

# Technological Changes and Innovations in the Chinese Economy: Analysis and Suggestions

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## ABSTRACT

*Since China started its economic development, industrial policies have been formulated and became an integral part of its economic development plans. This research is to examine various aspects of technological changes and innovations in China in which industrial policies have been incorporated and applied based on the success of its economic policies in improving their technological capacity. Its focus will be on technological innovations in transportation, manufacture, and agriculture in China. Then, this research will discuss what effects technological innovations have on the Chinese economy. Finally, it will include a conclusion of the role of technological changes and innovations in the Chinese economy for the future.*

**Keywords:** *Innovations, Technological Changes, Industrial Policies, Chinese Economy*

## INTRODUCTION

China is located in eastern Asia and is bound by the Pacific Ocean in the east. China is the third largest country in the world; Canada and Russia being number one and two respectively. China is still a developing country, with low per capita income. It still continues to have tremendous economic growth, and has shown upward movement since the 1970's. However, in the late 1980's, the Chinese economy was in a transition and was cautiously moving away from central planning. They were gradually bringing in institutions and mechanisms for an improved market economy. Still, the Chinese people felt there was very little progress in their standard of living. They also felt they were falling to close to the economic gap between themselves and the industrialized nations. The movement to a market system for their economy was most difficult and even in 1987 was not close to being completed. Inflation then became a problem for them, and with the new opportunities to seek profit, came new temptations for crime and corruption. The state still had complete control over the largest nonagricultural enterprises and the major industries were still primarily guided by the central plan.

Therefore, by the late 1980's, the Chinese economy was definitely a mixed system. Their economy could not be described as either a centrally planned economy or as a market economy. Regardless of the burst of progress in the 1980's, their economy still shared many basic characteristics with the economies of other developing countries. However, in other respects their economy was quite different from those of most developing nations. They were organized as a socialist system that was directed by a central planning structure, which was the biggest difference overall.

Even though there was great improvement in the earlier years of the Chinese economy, the technology level of their industry was generally still quite low in the late 1980's. There was great improvement in many areas: computers, satellites, and nuclear weapons, but, overall, the industrial sector set far behind that of the well-developed countries. China was suffering in the research and development

department as there were no clear set goals, and no concept of the importance of research and development to industry. There just was not a broad base set by China for their research and development area. Although there were some remarkable accomplishments in the Chinese economy, it had taken such a long time to achieve them, they were still behind.

After all of this, the Chinese economy is now considered the fastest growing economy in the world. China will and does use its' technology powers for political enhancement and benefits to help them out. Getting their research and development system together was one of the key factors to getting the Chinese economy to where they are now. It made them move towards an advanced industrialized economy. In order for the Chinese economy to achieve the goals they were trying to seek, the industrial policies were formulated and became an integral part of its five year plans.

This research is to examine various aspects of the Chinese technological developments; and methods in which development policy has been incorporated, applied, and analyzed based on the success of the Chinese economy policies in improving their technological capacity. The Chinese economy has come along way from where they were about ten years ago. This research has covered the technological changes and innovations for the Chinese economy with three main areas of focus, transportation, manufacturing, and agriculture. Industrial development will be included as production, economic growth, and future developments in the Chinese economy. Then this research will include science and technology of the Chinese economy, how it was, what it is now, and where it will be in the future. One of the last things discussed in this research will be what effects did technological developments have on other countries. Finally, this research will then include a conclusion of the role of technological changes and innovations in the Chinese economy.

### **TECHNOLOGICAL CHANGES AND INNOVATIONS**

There are three main areas of technological changes and innovations in the Chinese economy, which are transportation, manufacture, and agriculture. The transportation has really contributed many illustrious aspects to the Chinese economy. In terms of energy use China's transportation sector is the fastest growing sector. There are a growing number of people in the Chinese economy that is ready, willing, and able to purchase automobiles. The Chinese vehicles have been proven to be less fuel-efficient than vehicles in other developed countries. The Chinese economy realized that it must keep their economy moving forward by having an efficient system in place to move goods and people across the country. There have been a number of projects being done by the Chinese economy that has also helped other countries, such as the U.S., have more opportunities. They have doubled rail tracks to alleviate the freight train conflict issues, and also in order to cut down on vehicular travel times they have built expressways. Their airports are improving day to day across their country and now for greater use of China's waterways they have improved their ports. In the Chinese economy they now have sixteen major shipping ports with a capacity of over 5 million tons per year. They have made their ports more automated which have minimized loss of goods and times, while helping customs collect more accurate tariffs.

