An Exploratory study on Origin of AI: Journey through the Ancient Indian Texts & other technological descriptions, its past, present & future

1 author:

Mrinmoy Roy
Indian Institute of Health Managment Research Bangalore
25 PUBLICATIONS   **28** CITATIONS

Some of the authors of this publication are also working on these related projects:

Project   Marketing View project

Project   Knowledge Management View project

An Exploratory study on Origin of AI: Journey through the Ancient Indian Texts & other technological descriptions, its past, present & future

Mrinmoy Roy
PhD Scholar
Lovely Professional University, Phagwara, Punjab

Abstract

For the modern world and our present civilization the invention of the first programmable digital computer taken place in the 1940s, a machine based on mathematical reasoning, this knowledge & ideas inspired few scientists to seriously think of building Artificial Intelligence. The modern world also knows that a British Polymath, Alan Turing in the year 1950, suggested the concept of decision science, artificial intelligence and machines solving the real world problems. The first commercial, digital & programmable robot was made by Geroge Devol in 1954, the field of AI research was founded at a workshop held on the campus of Dartmouth College during the summer of 1956. But modern world is not aware of the origin of Artificial Intelligence (AI) began back in 8000 to 11000 years, with myths, stories and rumors of artificial beings endowed with intelligence or consciousness by ancient Rishis of India. The seeds of modern AI were planted by classical philosophers who attempted to describe the process of human thinking as the mechanical manipulation of symbols. This work culminated through Knowledge and ideas on many of the technological advancement that we are witnessing today had already been articulated in holy books of Hinduism like The Ramayana, The Mahabharata, The Bhagawatgeeta, The Vedas & Upanishads which were believed to be written 5000 to 8000 years ago (3000 BC – 6000 BC). Those are not only the holy epics of Hindu civilization but the proof of the existence of India. The contents of the Ancient Indian Texts written in Oldest language of human existence 'The Sanskrit' also viewed as 'Natural Language' from modern scientific point of view. Elements of modern science present in the Upanishads and Advaita Siddhanta and the nature of maya resembles modern scientific awareness. This awareness is further used in understanding human mental processes and the ways to model them contributing to the natural language comprehension field of artificial intelligence. Vedic concepts are suitable as well as necessary for an efficient lead and the future of Artificial Intelligence (AI). The concept is to bound the man-made machines with the ideology described in the Vedic scriptures, to build a better and smarter world with better machines. Natural language processing with natural language inputs and outputs provides a better human-machine interface. This paper explores origin of the concept of Artificial Intelligence and its existence in ancient Indian Texts and other technological description with modern scientific proofs of them; also reviews Sanskrit language as a possible natural language input to computers.

Keywords

Origin of AI, AI in Ancient Indian Texts, Source of AI is India, Veda and AI, Sanskrit in NLP

An Exploratory study on Origin of AI: Journey through the Ancient Indian Texts & other technological descriptions, its past, present & future

