a nation self-sustainable in terms of technology and industrial results and to stamp that nation's impact on other countries for profit and then dominance.

The Techno-nationalism shall have classified into three waves for the detailed explanation of its benefits, Where, the first wave focuses on the rise of manufacturing, infrastructure and often pervades essential sociological and revolutionary issues such as national identity, patriotism, a democratic vision. Later, the second wave shifted from Europe and North America to Asia, this was adopted, in particular, by China to develop, evolve and achieve its future goals, in order to preserve its national identity on the world, where the second wave also adjusted like the first wave but just the location changed. The third wave however is distinct from the other two waves as economic globalization, driven by economic globalization of this 21st century and by various new technologies and innovations, means, it is expanded to various nations with different new features.



*Fig.1: Waves of Industrial Revolution*

*Source: ILO*

Robert A. Manning who is a Senior Fellow of Brent Scowcroft Center for Strategy and Security at Atlantic council describes "The world is on the threshold of an unprecedented, disruptive technological transformation. Dubbed the Fourth Industrial Revolution, the convergence and synergy of artificial intelligence and Big Data, robotics, biotech, 3D printing, advanced manufacturing, new materials, the Internet of Things, Nano-engineering, and Nano-manufacturing all merge the digital with the physical economy" (Manning,n.d.). And he also said, in the present scenario geographically small countries like South Korea, Israel, Sweden, and Singapore are contributing a large number of innovations to the

technology. Countries like Russia, India, and Vietnam have chosen to take the appropriate place in enforcing Techno-nationalism and are following China in this respect. And there is a difference between Techno-nationalism and Techno-globalism, where the Techno-nationalism deals with a particular country's development, but the "Techno-globalism holds that technology is turning the world into a 'global village'" (Edgerton,2007).

## II. TECHNO-NATIONALISM IN EUROPE AND NORTH AMERICAN CONTINENTS

The origin of Techno-nationalism is started from Europe in the 18<sup>th</sup> century, especially the countries like Britain, Germany utilizes this trend more. This theory starts at the outset with the industrialization process, ways to create more factories to manufacture and export their goods worldwide, to mark other countries, it showed that these major European countries mixed nationalism with technology or industrialization to fuel their (Europe) economies positive, which is useful for their technological advancement later. In any case, the "Industrial Revolution" is also an important factor in the growth of Technological nationalism in Europe and later on in America. In the beginning of the 20th century, Germany crossed Britain and America began to compete strongly in the same way. And under modern conditions Britain along with America plays a vital role in the world's economic and scientific institutions.

North American Countries such as the United States and Canada in techno-nationalism are differentiated from the history of their country from Europe. Such two nations, at the beginning of their birth, are European colonies, mostly shaded by Britain, France, Spain. However, after independence, Also Americans and Canadians have begun the task of reducing their dependency on Europe and are only looking for their nations' sovereignty. Through this step the two countries initially seek to tie together their land scattered across the continent of North America and to bring them together successfully. After, the ethos of the creation and dissemination of technology nationalism in America and Canada inevitably helps create nationalism in its people. The strong dominance of America in various industries, such as oil, manufacturing, materials and finance as well as technology and science, can also be seen in the present 21st century. And there's also a significant portion of Canadian influence in the operation, banking, shipping, mining and other services.

### III. TECHNO-NATIONALISM IN ASIA

Techno-nationalism was initially flagged in Europe and North America, but gradually turned into Asia in the 20th century. Especially in Asia, China is the first and the largest nation to make proper use of this theory or hypothesis for their nation's technical, industrial and innovation sectors related to supply chain operations. In this perspective, it is also important to discuss the origin and development of Techno-nationalism ideology and its practical appliances in Asia. In this concept, China is in the top ranking along with America and the Productive. China is well known for its "world manufacturing hub" which means that maximum global goods are manufactured in China, provided that China has flourished as an "exporting economy" where it enjoys a large capital surplus of exports and foreign currency reserves. And Beijing's "Made in China 2025" is a classic example of Techno-nationalistic execution, and it also encourages foreign direct investment, named after the laws and regulations, to put America aside (Capri, 2019). However, there are huge allegations on China's policies are unethical, unfair, and manipulative. To a maximum degree, China does not allow imports from other countries, but even dumping its exports to other countries, and China has also begun to prohibit foreign companies and goods from purchasing in their country, whereas Shazeda Ahmed and Steven weber (2014) depicts "The Chinese government now touts the Snowden leaks as proof that the United States is an untrustworthy "hegemon" in the technological sphere, an argument used to justify China's stringent new cybersecurity policies. In light of past attempts to slowly weed foreign technology out of Chinese markets, it is clear that economic concerns have outweighed security ones for many years" (Ahmed and Steven, 2014). That is why the US, under the Trump administration, launched a trade war in 2016 and reached it peaks in 2020 when relations between the two countries were severely damaged. According to Rajan (2018) this trade war between US and China is also termed as "Cold Technological War" (Rajan, 2018).

