

# Information technology in india assignment

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From computers, to software programs, to the internet India has helped to make it possible for the nation to communicate in many new and different ways. The development of these new and different programs and systems has helped India to become a little wealthier of a country than it used to be. There has been no other industry in India to perform so well against the global competition. According to Embassy of India, their article on Indian's Information Technology Industry, India exports software and services to nearly 95 countries around the world (Embassy of India, 2011).

As a result of Indian's big growth of information technology within their country a majority of all of the computers, software and services purchased in the world come from India. India has also made sure that they provide trained experts in the various IT areas to offer technical support to customers who have issues with programs and services that they are offering. India has a large number of English speaking, highly skilled specialist in the computer field in their country which makes it better for them when it comes to information technology outsourcing.

Information technology is one of the suggest Job creators in India and has helped the national economy a great deal. It has impacted Indian's government, economy, educational system, and also the religious systems in India in both positive and negative ways. Even though the positives are far more and seem to outweigh the negatives. This report will begin by We will first explore the ways in which information technology has positively impacted Indian's government and also how it has negatively affected Indian's government.

Then we will go into how the economy has been impacted by information technology in India both in the positive and the negative ways. We will also explore how the education system has been impacted by information technology and even how it has affected the religious system. We want to also go into how India has dealt with different issues that have come about from information technology. For example, one issue would be Indian's dependency of technology and how India has dealt with that. Then we will explore inappropriate material/ censorship and if this has been an issue in India since the information technology system has started booming.

Privacy and security is of course another issue when you are dealing with the internet and computer systems. We are going to discuss how India makes sure that information is kept private and that it is not easily assessable. The Culture of India Indian Government: Political and Government structure India is a democratic state located in the Asian continent constituted by 28 states and seven centrally administered Union Territories. Historically, prior to the 16th century, the country was under the rule of McHugh, whose rule brought some political unity to India, until its collapse by the 16th century.

The British whose presence in India happened at around the 16th century assumed power in 1847 following a rebellion in Roth India led by mutinous Indian soldiers (Indian History, n. D. ). Several rebellious initiatives with significant emphasis placed on the efforts of a nationalist movement led by Gandhi, saw India regain its independence in 1947. Upon independence, India embarked on parliamentary democracy that its constitution describes as a Sovereign, Secular Demographic Republic and has worked hard over the years to sustain the democratic status the country enjoys to date (Trade <https://assignbuster.com/information-technology-in-india-assignment/>

Charka, n. . ). The Parliamentary system of India at federal level comprises of the legislature with two houses of reliant, Council of States and the House of the People headed by the President, and the executive body that has the President as the constitutional head, the Vice- President, and the Council of Ministers led by the Prime Minister responsible for the country's executive powers. On the other hand, the 28 states are under locally elected governments and operate independently from the central government.

They maintain a structure similar to that of central government that comprises of Governor as representative of the President, and executive powers vested in Chief Minister purported by the Council of Ministers (The Library of Congress Country Studies, n. D. ). Indian Economy: Economic Situation Post Independence When India gained independence from the British in 1947, the country's economy was at the poor state with majority of the people living in poverty. Government adopted a mixed economy approach to push the country's economy towards the direction of growth and development Trade Charka, n. . ). This strategy saw government becoming the major player in the economic affairs of the country with controlling everything including the banking system. These initiatives yielded significant growth in the country's economy, even though the poverty levels failed to show significant reduction. By the late ass's, government's aggressive initiatives for economic growth saw India drowning in debt, which raised elements of dissatisfaction amongst the population that led to change of power in the early ass's.

This change saw India engage in reform processes of liberalizing, prevarication and globalization. The country achieved significant progress on <https://assignbuster.com/information-technology-in-india-assignment/>

its reform processes with markets deregulated, many businesses privatized, and the Indian economy duly integrated with the global economy and competitively making its mark in information technology (Trade Charka, n. D. ). India is currently experiencing economic boom with agriculture and information technology (IT) having a significant impact.