Now the state's waterways, roadways, and airways can allow more than 1.2 billion people to travel across different provinces and from town to city. Although, the Chinese economy has made many different and some drastic changes in the transportation area there is still plans to continue numerous highway and railway reconstruction projects; this will help meet the needs of some other people in the Chinese economy. The Chinese economy has and will still continue to increase and improve their amount

of air travel. Since the September 11, they have increased air traffic control but it is also under strict flight control regulations over general aviation that is meant to prohibit unauthorized air activities. The Chinese economy has also increased the air cargo traffic that has helped their economy greatly and the increase in international air traffic has allowed them more flexibility to operate to, from and beyond other territories to help improve choices for the air travelers. This is really a great improvement for the business travelers. The technological changes in the Chinese economy for transportation as you can see really benefited them in many ways. They are now doing more with other countries but also helping their own country out.

Another area of significant technological changes and innovations we can see in the Chinese economy is manufacturing. In the mid 1990s, the Chinese economy has become a manufacturing superpower. Before this they were targeted for labor-intensive industries producing items such as toys, shoes, and consumer electronics. Now a growing share has been implemented to property development and infrastructure. The world now seems to be more reliant on Chinese factories to help them get the manufactured goods that they want. They have recently gained much importance as a manufacture of a wide range of products. The Chinese economy country is also moving forward with political change that will further stimulate manufacturing. There are about 20 million people from the Chinese economy that move from more rural areas to cities for manufacturing jobs. With all of this increasing importance of manufacturing in the Chinese economy it has received a higher per capita income.

Since 1949, the iron and steel industry has received more priority. The Chinese economy produces many varieties of steel products. China annually produced about 67.7 million metric tons of pig iron and 71 million metric tons of crude steel in the 1990s, which is about 90% of the U.S. production. Shipbuilding and the manufacture of locomotives are also a few of the most heavy industries for manufacturing in the Chinese economy. There are also tractors, rolling stock, power-generating equipment, and refining machinery that are manufactured in the Chinese economy as well. The Chinese petrochemical industry has a very unique feature in the Chinese economy; it is the widespread presence of small nitrogenous fertilizer factories that use a production technique developed in China. Another extremely manufacture is that of the textile industry. It is the largest in the world and has about 7.5 million workers that are employed by these factories.

A few other important manufactures in the Chinese economy include cement, paper and paperboard, bicycles, motor vehicles, watches, sewing machines, and cameras. This is why the Chinese economy is one of the leading manufactures in the world because of all they have improved on and it is mainly due to the new technology that has come about. It has improved their economy by a great deal and new technology is still on the way to help them and others even more.

The Chinese economy is finding manufacturing industries which greatly help to maintain cost margins and keeps their businesses globally competitive. Many of the manufacturing jobs in the Chinese economy are going to technology. Technology has improved the Chinese economy so much to make them the superpower they now are, in the manufacturing aspect.

Agriculture is the third area in the Chinese economy we can see significant changes of technology with innovations in recent days. Traditionally it is known that the Chinese economy has one of the strongest agriculture systems in the world. There are two measures that can demonstrate the quality of technology being created by the research system and the technological choices being made by the farmers. These two measures are the yield envelope variable and the adopted yield potential variable. The Chinese economy has also created a steady stream of yield-increasing technology. The new technology demonstrates the effectiveness of investments in the research system.

The Chinese economy remains the most important sector of the national economy and supports the vast majority of the population. The Chinese has more integrated land than any other country. The Chinese economy believes that one day they will become a force in certain international food markets. Most of the labor-intensive foods that are produced in China like vegetables cost about 30 percent lower than that in the U.S. One of the major problems that the Chinese economy did have with their agriculture sector is that of the financial system but in order for them to improve this, they invested in biological technology and that is one of the reasons they are where they are now. Some of the other major changes were the technology changes in agricultural machinery which helped them narrow the gap between China and the world's advanced levels. The Chinese economy has more than 20,000 inventions that they have various kinds of awards they have won; with 773 of these inventions they have captured state-level technological awards. There has also been many advanced applied technologies they have utilized nationwide and the results of them have been very attainable in the application of the results of agro-scientific research. The Chinese economy's overall quality and competitiveness of agriculture have increased considerably and it has really made the road to achieve rural modernization with Chinese characteristics much easier.