Japan is a prosperous and powerful nation and a leader of Techno-nationalism in Asia, at its height before the Second World War. But, after nuked by US the Japan's entire structure collapsed, but within a short time the country and its citizens started to rebuild their nation again with the power of nationalism, but without territorial imperialism. In this period, Japan rapidly increased the production of Engineering, Automobiles, Electronics and many products, successfully exported to the world (Low, 2003). Particularly, their trademark in automobile industry is remarkable, the famous Japanese auto brands are Toyota, Suzuki, Yamaha, Nissan,

Mitsubishi, Honda and more. Before the 1990s, Japan was at the top of the chart, but later, China overtaken Japan, economists are predicting that some US sanctions that are also the reason for Japan's decline in Asia's supremacy. And yet, some experts are going to call Japan as a "Sleeping Godzilla." Even now in the 21<sup>st</sup> century Japan is the strongest and largest investor in many countries, including in China.

South Korea, with a population of 50 million, producing a large content of techno materials, being developed by their native companies such as Samsung, Hyundai, Kia Motors, LG, where their products have the demand in the western nations and to various developing and developed nations in the rest of the world. However, these radical changes have taken place over the last three decades.

Despite facing economic sanctions, Iran has made significant progress in advancing its technological capabilities, evident in initiatives like the "Resistance Economy" that aim to enhance domestic production and reduce dependence on foreign technology. The nation's focus on information technology, biotechnology, and aerospace underscores its commitment to achieving self-sufficiency. The pursuit of nuclear technology, framed as a symbol of national pride and technological prowess, has, however, led to international tensions due to concerns about potential military applications.

Israel is in the Middle East Desert Area with many difficulties, but these complications make this country more resilient and competent to the world. Israel is accurate in the implementation of development plans and strategies. The beginning of Israel's Journey began with many clashes and wars with its neighbours, later followed by development, with more crucial situations making Israelis more patriotic and logical. Israel is one of the best examples for Techno-nationalistic countries along with America, China, Germany regardless of the geographical size of Israel, because Israel is also the birthplace for various new initiatives such as the programs like Tech-Incubators and also well known for the new theory Startup nationalism, that is why Israel is also called as The Startup Nation. Israelis are also owners and co-owners of a variety of capital money ventures, and it is also one of the best nations in the field of defence technology inventing and also arms suppliers to many major nations.

Vietnam is a Southeast Asian country with similar characteristics, such as cultural, political and administrative style with China. But, in broad terms, Vietnam differs from China. Where in the Industrialisation Vietnam follows Western style. But since the Fourth Industrial Revolution, the scenario of Vietnam has shifted and has influenced rapid industrial growth in different

sectors and has changed the entire structure of Vietnam's production (ILO,2018). Through this way, Vietnam is also beginning to imitate and succeed through China in the attraction of FDI, MOUs for multi-national organizations founded in Vietnam. Now, Vietnam, along with its counterparts like Singapore and Indonesia, is currently among ASEAN's strongest industrial developments.

Taiwan has long been recognized as a global technology hub, with Techno-nationalism deeply embedded in its economic development strategy. The government actively supports key industries such as semiconductor manufacturing, information technology, and electronics, positioning Taiwan as a vital player in the global supply chain. The success of Taiwan's technology sector is closely tied to its emphasis on education and research, with significant investments ensuring a skilled workforce capable of driving innovation. Collaboration among government agencies, academia, and the private sector is a fundamental aspect of Taiwan's techno nationalist approach.

#### IV. TECHNO-NATIONALISM IN INDIA: ROOTS AND DEVELOPMENT

While India is also part of Asia, India is different in various characteristics from other Asian counterparts. Simply, India is the second-largest population country and geographically the seventh largest nation and the world's largest democracy, it is also the home of many religions, heritages, ethnicities, cultures, traditions and many other features make this country unique. In India, however, numerous factors have ravaged patriotism and nationalism in different sectors of the nation in the handling of the Techno-nationalism from other nations. In any case, it is also important to clarify the origins and the history of technological nationalism in India before going into extensive study. This is significant in this context, as many social, political, cultural, technological and economic elements have influenced India's growth from the colonial era into the current scenario as well as into the country's Techno-nationalism. This involves the beginning of the industrialization of Indian people throughout the history and its transformation.

Initially, technology and nationalism are a different directive theory in the country as like in the western and America. Rohit Chopra(2008) says that "Even as the relationship between technology and nationalism has been marked by continuities and discontinuities over the time, it has endured as fundamentally constitutive of Indian Modernity" ( Chopra, 2008,p.1). The significance of Technology and Nationalism in India has started from 18<sup>th</sup> century softly, due to the influence of western-based

education on philosophy, science and technologies, this new educational renaissance in India turned against Britain to gain the independence from them, where "This conception of scientificity was extricably woven into emergent narratives of anti-colonial nationalism" (Chopra,2008,p.2). Nonetheless, after independence in 1947 from Britain, India's first Prime Minister, Jawaharlal Nehru, applied in various sectors the same Western science paradigm as his vision of a global and multi-cultural India to the nation-building tasks with philosophes of socialism and secularism. In 1980s, "The language of Techno-nationalism drew a distinction between 'scientific bureaucracies in strategic defence-related sectors' in India" (Chakravartty,2004). This Nehruvian way of development was hoped that it would be successful but failed due to various factors, including corruption, incompetence and lower government efficiency.