1. Introduction

While artificial intelligence has been around for decades, it was not until the 1950s that the true potential of it was investigated. A generation of scientists, mathematicians, and philosophers had the idea of AI, but it wasn't until Alan Turing, a British polymath, proposed that if humans can solve problems and make decisions using available knowledge and reason, why can't machines? In his 1950 paper Computing Machinery and Intelligence, Turing outlined machines and how to measure their intelligence, but his results did not advance. The problem of computers was the key stumbling block to progress. They needed to adapt fundamentally before they could expand any more — computers could execute commands but not store them. Until 1974, funding was also a concern. By 1974, computers had become extremely popular. They were now quicker, less expensive, and capable of storing more data. Early demonstrations, such as Allen Newell and Herbert Simon's General Problem Solver and Joseph Weizenbaum's ELIZA, which was funded by RAND, (www.sitn.hms.harvard.edu) showed promise toward the goals of problem-solving and the interpretation of spoken language in machines, but there was still a long way to go before machines could think abstractly, self-recognize, and achieve natural AI science resurfaced in the 1980s, thanks to increased funding and algorithmic resources. The invention of the first programmable digital computer in the 1940s, a system based on mathematical logic, motivated a few scientists to seriously consider developing Artificial Intelligence for the modern world and our current society. The modern world is also aware that a British polymath named Alan Turing proposed the concepts of decision science, artificial intelligence, and computers solving real-world problems in the year 1950. Geroge Devol created the first commercial, interactive, and programmable robot in 1954, and the field of AI research was developed at a workshop held on the Dartmouth College campus in the summer of 1956. However, the modern world is unaware that the origins of Artificial Intelligence (AI) can be traced back to theories, legends, and rumors about artificial beings endowed with intelligence or consciousness by ancient Indian Rishis between 8000 and 11000 years ago. Classical philosophers tried to characterize the mechanism of human thought as the mechanical manipulation of symbols, which sowed the seeds of modern AI. Many of the technical advancements that we are experiencing today were already articulated in Hindu holy books such as The Ramayana, The Mahabharata, The Bhagawatgeeta, The Vedas, and The Upanishads, which are thought to have been written 5000 to 8000 years ago (3000 BC – 6000 BC). These are not only Hindu civilization's holy epics, but also evidence of India's life. From a modern science standpoint, the contents of Ancient Indian Texts written in the oldest language of human life, Sanskrit, are often regarded as "Natural Language." The Upanishads and Advaita Siddhanta contain elements of modern science, and the essence of maya resembles modern scientific knowledge. This knowledge is often used to better understand human mental processes and how to model them, which contributes to the artificial intelligence area of natural language comprehension. Vedic principles are both appropriate and necessary for effective leadership and the future of Artificial Intelligence (AI). The idea is to connect man-made machines to the Vedic scriptures' philosophy in order to create a better and smarter world with better machines. A better human-machine interface can be achieved by using natural language processing of natural language inputs and outputs. This paper investigates the origins of Artificial Intelligence and its presence in ancient Indian texts and other technical descriptions, as well as modern scientific proofs; it also considers Sanskrit as a natural language input to computers.

2. Rationale and objective

Ancient technologies mentioned in the historical and holy books of Indian origin always inspire to improvise, there should be a beginning and end of everything. What we are seeing in terms of advancement of technologies is just a glimpse of what ancient civilizations went through ten to hundred thousand years ago. Ancient scholars and inventors discovered some amazing things which can be easily enviable for today's technologies. There is an attempt made to explore the origin or the beginning of the concept of Artificial Intelligence through digging deep into our past where lies our future.

Objective of this study is, to explores origin of the concept of Artificial Intelligence and its existence in ancient Indian Texts and other technological description with modern scientific proofs of them, also reviews Sanskrit language as a possible natural language input to computers. Based on these objectives an attempt has been made to explore the first origin of concept of Artificial Intelligence in human.

3. Methodology

This paper is based on **secondary database** which include Ancient texts such as Vedas, Ramayana, Mahabharata, Srimadbhagbatgeeta, Puranas, literatures, scriptures and notes. A **qualitative** method of analysis has been chosen for this research. Based on **historical studies**, **literature** and **documentation** a new horizon has been attempted to pave in regards of origin of the concept of Artificial Intelligence and its existence and used in ancient Indian civilization

4.1. Description of Artificial Intelligence in Ancient Indian Texts

My investigation into the origin of Artificial Intelligence led me to mythology, where ancient people imagined artificial life, automatons (or robots), self-moving machines, and other marvels long before technology enabled them to be realized. These ancient oral traditions about robots and other devices were first written down around the time of Homer, around 2,700 years ago. In antiquity, however, the Greeks were not the only ones who imagined automatons and computers. The Ramayana, Mahabharata, and other epics contain similar tales. Automatons are created by the engineer God Vishwakarma and the sorceress Maya in Hindu mythology, and by the god of technology Hephaestus and the brilliant artisan Daedalus in Greek mythology. Such myths, in my opinion, are the world's first science fiction tales. No one culture had a monopoly on ancient technological fantasies. If one considers Greek, Etruscan, Egyptian, Hindu, Islamic, Chinese, or any other ancient cultural myths about artificial existence, they all consider the wonders that could be accomplished if only one possessed the Gods' divine imagination and skill. However, it is impossible to draw a straight line from mythology to current scientific understanding over millennia (Adrienne Mayor, 2018).