Scientists have definitely noticed the importance of agriculture technology in today's Chinese economy and the extension too many areas by promoting the expansion of supply and increased productivity in the world over the past several years. There has been a new measure of seed technology to track the changes in the quantity and quality of genetic resources in China's major foods such as their rice and wheat. Technological improvements in the Chinese economy do not account for all the growth but they do account a majority of it. The new technology has been produced mainly by the China's domestic research system. The Chinese economy researched here has shown how well the economy as a whole has proven to be much stronger than the years before. They have new technology that has really improved in many areas but not only the technology but they also have the science and research that they did in order to make these new technologies work good and profoundly. The Chinese economy research system has overall created large amounts of this new technology and it also has got the farmers to adopt it at a rapid pace. An important determinant of productivity is the way technology has appeared to embody many levels of yield-increasing material. If the Chinese economy in the future increases their yield from higher input levels that are limited by already high levels of input use, future growth in yields will more increasingly rely on rise in TFP and this will have to be driven by new technology. Not only has the technological innovations really improved the Chinese economy, but there are many other aspects that have also contributed to their great improvement. The industrial development has contributed to the Chinese economy by their production, economic growth, and also what future developments will contribute to them.

## **INDUSTRIAL DEVELOPMENT**

Production in the industrial development in the Chinese economy grew very rapidly due to technological factors. Technological developments have been considered the keys to continue the research and development in the Chinese economy. This also created new competitive industries and products to join but it also improved the Chinese economy's infrastructure. The Chinese economy was well aware of the technological developments that needed to be taken up in the earlier years to make their economy more advanced. This new technology that has been coming about to help the Chinese economy replace obsolete technology within the industrial sector has been considered to hold the Chinese economy

back some in some areas. Some of the new technology has been imported and was said to help the Chinese economy jump over many generations of technology and move into what we call the more high-tech industry of production.

Some technological improvements in the Chinese economy have proven to indicate empirical evidence in the increase in productivity for them. A few of the technological improvements do include the state enterprises, which have shown increase in the pace of R&D efforts and new product development and process innovations. China has continued to benefit from technology transfer and it also has been able to provide their economy with growing technology industries and even a good outlook for more technology development and innovation in the near future for more production. One of the major roles of the Chinese economy industrial production is the use of imported technology. In order for the Chinese economy to close the technology gap and the production levels with the rest of the countries and to develop a high-tech economy, after reform they must consider technology imports vital for the Chinese economy. The Chinese economy's government continues to increase their investment in industries in order to increase their productivity and product quality. It also continues to improve many other production areas such as the production of raw materials and improving their transportation. The technology developments of the Chinese economy and productive capacity have been enhanced by the benefits of importing large scale technology.

There have been a number of industries that have become more competitive because of the improvements in the Chinese economy's industrial production sector. Most of the improvements have resulted from the imported technology and technology transfer that have led to new emerging industries in China. Actually, the increased amount of imported technology seems to have a greater affect on industry than China's overall economy. The new technological advancements have led to growth in the export of manufacturing products and this caused more competitive industries and lower production costs. This result of a stronger market export also increases the economic growth of the Chinese economy. The economic growth of the industrial development of the Chinese economy is also a very important element.

The economic growth of the Chinese economy has tremendously improved over the years, mainly due to the technological changes. Not all of the economic growth is due to technology factors; there is a large amount that is due to strong international demand for its products and heavy government spending. The Chinese economy grew 7.9% in just the first nine months of 2002 and is expected to continue in that direction. The National Bureau of Statistics stated that the national economy has maintained fast and healthy growth and momentum, and the overall situation is better than expected. The Chinese economy's economic growth has also rooted in liberalization of a surplus labor economy that has a high saving rate. China's gross industry output value seems to be increasing at a faster rate than China's overall economic growth when measuring the rates of growth. The imported technology has been increasing and this has caused a greater affect on the industry than China's overall economy.

The export manufacturing products has been growing and this is because of the technological advancements in the Chinese economy and industry. This has been shown through the increase of productivity, lower production costs, and other competitive industries. Imported technology is a direct result of the technology advance that was achieved in the Chinese economy and also the technology promotion efforts was also achieved. The Chinese economy has a relatively small share of technology development of overall economic growth but this new technology has transferred to China and made their industrial development better. It also created new industries and increased the competition for them.