Later in 1991, India under the leadership of Prime Minister P.V.Narasimha Rao, Finance Minister Dr. Manmohan Singh, opened the doors to globalization, economic reorganisation, this time the Indian Government adopted Neo-Liberalism as an official stand for the development of the nation, which was very much hailed by the world, particularly welcomed by America. After the arrival of the 21st century, India begins to move around the world in two parallel ways, one as India is a rising economic star, but suffering from various political instability and religious conflicts. And, in another way, India can stand as a hub of technology, industries with a prominent workforce and a skilled body. Miraculously, after the 2000s, Indians concentrated mostly on science and technology to adopt emerging changes in the world. In particular, following the West, and this method is a success. Even India's global diaspora is currently contributing its funds to infrastructure development and self-sustaining India, and recent surveys predict that even the diaspora is also anticipating India as a global technological, economic super-power in the coming years. At the beginning of the 21st century, the Information Technology Revolution was a gift to India as a result of liberalization, privatization and globalisation. However, in 2002, the religious conflicts in Gujarat defamed India from the factor of perspective of the West, which also delayed the development of the various service and labour sectors.

After a while, India recovered its reputation with various secular social policies and efforts, Greenspan observes that "Inside India, there is no doubt that the IT industry has created jobs, strengthened exports and made substantial contributions to economic growth" (Chopra,2008,p.9). And the people like Sachs, Varshney, and Bajpai opined that the "IT sector can create a good foreign exchange for the country" (Chopra,2008,p.9). This IT revolution has

also increased India's digital literacy, Internet access, and technology has made Indian people more liberalized. With the passage of decades, the Indians have embraced the Western form of oriental nationalism and now converted into technology-nationalism. Almost all of the factors in Indian minds, such as historical, social, cultural and economic, have increased the popularity of Techno-nationalism along with the emergence of Liberalization.

India has also faced unfair sanctions, intimidation, blockades and insults from the Western countries in its development on various fields such as technological, scientific, cultural, space and defence. India doesn't care, however, and because of its policies of security and non violence, this challenge makes India more immune to external and domestic causes, then other countries revoke and trusts India. Stroikos (2016) in his PhD thesis depicts, China and India as a postcolonial techno-nationalistic countries and he also mentions India and China as a rising space powers (Stroikos,2016).

According to the history, China has always been a catastrophe for India, which trying in many ways to downgrade India, particularly in the areas of goodwill and commerce later on to the economy. China is constantly dumping its goods after numerous free trade agreements between China and India, which can seriously harm the micro industries and micro-economies of India. As a result, many small factories are shut down and the medium-sized enterprises struggle due to the high import loads from China. Indirectly, China also seeks to dominate India's future, which means that Indian startups are either invested or bought by Chinese funding agencies. In another way, from the last two decades, Chinese companies are even taking bids of Indian infrastructure projects with low quoting costs, Where Indian contracting firms are financially vulnerable because of the reduced contracts.

Even in recent times, China frequently blocked Indian exports for various reasons, which is also affecting the Indian exports and import companies. As a whole, China has a surplus of a large part of India's bilateral trade with China, but unfortunately India is in the loss of trade with China due to high imports from China, this is a major disadvantage for India. Indian people don't care where the product produced, but until now they have been connected with quality and price, so China's trading advantage with India is mostly because of its low price and availability in the market. Therefore, it is time for India to revoke and amend trade regulations with China, as many world analysts and economists have said, Beijing would benefit more than Delhi from bilateral trade. Therefore, several strategists say that China intends to forcefully block India. The only reason is, according to the worldwide sources,

India is the only one that can compete and control the Chinese dominance at the maximum extent in Asia, China already knows it. Even geographically and population-wise India is also a largest country after China. That is why, China's hostility to dominate India with the help of the psychological warfare increased dramatically from 2010, especially on the borders.

With these continuing barriers from China, India also began to relocating all positive things to China, such as India's trade, foreign and administration policies, which are rapidly evolving in the last 10 years. At the other side, Indian people were also outraged at Chinese continuing aggression towards India. due to this, "Make in India" project initiated by Indian Prime Minister Narendra Modi in 2014. The main objective of this scheme is to make India as autonomous as possible, indirectly, to reduce Chinese imports. Because of the Covid-19, the year 2020 is noteworthy for each of the world, but for Indians, there are two reasons to remember year 2020 they are 1). Covid-19 pandemic 2). China's sudden attack in Ladakh killing twenty Indian soldiers. Particularly Chinese sudden aggression has sparked anti-China sentiments in India where people are beginning to demand a ban on Chinese goods and businesses. And so far, the "Ban Chinese Products" campaign has also become a phenomenon for Indians in different social media platforms, which are considered the revival of technological nationalism in India. So, because of the high demand from the people, the Indian government is banning 59 Chinese apps on the grounds of "Prejudicial to sovereignty and integrity of India, defence of India, the state and public order" (Kapur,2020).