Today 60% of the Indian population is cited as independent in agriculture somehow and it contributes 17% of the national gross domestic product (GAP). IT industry is a revelation in the Indian economy and it has strengthened Indian's presence in the global market with the country becoming the hub for outsourcing of IT services by countries like the United States and England (Trade Charka, n. D. . Education and Religious System of India The education system in India consists mainly of primary, secondary and higher education, with the whole process taking a minimum of 14 years to the level of graduate degrees.

Since its independence in 1947, India sees education as a key to maintaining the country's economic growth, and this commitment is evident in the Indian constitution that condemns discrimination in education and cites elementary education a fundamental right for children between the ages of 6 and 14. The 2001 census records overall literacy rate in the country at 65% because of the gap that exists between rural and urban rates recorded at 59% and 80% respectively with women also lagging behind at 55% (India Academic, n. D. ).

The fundamentals of religion in India are very strong with lives of most Indians intertwined in religious beliefs and practices that dominate their

private and social behaviors. There are several religious systems in the country that consists of Hinduism, Muslims, Buddhism, Islam, Schism, Christianity, and many other negligible religions in existence with Hinduism followed by Muslims commanding a higher following. Government remains neutral on religious matters in the country and exercise level of Lorraine, which has led to the classification of India as a secular state (The Library of Congress Country Studies, n. . ) History of Information Technology in India and it's Development Four Periods of Information Technology and its History in India Information Technology is the “ science of collecting, storing, processing and transmitting manage data. Information Technology does not begin with the invention of computers but instead was around as far back as 3000 B. C. The history of Information Technology consists of four periods, Pre-mechanical, Mechanical, Electromechanical, and Electronic. Butler, 1998) The Pre-mechanical period took place from around 3000 B.

C. To 1450 A. D. This period included writing and alphabets. For example, pictures or drawings, cuneiform and symbols were used. Paper and pens were used like scratching marks into wet clay, or writing on papyrus. The first numbering system and the Abacus also came about during the Pre-mechanical period. The Abacus is considered one of the first information processors. (Butler, 1998) The second period, the Mechanical period, took place from 1450 to 1840. During this period, in 1450, John Gutenberg invented the printing press.

Other notable inventions were the Slide rule, the Baseline and Leibniz machines. Charles Babbage invented the difference Engine and the analytical engine. Also, another important part of the Mechanical period was <https://assignbuster.com/information-technology-in-india-assignment/>

Augusta Dad Byron who was considered the first programmer. (Butler, 1998)

The third period was the Electromechanical Period which took place from 1840 to 1940. During this period, ways to harness electricity was discovered which was key to this periods advancements. This period included the beginnings of telecommunications like, the telegraph, Morse code, telephone and radio. In 1880,

Herman Hollering created the census tabulator which used punch cards and analyzed the data faster. (Butler, 1998) Also, notable during this period, in 1939, Hewlett-Packard, HP, was founded. (Computer History Museum, 2006). The four, and current period, is the Electronic age which took place 1940 and continues today. This period includes much advancement in computers. In the ass's there were advancements like the Harvard Mark I, Manchester Mark I, the ADVANCE, MANIAC the first electronic computer, and the DEEDS which was the first practical stored-program computer. (Butler, 1998) Later in this period came the IBM

UNIVAC I, the IBM 7000 series mainframe, which was the company's first transistorized computer, the Cad's 6600 supercomputer and the Keenan-I which was the first personal computer. (Computer History Museum, 2006).

Following shortly after these advancements were the Apple I in 1976 and Apple II in 1977 and the Atari models 400 and 800. In 1981, IBM came out with their personal computer, in 1982 the Commodore 64 was introduced and in 1984 Apple came out with the Macintosh. (Butler, 1998) Information Technology history in India Information Technology has helped put India on the global map and is the country's rimier growth engine. BEEF, 2010)

Indian's software industry has grown from US \$150 million 1991-92 to US \$5.

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7 billion in 1999-2000. (Embassy of India, n. D. ) India is also the preferred destination for companies to outsource their IT services. (BEEF, 2010)

Indian's IT industry continues to grow. In the 1980's and 1990's, India did not have a separate IT industry. Most Indian companies purchased old, refurbished machines from companies like IBM since they software company, began operations. In 1973, TTS obtained its first big export assignment.