Technology in the Chinese economy has also played a role in the future developments. Some of the new technology that is coming about that will affect the businesses in the Chinese economy are, the

pervasive next generation of the Internet, the emergence of smart environments, the post-genomic health space and the emergence of the real-time enterprise. Another huge development that will take place soon for the Chinese economy is the 3G standard that has been developed in China. The Chinese government is well prepared to have up to four 3G licenses be awarded in the coming year. They are mostly likely to be China Mobile Communications Corp., China Netcom Corp, Ltd., and China Telecommunications Corp. Right now there is no set timetable for the award of the 3G spectrum and the authorities are waiting for next-generation technology to become more mature.

The Chinese economy is more and more being pushed by their government to develop their own products, because Chinese firms are shunning technological protocols invented. The Chinese government thinks that the economy should buy China developed mobile gadgets. The Chinese economy did not take much action for centuries before and they had to watch as the West advanced before them. They are now on the go and racing to catch up and develop the latest cell phones, computer security tools and more so, so it can be a leader once again. The Chinese economy must be very careful when planning their strategies out because they can create risk on domestic standards that are incompatible with the rest of the world. They are really trying to keep up with the rest of the world in providing this new technology for their economy. The risks are very high here for them and their strategy is extremely risky also. China has been projected to be the 21<sup>st</sup> century global technology standards setter. The Chinese economy is now getting ready to move beyond manufacturing for others. They want to set their own standards. The world knows that the Chinese economy will use its technology powers for Political enhancement and benefits when they have to. The future will bring great aspects for the Chinese economy as long as they don't let themselves fall to far behind.

## **SCIENCE AND TECHNOLOGY**

Science and technology are a huge part of the Chinese economy. The Chinese economy has had many accomplishments in the past such as the invention of paper, the compass, and gunpowder that made many contributions to economic growth. Science and technology constitute the foremost productive sources and they must be geared to economic development. When New China was founded in 1949, China had no more than 50,000 scientific and technological personnel. At the time modern science and technology were non-existent except for a few little investigations. They faced countless difficulties and needed new construction in many areas. The CAS, China Academy of Sciences, was established a month after New China was founded. In the first five year plan science and technology forces played a positive role in the rehabilitation of the national economy. China successfully finished its first nuclear experiment in 1964 in which this showed how their science and technology had reached comparatively levels in particular areas.

After the Chinese economy had a fall back, in 1977 through 1979 they had a recovery session. The government turned the focus to the construction of the four modernizations and in order to put forward these and understand them, the key would be the modernization of science and technology. In 1980 through 1999 became known as the rapid development for the Chinese economy in science and technology. It had contributed greatly to national construction but was also separated from the economy under the planned economy that had controlled the system for a period of time. Then in 1986, science and technology covered three levels; serve national economic construction and social development, develop new and high technology and related industry, and strengthen basic research. Then in 1995 two committees initiated the strategy of developing the country through science and technology progress.

This progress being made here made economic construction rely on scientific and technology and help speed up the transformation of China into a powerful and prosperous country. All of these achievements that were being made by science and technology in this early period really helped China to develop where they are now, at this current time.

The Chinese economy has just launched an ambitious science and technology advancement program. Their goal here is to promote twelve key technologies and all of their applications by 2005. Now the Chinese economy has about 2.582 million scientific and technological personnel that are involved in their activities. The economy has been working hard over the years and has established a very comprehensive scientific and technological system. This system covers all fields of science and technology. There are three tiers that the Chinese economy's S&T efforts are strategically deployed with. The first tier is, the R&D activities are aimed at tackling major S&T snags encountered in the nation's economic construction, the second tier is the efforts develop high and emerging technologies and high-tech industries that are under two programs that are designed to place the nation at the frontiers of the world's high technology development in particular fields, and the third tier undertakes basic research and applied research by launching a project that helps scientific and technological advance as well as the economic and social development.

There are two leaders from China that have long noticed science and technology in this current state. As a result of the Chinese Economic reform, the Chinese scientists and institutions are more encouraged to commercialize their activities. More Chinese scientists have now been going into business. There seems to still be a chance in the PRC to become a significant player with biotechnology and computers for the Chinese economy. These are the mainland's greatest opportunities in newly emerging fields. The Chinese economy has advanced in many areas of science technology. They now have an Enhanced Versatile Disc (EVD) that just came out; it is very similar to what we know as the DVD player. EVD has a definition five times higher than DVD and can play most of the compact disks in the market. This has made the Chinese economy cultivating and developing core competitiveness by exercising the rules of intellectual property rights. This year there will be up to 1.8 million EVD players manufactured. They have really made a difference in the Chinese economy.