In addition, 47 cloned Chinese applications were also barred by the Indian Government at the end of July-2020. The Indian Army bans 89 applications, including Chinese and US-based apps such as Facebook, Instagram, Snapchat, Truecaller, due to the security threats, and also orders staff to remove their existing accounts in the applications mentioned. And India also ordered its telecommunication companies, not to use the Chinese products for 5G upgrades, which indirectly hit backs Chinese tech giant Huawei, these activities are called India's Digital Strike against China, which could have the effect of a loss in China of several billion dollars. While these Indian anti-Chinese protests also ignite Techno-nationalism among Indian people, demanding to ban Chinese goods and even demanding a strict alternative to Chinese in all categories (Jing,2020). Tik Tok is the application belonging to Bytedance which has lost large profits from India during the Indian government's prohibition. Yet in recent days, Tik Tok has become a venue for anti-nationals, religious supremacists, terrorists,

women and animal abusers. A lot of citizens are being called for the government to ban this application from India, now the government has this chance. However, US Secretary of State Mike Pompeo has also lauded India's digital retaliation to Chinese devices. China's investment prior to this dispute has also been thwarted by India because it has shielded start-ups from investment traps. Regardless of the effect, however, the Indians have a strict willingness to avoid as many Chinese items as possible that have ignited techno-nationalism in Indians.

India also changes some trade resolutions in this anti-China sentiment which eventually benefits Indian companies. Due to the rise of Techno-nationalism, India ordered foreign companies to store the Indians' data in Indian servers, which is also called Digital-nationalism and Data localization. Because, in the 21<sup>st</sup> century the war fare will be allocated in the area of data and information technology, the ideology of Techno-nationalism is also encouraging the data and technology policies of a particular country, Means that countries that have achieved as self-sustainability in major technical factors will hold data or information from other countries where China and the US are doing the same, the data from people of a specific country stored in foreign countries servers will be at risk at any time, as happens in the case of Indians these days. Even if a country has the most data or knowledge, it can easily become a super power, since information is the weapon of the 21st century (Bobb,2020). Anyhow, after these threats from China in all respects, along with India, countries like Britain, America, Canada, Australia, Japan are taking the same actions against China, with strict restrictions.

## V. TECHNO-NATIONALISM, AN EMERGING TREND IN INDIA

As a rising nation, Techno-nationalism is a new battlefield for India, but not new for nations like America, Britain, Germany, Japan, and China. The demands from the Indian citizens have pushed India into this new war ground, where all weapons are information, technology, and software that can damage or improve the economy of a country on a wide scale. India has these weapons to be used by experts anyway.

In modern times, Indians become the touchy in the problems of nationalism and the army, Indians raised nationalistic slogans and starts to show their anti-china sentiments "In the wake of the Ladakh clashes and the death of Indians soldiers, television screens, and social media was full of images of Indians destroying and stamping on Chinese products including TV sets and mobiles phones" (Bobb,2020). Due to the demand from

the population, India began to limit the range of Chinese goods from any commercial perspective and even prohibited them like how China restricts foreign goods in the past. Side by side, India is also filtering Chinese investments and holds the Chinese companies bid for various infrastructural projects in India. The rise of the Techno-nationalism in the world is a major blowback to the Techno-globalism, especially to China's globalist interest.

In order to profit on this anti-China sentiment in India and around the world, Indian Prime Minister Narendra Modi was launched a scheme called '*Atmanirbhar Bharat*' or 'Self-Reliant India' to attract international companies to invest, develop their industries and businesses in India, and also to promote Indian companies and their goods, beginning with the manufacture of their Protective Equipment instead of importing it from China. "*Atmanirbhar Bharat*" also called a Re-packaged version of "Make in India", where this scheme also tagged the lines like "Vocal for Local". In this way, "*Atmanirbhar Bharat*" involves investing a huge amount into the nation's R&D department and various elements that develop Technology and Industries in India, which can indirectly corner China in the long run. At the other hand, activists like Sonam Wangchuk called on the Indian public to minimize the use of Chinese products on a voluntary basis and highlighted the "Software in a Week and Hardware in a Year" hashtag campaign in social media. It seems that the Indian government is gradually using people's anti-China sentiment to encourage self-sustainability which is another code name for Techno-nationalism. additionally, On 4 July 2020, the Indian Government also launched an App Development Competition under the *Atmanirbhar Bharat* Scheme to recognise the best Indian applications available under the E-learning, Office Productivity, Social Networking, Entertainment, Health & Wellness, Industry, including Agritech and Fintech, News and Games categories. Techno-nationalism is a trend emerging in India that is evident in Indian actions towards China. So, Indian authorities have a chance to utilize patriotism to enlighten the self-technological improvements to stand independent. If any country succeeded in utilizing the Techno-nationalism trend or ideology, that country can easily dominate the worldwide technologies and can control geopolitics. Anyway, the new startups in India should not be affected by "Galapagos Syndrom" which means, Therefore, Indian authorities have the opportunity to use nationalism to justify the technical developments themselves. When a country has succeeded in using the technological nationalism ideology, it can easily influence global technology and geopolitics.