4.1.1. Barbarik: The Warrior Robot with Artificial Intelligence

An Exploratory study on Origin of AI: Journey through the Ancient Indian Texts & other technological descriptions, its past, present & future

Around a thousand years ago, in the year 1027 A.D., a group of workers in the village of Khatu in Rajasthan were digging the ground for water. They discovered a metal box that was sealed airtight after searching for more than 30 feet. One word was etched on the box: Barbarik. When they opened the package, they discovered a skull inside, but it wasn't a human skull made of bones; instead, it was made of a gleaming metal. What's more bizarre is that the skull had two eyeballs in each eye socket. The workers have taken the skull to the king Roop Singh Chauhan, and he summoned all learned men to his court to learn more about the Barbarik's Skull ('Barbarik' - Did Ancient India have AI Robot Technology? Khatushyam Temple Mystery| Praveen Mohan | - YouTube, Aug, 2020)

The question comes in mind that 'Who is Barbarik? & How his skull is made of metal? How did his eyes not disintegrate and decompose?' Barbarik was not mentioned in any of the ancient texts that the learned men combed through. Finally, a priest from the far south came to describe his tale. Barbarik was a legendary warrior who lived 5000 years ago, during Lord Krishna's reign. Barbarik, on the other hand, was radically different. He wasn't human; he had divine power. He was capable of simultaneously handling several advanced arms and weapon systems and solving mathematical problems at lightening speed, but his voice was sluggish and he couldn't identify faces. He didn't have human intelligence; instead, he had artificial intelligence. After hearing about Barbarik's power and intellect, Lord Krishna agrees to meet him. The Mahabharata's great war is about to begin, and Lord Krishna wants to know which side Barbarik will support. With Lord Krishna's request, Barbarik showed his incredible pace and accuracy with advanced weapons. Lord Krishna is taken aback and learns that Barbarik will be the pivotal figure in the upcoming great War. Barbarik's intellect, on the other hand, is not human-like; he thinks and acts like a robot. Lord Krishna inquires about his position in the war. Barbarik responds by saying that he will help the side that is weaker than the other. He claims it is his responsibility to save as many people as possible. Lord Krishna then asks Barbarik a simple question, which utterly perplexes him. According to Lord Krishna, if Barbarik backs the weaker army and begins to kill the stronger army, by this way the stronger army will eventually become the weaker army, and the once weaker side will become the stronger side. What will Barbarik do in that situation? This would not be a legitimate question to a human being because we humans comprehend broader concepts, while robots and artificially intelligent machines observe events and are unable to comprehend the bigger picture. However, Barbarik later states that because the other army has become weaker, he will turn sides and help them. Barbarik's response astounds Lord Krishna because it implies that Barbarik would switch sides between the two armies and fully kill them. Barbarik's unnatural intellect, Krishna concludes, would bring damage to humans rather than benefit them, despite his ability to handle sophisticated weapons with exceptional precision. As a result, Lord Krishna chooses to disable Barbarik's physical activity, preventing him from attacking or wielding weapons with his arms or legs. Barbarik is asked by Lord Krishna to separate his head from his body. The most intriguing part is this: Barbarik takes his head off and hands it over to Krishna, but he continues to talk. This clearly demonstrates that he was not human, but rather a robot with artificial intelligence. Some argue that Barbarik was Bhima's grandson, but this is highly unlikely because he would have been listed in the Mahabharata. Barbarik, on the other hand, is not mentioned anywhere in the original text. Why did the author leave out such a powerful warrior from the epic? Since Barbarik was a robot with artificial intelligence rather than a living human, the author omitted this detail. Barbarik's name alone denotes that he is not human. It is derived from the Sanskrit word Barbara, which means inhuman and is similar to the English word barbaric. Barbaric originally meant inhuman, or someone who lacks understanding of human feelings and thoughts.