The Chinese economy has made a tremendous amount of difference compared to where they were just ten years ago. Last year, they sent their first man in space. They are only the third nation to do this. The man took a 21 hour odyssey around the Earth. It has been four decades since the Soviet Union and the United States pioneered manned space flight. China's economic growth is large. Electronics has now become one of the most important industries in the nation and the Chinese economies has become the world's largest maker of electronic appliances and are also the world's largest market of cell phones and many other electronic devices. The Chinese economy's future is looking very good. By looking into the future the Chinese economy will be able to spur economic growth and enhance political passion in the world.

The future is full of more surprises for all other nations by the Chinese economy. China has already started to prepare for the Beijing Olympics in 2008 and the World Expo in 2010. Their future is looking good from this point. They are planning on producing up to three million EVD players in 2005 and nine million in 2006. The Chinese economy has really surprised everybody since about thirty years ago. China is also considering emerging as a leader in information technology. They will mainly be doing this as Internet access penetrates the country.

Right now Royal Dutch/Shell have begun to study the economics of CTL, coal-to-liquid, in the Chinese economy to see if they will have an initial public offering next year. This will also lead to more

future technology investment opportunities. Shell has now, listed ten licenses for its coal gasification technology in China and they are planning on listing some more later on. There have been new technologies developed with commercial users that will help people in their every day life. They have a future operation, "863" program and there are over 6,900 high tech projects backed by state funds. The Chinese economy will be focusing more on independent development of hi-technologies on their own. They do not want to trace on customary prints of world advanced. They are going to seek new development by its information technology centering on information security. These hi-technologies will be used in modernizing their traditional industries and making them become better.

The Chinese economy has come a long ways from the beginning but they are not done yet. They are coming out with more and more for their people everyday. The Chinese economy has grown to one of the biggest economies because of their technology and because of their future technology. They need to make sure that they stay on top of it though because one mistake can make it horrible and maybe they won't be able to recover also. They are becoming the leader in cell phones right now but they are certainly not going to stop there. As of right now they have future plans made out all the way to 2010 and they say that nothing will get in there way.

### **EFFECTS ON OTHER COUNTRIES**

Over the years as the Chinese economy has had tremendous growth in many areas that have not only helped themselves but they have also helped to improve other countries as well. China helped life the Japanese economy. Japan's economy is very closely linked to the Chinese economy and Japan is very vulnerable to any slowdown here. There are many of Japan's exports that are China's components that are assembled in the Chinese factories into goods that are then bound for the U.S. or other markets. Japanese exports to China are very strong and even if growth slows in China they should still stay relative strong but as long as the Chinese economy stays strong then that will benefit the Japanese economy.

U.S. and the Chinese economy have many imports between one another. U.S. imports from China equal about 1% of their GDP and 11% of their total imports. China's imports on the other hand have been increasing quickly. China uses low-skilled labor to assemble and process imported parts and materials. These parts and materials are originated in other countries that usually have been exported directly to the U.S. There has been growth of U.S. merchandise exports to China that has just recently accelerated and grew 22% in the first months of this year. China and the United States also have a large trade surplus together. China does have a large deficit with the rest of the world, but it does not have a large overall current account surplus. If the value of the Yuan relative to the dollar was to change this would make U.S. exports to China less expensive and make U.S. imports from China more expensive. There are only a portion of most exports from China that are produced in China and the price of the Chinese goods in the U.S. would not change by as much as the exchange rate. If there was a higher Yuan then there would be substitutes for Chinese products that would most likely come from other countries other than China.

The Asian economic crisis has taught China there will be a recession within a domestic economy if the developing countries choose not to develop high tech industries. Making successful implementations to promote these high tech industries are very critical in determining the Chinese economy's future. The Chinese economy and India are the two most populated nations in the world. These two nations also have many things in common. The Chinese economy has topped India's economy in many different respects. India's GDP only grew at six percent over the past 20 years compared to that of China's GDP which grew

ten percent. India can learn a few things from the Chinese economy to become more of a major player in the world in the future. The migration of professionals from India to China is very significant because migration involves the transfer of valuable human resources and technology from one country to another. China is taking prompt action in order to have more people come to the Chinese economy instead of to India. The Chinese economy networks its skilled professional outside their country and brings them great benefits to keep them coming back. Most of the Chinese around the world are focused on the Chinese economy, and there have been many successful entrepreneurs from other countries as, Southeast Asia. This has helped the Chinese economy grow and develop and it also is benefiting both China's own citizenry and all other Chinese that are overseas as well. When you compare India to the Chinese economy it lacks a National level organization like China's Foundation. They need this in order to carry out intensive programs in some areas. The India infrastructure is also very poor and this is an advantage for the Chinese economy. They also have to provide proper incentives to the investor to attract more. Indians can learn from the Chinese economy that can help them to compete and prosper in the future both in the country and outside. Today, the Chinese economies in general are major players in the global economy in technological innovation. This is a great strength and stable resource for China.