India is one of the best countries to use the IT industry, but China is not that far away from India in this field. In this situation along with popular IT brands like Infosys, Wipro, TCS, Tech-Mahendra, there is a need to encourage the new startups in this field. In other sectors also Indian Government and Indian private corporations have a significant image, those companies are ONGC, Indian Oil, Reliance Group, HAL, TATA Motors, Hinduja Group, Mahindra & Mahindra, SBI respectively. especially the motor companies like Bajaj and TVS are slowly overtaking the numerous Chinese motor companies in the African countries in the sales and reliability of the brand. Even in this Corona pandemic time, Indian pharma companies like Serum Institute of India, Zydus Cadila, Bharat Biotech, Indian Immunological Limited are working efficiently and inventing the vaccine and medicines for the Covid-19 and other diseases. in order to achieve self-sustainability, India should promote start-ups and help the companies currently in service, which is how China is protecting their companies in the critical times. Therefore, the concept of techno-nationalism is trending in India with various names, but India has the opportunity of promoting and exporting its goods rather than relying on imports from a hostile country. Anyway, some critics are alleging that these anti-China measures did by the Indian government are just to satisfy and calm down the Hyper Indian nationalism against China, and soon it will revoke the sanctions on Chinese apps and firms. While India may have proper demographics, strong economic growth, sound governance policies and strong purchasing power parity, but, many investors still believe that some industrial policies, regulations and corruption, unfair delay in the processing, mediocre ground-level transport deter them from investing and developing their industries and firms in India.

## VI. SIGNIFICANCE OF THE STUDY

This study is designed to explain knowledge and information concerning Techno-nationalism and its emergence from history to the prevailing trend scenario in India. And this study also focuses on the initiations of India into Techno-nationalism and the opinions of the people on this techno-social ideology. In this connection, this study would increase the public's understanding of Techno-nationalism, its roots and its growing effect on Indians and the government's efforts for self-sufficiency through references to people's responses. In addition, this study also contains theoretical explanations and analytical surveys, which focus mainly on the emergence of this techno nationalistic trend in India, due to the various questions related to Techno-nationalism, as well as different opinions on purchasing, production, economic,

social, technical, emotional factors and also on the initiation of India towards self-reliance, that counters China's impact indirectly.

## VII. RESEARCH DESIGN

Qualitative methodology used for processing and analysing the information and responses obtained from participants. 116 people have been enrolled in this research to enter their responses, and these responses are chosen as samples for this research, and the responses will be the random in the numbers. Means, the sample count is based on the answers given by the respondent. The survey questionnaire forms are the google forms that have been distributed to participants with the help of various social platforms such as Whats App, Hike, Telegram, Facebook Messenger, and Gmail. The respondents are the public of India, who would be employees, students, workers, formers, business individuals of diverse sectors. Through this questionnaire, several questions were prescribed to know the details of the respondents and the points of view of the research objectives.

This research paper focuses on the following objectives:

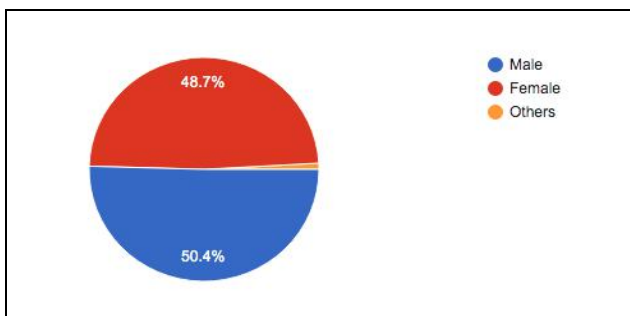
- To investigate the different opinions, answers with the help of a survey on Techno-nationalism, which is an emerging trend in India.
- To prove the existence of techno-nationalistic emotions and other related thoughts in the minds of Indians and awareness on several ongoing issues in India.
- To define Techno-nationalism, its roots and development in accordance with the timeline, and to examine the trajectory of this ideology from Europe and North America to Asia and India with the help of various relevant theories, sources of specific experts in the world.
- Evaluating the events and significance of Techno-nationalism trend and efforts to secure the future for India and its people.

## VIII. DATA COLLECTION PROCESS

Data collection is a method for collecting the required data and evaluating the answers collected or the knowledge according to the questionnaire. Upon obtaining the data, the researcher measures and analyses the results in all respects, such as reliability, accuracy of the results of the study. In this way, the researcher selected the common public citizens of India, workers, students, research scholars, businesspeople and the people of numerous individual sectors to be included in the survey questionnaire data collection process. The researcher has

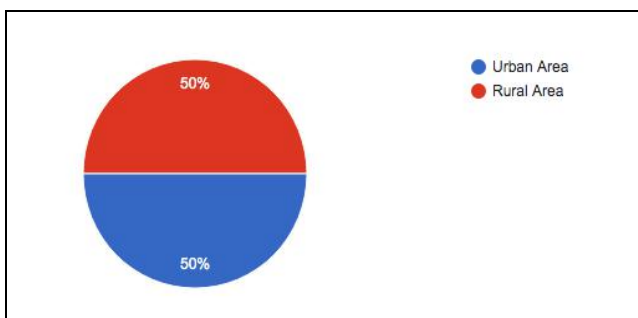


given ten days of time to fill out the necessary the answers to the questions in the research questionnaire. The structure of the questionnaire was split into the different format of the questions such as Multiple Choice Questions, Fill in the blanks and Checkboxes respectively. The main purpose of this questionnaire is to gather precisely the opinions on Techno-nationalism and its associated elements in the concentration on India accurately. The age range of respondents is between 16-34 years.