Tat's success made it a role model for later IT companies. In the early 1980's, India was the only developing nations to have significant software exports. Many IT professionals took jobs in the United States but in 1993, the U. S. Immigration and Naturalization Service made it more difficult to obtain the H-1 visa. In 1998 to 2000, the U. S. Encountered the Y2K problem. The U. S. Hired more computer programmers but the Y2K problem was due to legacy software being written in old languages such as COBOL, the U. S. Programmers were not equipped to handle it. So the U. S. As forced to increase the quota for the H-1 visas and this allowed a number of Indian IT professionals to move to the U. S since India was one of the few countries that could provide a sufficient number of programmers to deal with the old language. In 2001, the U. S. Went into a recession and the quota for H-1 visas was reduced again. This did not hurt India but instead benefited them. In attempt to reduce costs, U. S. Companies outsourced more IT work to India. (Agrarian, 2008) Indian's IT sector currently employs about 2. 2 million professionals directly and another 8 million indirectly accounting for over 5% of the GDP.

Also, the majority of Fortune 500 companies and Global 2000 corporations are sourcing their IT service from India. It accounts for 55% of the global

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market in offshore IT services. India also exports software and services around the world to 95 countries. (Department of Information Technology, 2010) The Specific Impact That Technology Has Had Upon the Culture of India The Impact of Information Technology on Indian's Government Information technology has had a significant impact upon Indian's culture in terms of its government, its economy and also its education and religious systems.

To start off with let's begin by talking about its government. The Indian government has benefited since the information technology era has began in that it has brought India more money into the government and the country. All over the world we take advantage of Indian's knowledge of computers and the IT industry and not just that but the ability of most of the IT specialists that they have to speak good English because English is important considering the U. S. Dominates the computer industry.

Due to the fact that India is such a poor country salaries paid to IT techs are low and India can afford to offer lower priced IT equipment and support than other places. Which people no tater what country you live in, are always looking for the best services and quality for the lowest price. Providing the lower prices and the good quality and service brings more business to India and by bringing in more business they are bringing in more money to the country. More money in India makes it possible for people to live a better life.

This has enabled the government to provide the people of India with better education which in turn allows India to have more educated people and more

and more people with the knowledge of computers and IT. IT has made it possible for India to accelerate in the path of growth. At first India was not able to participate like they wanted to in the exporting part of the technology industry because to invest in the manufacture of hard drives and computer chips was very costly and India did not have the money to invest in this nor could they get the money from anyone else. Or industrial infrastructure which meant unreliable trains, clogged ports, and intermittent electrical and water services Jackson, Greg; Kari, Vishnu, 35). Indian government lost out on this opportunity so they decided that they had better invest in the future of the computer software development market. In the last 30- 35 years the Indian government has continued to develop and upgrade their Information Technology to better serve the people of the world who utilize their software programs. According to Jackson and Kari, “ India is now annually producing about 68, 000 computer software professionals. (p. 36). There is one great issue that Information Technology has brought to the Indian government and that is the fact that all of India is not equipped with the new information technology. There are poorer states in India that are in danger of not having the knowledge and the ability to have the technology systems like the wealthier states do. This is because the poorer states do not have the people there that know how to access the technology and then they can't afford to have the technology in these states because money is an issue.

The poor states are unable to attract IT based industries that could in the long run end up helping to develop those states economically. This is really an issue because the government in the richer areas of India is being run one way and then the government in the poorer area is being run another way.

According to Ads and Maryanne, “ The cause of concern is that if this trend continues then there will be skewed economic development and it will be difficult for the governments to achieve an equitable development. ” (p. 107).

One of the goals of the information technology system in India is to make all government information available to all of their country but this is not the case in the entire county. The states that are not as developed do not have all of the advancements that those who are more developed do. It is Indian’s goal to try to make this information easily accessible to all of the Indian people through internet sources and things of that sort. This is a little harder to do when you have states that are not as developed as others though.