The developed countries must extend a little assistance to developing countries in the area of technology transfer. The economic and technological cooperation can contribute to making the gap between the member countries smaller. The Chinese economy believes that each country should plan its liberalization by where its domestic situation is. The Chinese economy's market seems to be far more open than that of Korea, Japan, or Taiwan at comparable stages of each one's development. Also, the transfer of some U.S. technology to the Chinese economy can damage national security. This has become a real debate over China's policy. The Chinese economy has been told that they are improving their military capabilities with U.S. commercial technology and the Chinese say that this is wrong. If they were to restrict high tech trade with the U.S. then this is most likely to damage the U.S. rather than improve their national security. The United States commercial technology is important to the Chinese economy to continue their economical growth but the economy can get these commercial technologies from other Western industrial nations that do not share U.S. concerns with China. There are many other countries that have the advanced military and industrial technologies that are willing to sell to the Chinese economy. The U.S. has sold to China and it has been more civil and not military. The Chinese economy technological transfer focuses more on the general purpose industrial goods and not so much on the military technology and weapons. The Chinese economy imports things from the United States such as, computers, machine tools, aircraft engines, a space technology, and telecommunications but actually the U.S. commercial exports are unimportant for China's military modernization. Changes will be highly made over the next years concerning all the facts of doing business in other countries. China is becoming more technologically advanced and better to absorb foreign technologies. Over the next years things will be getting better for some countries that are in contact with China and some countries will not benefit from them. China is in competition to be the best and stay the best. They still have a lot of work to do in their technology field but they have plans made out all the way to year 2010 and as long as their plans are good significant strategies, it will be a good outcome for them.

## CONCLUSION

The Chinese economy has shown clear signs of overheating by the end of the first quarter in 2004. Prices were pushed up because there were shortages of raw materials and energy became acute and their

industrial production increased 17.7 percent. The Chinese economy's government reform policy was very important to them because it improved their research and development and created new science and technology policy. Although, right now technological development is becoming more prevalent while the government role is still important but slowly diminishing. One of the most important elements of the Chinese economy's technological development is the technical innovation of industry and enterprises. The technological development has depended a lot on technology imports from other countries and abroad. Most of the technology has been imported from Japan and the United States. New technology has been a method to enhance China's technological development. All of the advances had various techniques and have been applied in a number of the Chinese industries. After looking at the technological developments in the Chinese economy over the past 20 years plus; it has increased their productivity. The Chinese economy has really become a major manufacture in the consumer electronics mainly because of the importing of foreign technology. It has also been the fastest growing industry in China. China's electronic and telecommunications are growing at a fast rate in the market.

Overall to examine all of the aspects of the Chinese economy can be very difficult and complicated. They have had a major transformation of certain industries and substantial improvements in technological developments. After the reform many years ago in China, the technology imports were considered more essential then ever because China had to close the technology gap and production levels with the rest of the industrial countries and to be able to develop a high tech economy. All of the technology developments have really made China a more competitive country; their economy is also very competitive now. With the development of the overall economic growth in the Chinese economy, technology transfer has increased China's industrial development and increased competitiveness.

Technological decisions that are made in China today a being made by a small government and business elite without much public input, put into them. The modern technology seems to be transforming China just like it did with Japan and Russia earlier. China definitely represents a large percentage of the world's population and that makes it hard to imitate the West without disrupting the world economy. The Chinese economy will continue to develop over the next several years and will define its own model of wealth in a way that conforms with its real possibilities of development. The question of what kind of developmental process is best for the country can cause much disagreement. Outsiders like me cannot expect to understand the whole issue and can hardly be expected to abstain from judgments. The Chinese economy is growing fast and will continue to grow at this rate especially with the new technological innovations that are coming about. They have plans up to year 2010 and will soon be starting to plan further into the future. Over the years they have substantially increased their economy and became the fastest growing economy in the world. They are not finished yet and are trying to stay on the top and become more successful and dominate compared to all of the other countries. The research done here was to examine various aspects of the Chinese technological developments; and methods in which development policy has been incorporated, applied, and analyzed based on the success of the Chinese economy policies in improving their technological capacity.

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