*Fig.2: Gender*

Chart 2 shows the gender ratio of the participants, regardless of their majors and their job roles. 113 people reported their gender, according to that 50.4% (57) of the sample was male, 48.7% (54) of the respondents were female and 1 person (0.9%) preferred 'others' respectively. Thus, according to the numbers and percentages of respondents, males are marginally higher than female respondents, and only one person has opted for 'others' in this study.



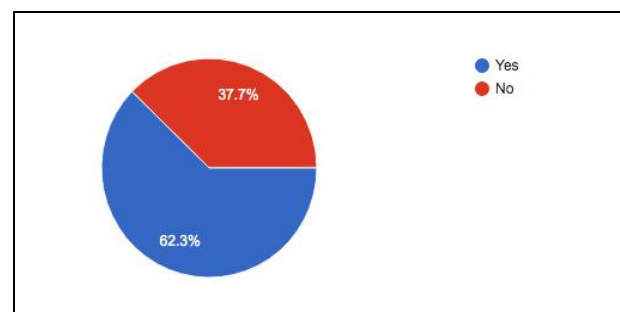
*Fig. 3: Area*

Chart 3 represents the percentage of participants in terms of their area of living either in urban or rural areas, 114 members have specified their areas, according to the chart, 57 (50 %) of respondents are urban and another 57 (50 %) of respondents indicate they belong to rural areas. Therefore, in terms of numbers and interests, the people who belong to the urban and rural areas are equally enrolled and participated from different parts of India.

## IX. ANALYSIS AND INTERPRETATION

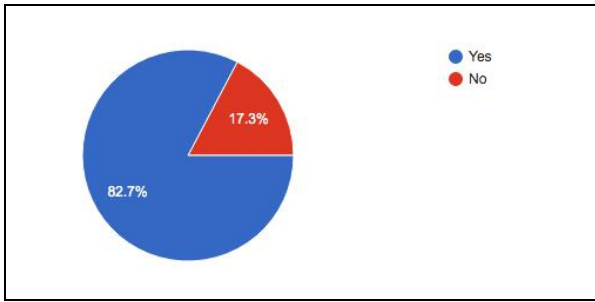
The development of this research questionnaire is in ascending order in terms of complexity (simple to complex order). In other words, at the beginning of the questionnaire, the questions focus on simple details of the participants, such as their names, age, gender, place of residence, whether their place belongs to the urban or rural areas. After that, the questionnaire focuses on the basic specifics of the core context, which collects the views, responses, and concerns of the respondents. After that only the questionnaire started to gather details, opinions on the key research topic called "Techno-nationalism, an emerging phenomenon in the 21st century in India" and its supportive elements.

It is also important to remember that 116 participants registered to participate in the survey, but the people replied according to their choices and known questions, so that according to the flow of respondents and their answers, the researcher compelled and regularized the data for the results and the conclusion of the analysis. The researcher focused on the numerous minor and key factors that eventually connect the lines to the idea of proving the presence and effect of the theory of Techno-nationalism in India. Even, some questions raised on the basis of China's trade and products, as well as on several of India's self-reliant projects, are useful for respondents to understand the main sense of this research.



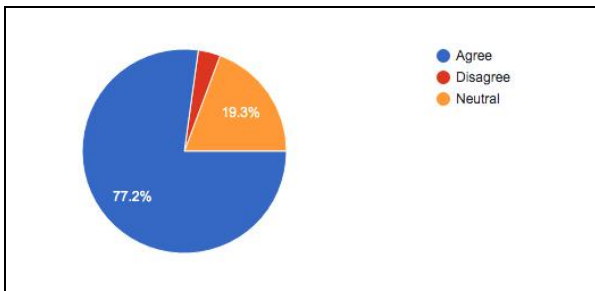
*Fig. 4: People's Awareness on Techno-Nationalism*

The above pie chart aims at people's perception of the term "Techno-Nationalism." So, in 114 respondents, 71 (62.3 %) said they were aware of this techno term, and 43 (37.7 %) said they had not heard of that term anywhere. However, in percentage terms, most people have an understanding and are conscious of Techno-nationalism.



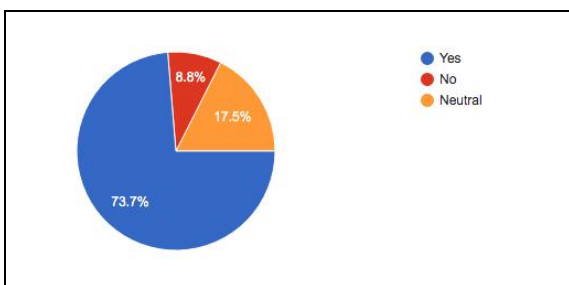
**Fig. 5: IT Boom and Digital Revolutions Impact on Indians Thinking**

Chart 5 is projecting that, of the 110 respondents, 91 (82.7%) said that the IT boom and digital revolution in various sectors affected and gradually changed Indian thought. But, remaining 19 (17.3%) opined that there is no significant impact of IT Boom and Digital revolution on Indians. The findings show that most members firmly believe that IT and digital revolutions have a positive effect on them (Indians).