4.1.2. Automatons of King Ajatasatru

Beginning around the fifth century BC, Indian and Hellenistic cultures borrowed and inspired each other, and syncretism increased after Alexander of Macedon and King Porus established diplomatic relations in the fourth century BC. Before Philip II of Macedon received torsion catapults, Ajatasatru's engineers invented armed war chariots with spinning blades, which may have influenced later Persian scythed chariots, and he had powerful machines to hurl huge boulders, according to Jain texts. The constant burning of oil lamps in India suggests knowledge of naphtha, which the Greeks and Romans did not have until much later. In the court of a king of India, the travelling Greek sage Apollodorus of Tyana encountered automatic servants and self-propelled carts, and India was centuries ahead of Europe in distillation and hydraulics technologies (Adrienne Mayor, 2018).

The Mahabharata, Ramayana, Kathasaritsagar, Harivamsa, and other works include myths about flying chariots and synthetic swans, animated slaves, giant robots, machines. In Egyptian texts and Homer's Odyssey, self-navigating ships are described; in Homer's Iliad and Chinese chronicles, androids and automatons are described. The Lokapanatti, a complicated collection of Burmese stories, contains the most comprehensive account. King Ajatasatru stored Buddha's bodily remains in a secret chamber beneath a stupa after his death, according to legend. Bhuta vahana yantra protected the priceless artefacts (spirit movement machines). There were robotic warriors wielding whirling spears, similar to the king's novel spinning blade war machines. Greek myths tell of automaton guardians in human and animal form protecting palaces and treasure, but this legend is unique due to the historical and technical specifics. According to the storey, the robots were built from plans secretly transported to Pataliputra from Roma-visaya, the Greek-influenced West, by a yantrakara, a Pataliputra-born robot builder. Before the great Indian emperor Ashoka learned of the underground chamber, the automaton soldiers guarded Buddha's relics. The robots obediently obeyed Ashoka after he defeated them and learned how to handle them. We know from history that Ashoka unearthed and disseminated long-lost Buddha relics throughout the country (Adrienne Mayor, 2018).

Craftspeople and engineers in Greece, Alexandria, Arabia, India, and China began producing self-moving devices, flying bird models, animated machines, and automatons similar to those depicted in myths by the third century BC. Some were small, while others were massive, and some had simple mechanisms while others were very complex. Springs, levers, pulleys, water, air, fire, and other mechanisms were used to power these contraptions (Adrienne Mayor, 2018).

4.1.3. Kumbhakarana the Ancient Robo-War Machine (like Hulk Buster in Avenger Universe)

In 'Ramayana', the world's oldest epic poem, Kumbhakarna is referred as Ravana's younger brother. But he was not a living being at all, but a 'Yantra' (machine/robot) which had a gigantic appearance (like a giant robot). To be more precise, Kumbhakarna was an ancient robot, fearsome more-machine-and-less-human-like 'humanoid'. Ravana used Kumbhakarna sparingly, meaning, only during very difficult battle-situations, and it instantly turned the tide in Ravana's favour. May be due to its high maintenance, it was made to sleep for a period of about six months and awakened only when need arises or when it has to be re-fuelled. Sage Valmiki writes the thoughts of Brahma when he saw Kumbhakarna :

ध्रुवम् लोकविनाशाय पौलस्त्येनासि निर्मितः |
तस्मात्त्वमद्यप्रभृति मृतकल्पः शयिष्यसे || ६-६१-२४

(dhruvam loka vinaashaaya paulastyena asi nirmitaH |
tasmaat tvam adya prabhR^iti mR^ita kalpaH shayiSyase ||)

Translation : It is sure that you were created by visravasa for the destroyal of people. On that account, you will be sleeping apparently dead from now onwards. Here, he clearly uses the word 'nirmitaH', which means 'built/created' by Visravasa, who was Ravana's father. When Kumbhakarna was approaching Vanara Army and crushing them under his toes, they started to runway in fear. Then Ravana's brother Vibhishana reveal the truth of Kumbhakarna to Rama and his army.