The Positive and Negative Impact of Information Technology on Indian’s Economy One positive impact that IT has on Indian’s economy is the growth of Indian’s Real GAP. Indian’s Real GAP has increased in the past years. In 2001-2002, Indian’s GAP increased by 23% and in 2005-2006, it increased substantially by 33%, setting a new record for GAP growth in India (Day and Sings, 2010). India also holds a 6. 0% share in the world’s overall GAP, contributing 10% to the world’s growth (Industry Report, 2010). According to Dolman and UTC, it will continue to increase within the next decade.

The IT technology in India has many great impacts on their economy. According to Dolman and UTC, between the early ass’s to the ass’s, Indian’s economy grew by 3. 5% mainly due to its vast knowledge and technology. Indian’s economy continued to grow throughout the ass’s and ass’s where it was opened to more global competition. In the late ass’s, the economy

dropped by 5.5% due to poor rains on agriculture but later saw a significant increase in 2003-2004 by 8.2% (Dolman and UTC, 2005). Indian's IT market has grown from \$1.3 billion to \$19.9 billion in less than a decade. Along with Indian's economic growth, their IT technology has also grown.

The jobs in India have increased due to IT, employing more than 2 million people in the field alone (Dolman and UTC, 2005). India has also expanded its IT technology in the field of IT consulting, serving major companies in the United States such as Wiper, Informs, and Data. These companies are now reconstructing their business process with the help from India. India has done so well with their IT, giants such as Intel and Texas Instruments are using India as their Research and Development hub for microprocessors and multimedia chips (Dolman and UTC, 2005).

As long as they maintain their distinctive competitive advantage, this is bringing high-quality, abundant, and cost-effective human resources to its customers, they will continue to dominate its competitors and the IT world. Even with Indian's fast economic growth, the great rapid GDP growth, and the large population, they are still vulnerable to development in its own region (Day and Sings, 2010). While maintaining positive relationships with major countries such as the United States, everything else that isn't IT related is growing at a very slow pace.

The Indian government invests millions of dollars every year in promoting their IT. So much focus has been on IT that seventy percent of the population is living without the basic amenities and infrastructure (Valetudinarianism and Goanna, 2001). The government and the policymakers need to cut back

on investments in IT and focus more on their poverty and agriculture and create a better India. Also being in an unstable area, where relationships with Pakistan continues to fluctuate, the dispute over Kashmir remains unresolved, and the rising developments may affect Indian's growth, including its IT technology (Day and Sings, 2010).

The Positive and Negative Impact of Information Technology on Indian's Educational System Positive Impacts It is a prerogative of every individual to receive education and in most instances educational achievements acquired by individuals lead to a positive impact on the individual's life and the country's economy, which implies that skills imparted through education paves the way for individual and economic success. Evidence of success in the lives of individuals with careers in IT, and the impact IT has on the country's economy has many Indian students viewing IT as the license to attain arsenal development.

They view higher IT education as opportunity to attain wealth, and personal recognition at national and international level (Geezer, 2006). Traditionally, Indian's education system is oriented around classroom teaching, which fails to be inclusive of all members of the society by denying working people an opportunity to advance their education while keeping their jobs. India with its society's acquired passion for IT, has seized the opportunity offered by the internet through introduction of online learning at several institutions that include Indian

Institute of Management Maidenhead (" MA), that delivers management education through Virtual Learning Programs (Sandy, R. , Sandy, S. , Dashes

& Look 2008). Lack of classroom infrastructure coupled with opportunities presented by the country's growing passion to acquire skills in IT has motivated introduction of e-learning at most institutions and while the model is still at its infancy, the commitment shared Library of Congress Country Studies, n. . ). The highlighted desire by individuals to achieve higher IT education and government's commitment to facilitating means for expansion of higher education through establishments of grants has IT installed on a high pedestal within the Indian society. Availability of reputable IT Institutions only strengthens people's desires to infiltrate the IT fraternity irrespective of the social background.