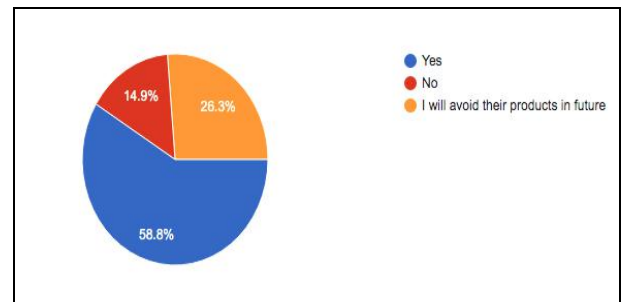
**Fig. 6: People's Opinions on Indian Government's steps to Reduce Imports and Promoting Self Reliant Actions for Indian Products and Companies**

Chart 6 is portraying that, among 114 respondents, 88 (77.2%) people are agreed on, Indian Governments will take proper measures and actions to reduce the dependency on imports and will promote Indian made products and companies and to establish industries in India. Furthermore, 4 (3.5%) respondents disagree, and 22 (19.3%) respondents take neutral stance in this context.



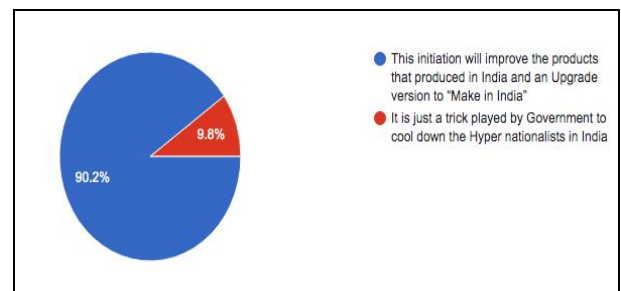
**Fig. 7: Strong growth in support for campaigns against China and self-reliant movements in India**

Chart 7 is conveying a chunk of information about on the question asked “do you support the Anti-China campaigns and self-reliant movements such as #BanChineseProducts, Swadeshi, Vocal for Local, trending in digital in digital platforms?”. In this regard, 114 respondents feed on their responses, of 114 responses, 84 (73.7%) supported the above movements, and 10 (8.8%) are not supported those anti-China and self-reliant movements, and at the last, 20 (17.5%) people chose to remain neutral. Most people therefore support self-confident Indian movements and have respectively embraced the anti-China stance.



**Fig. 8: Avoiding the Purchasing of Chinese Products**

Chart 4 demonstrates the answers portion, where the researcher questions respondents that, practically, are they think they can avoid the purchasing of Chinese products. In relation to these 114 respondents, 67 (58.8 percent) said that they are sure that they will not purchase Chinese goods. 30 (26.3%) participants stated that they would not purchase Chinese products in future and the remaining 17 (14.9%) assumed that the purchasing of Chinese goods could not be prevented.



**Fig. 9: Responses on Indian Government's Atmanirbhar Bharat (Self-Reliant India) Initiative**

Chart 9 presents various opinions on the Indian Government's *Atmanirbhar Bharat* initiative, in this context, among 112 respondents 101 respondents (90.2%) said that this implementation would increase the output of products manufactured in India and therefore it is an upgrade to the 'Make in India' scheme. Remaining 11 (9.8%) respondents said it was just a trick played by the

government to calm down the hyper nationalists in India. However, this program is supported by most citizens.

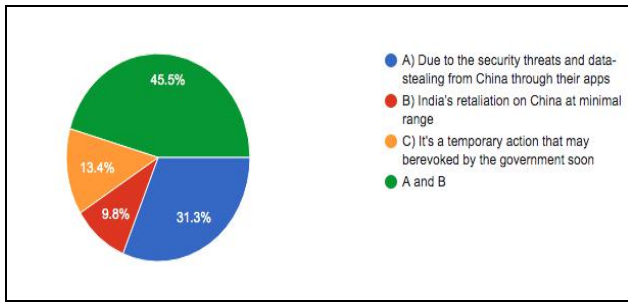


Fig. 10: India's Ban on Chinese Apps

Chart 10 displays the results of India's ban on Chinese devices, the researcher received random responses from the participants. Between 112 participants, 35 (31.1%) members claim that India has banned Chinese apps because of ongoing security threats and data theft from China through their applications, 11 (9.8%) say that it is India's minimum-range retaliation on China, 15 (13.4%) say that the ban on Chinese applications is just a temporary measure and will be revoked by the government. However, while the majority of respondents suggested the last option, which is related to the A&B option which means they agree with the first two options in this MCQ. Additionally, on the topic of finding alternatives to Chinese apps, among 111 respondents, the majority of respondents 55 (49.5 per cent) said that they found the right alternatives to the prohibited Chinese apps, 28 (25.2 per cent) found the apps which might replace the Chinese apps, and another 28 (25.2 per cent) said they did not find any alternatives to the Chinese apps.

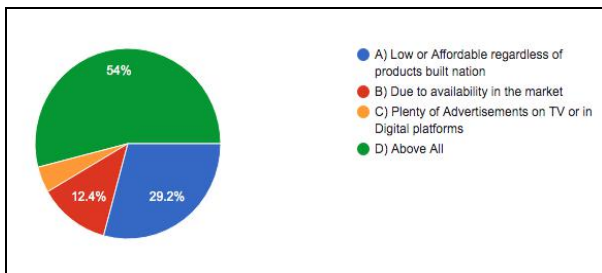


Fig. 11: Reasons behind the Purchasing the Chinese Products at a Larger Level

The above chart is illustrating the outcomes from the respondents about the question, Why Indians are purchasing the Chinese products in a larger level. In this manner, for 113 respondents, 33 (29.3%) respondents said they preferred the Chinese product due to the "Low or Affordable price regardless of products regardless of built nation". 14(12.4%) members opined that "due to availability in the market". 5(4.4%) members said that

"plenty of advertisements on TV in digital platforms" have influenced them to purchase Chinese products. But majority of the respondents 61(54%) opted "Above All" option, this includes three previous choices in the MCQ section.

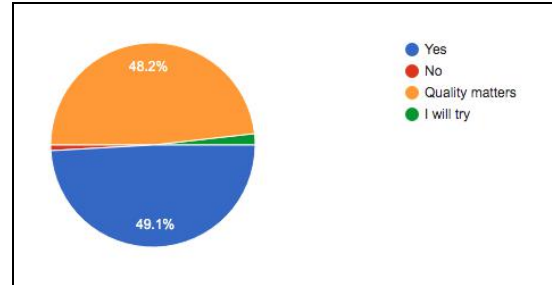


Fig. 12: Indian Made Products

Chart 12 reports the differences in the view of Indian respondents on Indian products and their cost affordability. Among 112 respondents, 55(49.1%) respondents are said they are ready to purchase Indian made products, even if they are a little bit costlier, secondly 54(48.2%) respondents say "Quality Matters" for them, which means, if the Indian products are with good quality, they will purchase it regardless of cost. 2(1.8%) members told they will try to purchase at least. And remaining one person (0.9%) says he/she don't have will to buy Indian products.

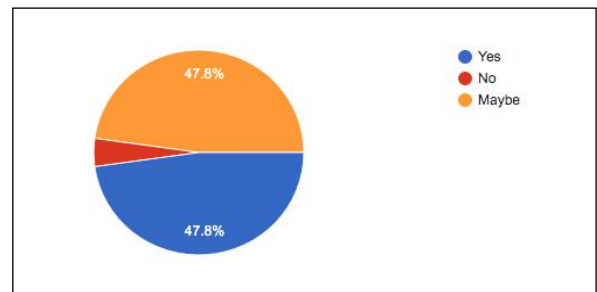
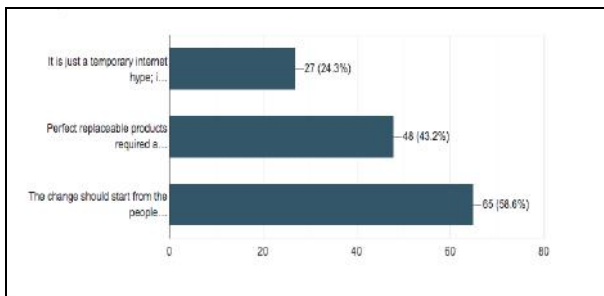


Fig. 13: China and Nationalism in India

The findings on the subject in Chart 13 shows that China would be the trigger for India's sudden rise of nationalism. Among 113 participants, 54 people (47.8%) strongly agreed with above statement, another 54 (47.8%) people are agreeing with these statements in mild manner. The remaining 5 (4.4%) respondents did not agree with these statements respectively.



**Fig. 14: Opinions on Social Activists are Calling for Chinese Brands to be Avoided**

Chart 14 depicts divergent opinions of the Indians, where social activities are called upon to avoid Chinese products by voluntarily. For 111 respondents, majority of the respondents, 65(58.6) says that “The change should start from the people's choice, once the people stop to buy Chinese products automatically the replaceable (Indian) products will start to occupy the gap in market”. Next, 48 (43.2%) respondents said, “Perfect replaceable products required at first to avoid the Chinese products.” And remaining 27 respondents (24.3%) opined that “It is just a temporary internet hype; it may not work out in this globalized world” respectively.

## X. CONCLUSION

Finally, the presence and growth of Techno-nationalism in India proved with the help of various theoretical, and analytical studies. And the researcher also detected various social, technical, economical, business, historical factors have influenced the flow of techno-nationalism in India side. The theoretical assumptions and the research survey results proves and predicts the different people's opinions, views, experiences on various purchasing, products and nationalistic concepts in parallel way, because Techno-nationalism is not only a single stand theory, but it is collection of various indirect factors. So, through this research, the researcher would like to convey that, most of the Indians are aware of the ideology of Techno-nationalism, and even they are highly patriotic towards their nation (India) which is reflected through the questions related to the questions related to the China respectively. in this manner, the researcher has been proved the presence of the Techno-nationalism, which is an emerging trend in the 21<sup>st</sup> century in India successfully.

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