The perceived benefits linked to IT qualification have pushed the Indian society to incur sacrifices that include selling of land to raise money to attend premiere institutions (Geezer, 2006). Negative Impacts With many Indian students choosing IT qualification against science qualification, it goes not look like Government is doing enough to promote science to students as the country demonstrates signs of struggle to build solid foundations in basic science education and research.

The success that Indian's IT graduates derive from overseas postings poses as an obstacle to the advancement of basic science because student use every opportunity they get in studying to get an IT qualification. IT qualification has become a qualification of choice in India, disposing of science from the pedestal with IT workers getting better pay than basic researchers who are 10 times worse off, which has diminished the value traditionally applied to sciences by the society (Anything's, 2008. ).

According to Anything's, it is not only science threatened by IT popularity, there is fear that qualifications in agriculture will also suffer, which could put the country in a precarious situation of placing the country under a single major contributor to the country's GAP. Considering the flooding of the IT faculty in Indian Institutions, one would expect entry barriers to be nonexistent in this faculty; however, costs for the IT degrees continue to attract high fees that drain the thin uncial resources of the society, majority of which live below the poverty lines.

Arguments have come up regarding provision of computers in low-income schools in policy circles without bearing any fruits (Pal, 2010). This lack of progress represented a step backwards for the poor people consumed with desire to upgrade their living standards through means of higher education in IT because they have to sell their valued assets for education, which in most cases is not enough for them to achieve their primary goal.

The evolution of IT in the education sector have not gone noticed in the global market as evidenced by the growing demand for Indian IT specialists over the years. This erosion of IT expertise lured overseas for better prospects in the global IT industry reflects weak link that could lead to a domestic shortfall in IT skilled labor despite reported influx of students in IT courses (Information Technology India, n. D. ).

The Positive and Negative Impact of Information Technology on Indian's Religious As a society of deep-rooted traditional religious beliefs, Indians lead personal lives dominated by religious practices that include rituals and offerings to the gods. The society has taken an initiative of giving meaning to

technology that has become dominant in their lives by conducting rituals to technology reserved for god-like (2003). Praying to technology like that can mean that Indians perceive technology as a form of development that deserves recognition befitting to gods.

Negative impacts Indians welcomed arrival of technology with mixed feelings that indicates they do not perceive it as from within but from outside by displaying element of reluctance to internalize technology into the collective consciousness as an Indian thing. Places of worships are everywhere in India except that none exists within the premises of Indian Institute of Science with employees of the Institute opting to visit areas outside the campus for worshipping rituals, which confirms the need to keep the two institutions separate (Karakas, 2003).

The growing involvement of Indian IT experts in the global market brings its challenges of interweaving work demands and the demands from home, where government expects them to remain committed to the country's wellbeing in terms of maintaining remittances and investments in India. Hinduism represents religion that helps to unify humanity and to stimulate respect for creation and recognition that the physical and material aspects of life are not the only or even the ultimate reality, which Overseas IT workers use to discipline mind and body to take control of their destinies (Summate, 2010).

The Moral and Ethical Issues Brought About By Information Technology in India and How India Has Dealt With These Issues Censorship Internet censorship exists in varying degrees all over the world. Since 1995, several



governments around the world including India have been addressing the problems of material on the Internet that is illegal under their offline laws and content seen as harmful or otherwise unsuitable. The nature of material that is of principal concern has varied significantly.

In the past and on a continuous basis attempts have been made to block sites which slander politicians, or sites run by groups which incite religious hatred, or those which publish politically sensitive material. Nevertheless, often these attempts are not successful. For a period, the DAWN (Pakistani Newspaper), was blocked for its reporting of the bans of sites like Youth by an Indian government owned internet gateway, however one of the local news sites circulated thorough instructions on how to bypass the filter and view the site.

Right now in India, there are no established rules, which a website needs to follow. However the official banning of sites takes place in a very ad hoc manner (generally signifies a solution designed for a specific problem or task, non-generalized, and which cannot be adapted to other purposes) and is often temporary. More often, schools, universities, and employers impose restrictions on blogging or otherwise veiling information relating to their organization.