उच्यन्ताम् वानराः सर्वे यन्त्रमेतत्समुच्छ्रितम् |
इति विज्ञाय हरयो भविष्यन्तीह निर्भयाः || ६-६१-३३

(uchyantaam vaanaraaH sarvE yantram etatsamuchchhritam |
iti vijNaaya harayO bhaviSyantiiha nirbhayaaH ||)

Translation : Let all the monkeys be told that it is a kind of machine, advancing forward. By knowing this, they can become fearless by now.

प्रक्षिप्ताः कुम्भकर्णेन वक्त्रे पातालसंनिभे |
नासापुटाभ्यां निर्जग्मुः कर्णाभ्याम् चैव वानराः || ६-६७-३६

(prakSiptaaH kumbhakarNena vaktre paataala samnibhe |
naasaapuTaabhyaam nirjagmuH karNaabhyaam chaiva vaanaraaH ||)

Translation : Hurled by Kumbhakarna in his mouth which was looking like a hole in the earth, the monkeys again came out from his nostrils and ears. How can person enter into a gigantic person's mouth and come out of nostrils and ears, unless the giant is a machine with no internal anatomy?
But in same Ramayana, it was clearly stated that Kumbhakarna was married with Vajramala and had kumbh, nikumbh as sons. These sons were killed by Hanuman. So, Kumbhakarna must be an alive brother of Ravana, who operated a giant robot from its inside (like the AMP suit in Avatar movie or Hulkbuster in Avenger Movie Series). So the robot was known with the same name of its operator. Infact Kumbha-Karna means the one who has pot (kumbha) like ears(karna). Rama used Vayuvyastra (a wind forced missile) to cut-off Kumbhakarna's arm and later chopped its head. When Kumbhakarna was shot down by arrows of Rama, he died and the robot which had nobody to control it, fell into the sea. Upon knowing the death of Kumbhakarna, Ravana and his sons wept. Hearing that their paternal uncle was killed; Devantaka, Narantaka, Trishira and Atikaya were afflicted with sorrow and wept.
In later (mis)translations Kumbhakarna has been (mistakenly) thought to have been a gigantic demon, while the Vanaras have been turned into monkeys. Infact Vanaras are humans with tail. Vaala(tail) + Nara(human). The term Vanara can also be described as forest-dweller (vane carati iti vanara). So, this must a special species and described as group of monkey-like humanoids. The epic Mahabharata describes them as forest-dwelling, and mentions their being encountered by Sahadeva, a Pandava general who led a military campaign to south India. Infact, Vanaras were genetically engineered from multiple species.

Let monkey-shaped progeny equalling Vishnu's valour be procreated from the physiques of prominent apsara-s and gandharva-s, from the girls of yaksha-s and pannaga-s, and also thus from the bodies of kinnaraa-s, she-vidyaadharaa-s, she-riksha-s and she-monkeys, and they shall be wizards of miracles and audacious ones, in travel they shall have air's speed, bestowed with intellect they shall be the knowers of ideation, and with their divine physique they shall be ineliminable, they shall be endowed with all the assaultive aspects of all missiles, and they shall be untiring in their efforts, like you who thrive on amrita, the ambrosia, unmindful of thirst and hunger. [1-17-3, 4, 5, 6]

4.1.4. Application of AI & human emotions into Ancient Robots made by Asuras to win over Adityas

Yoga Vāsistha describes application of Artificial Intelligence (A.I), human emotions, ego to Robots. Sambarasura creates dama, vyāla, kaTa to win on Adityas. Yoga Vāsistha (योग-वासिष्ठ) is a discourse of sage Vasistha to Prince Rama. Sage Valmiki is credited as its author. It has 6 parts and in one of the part, application of Artificial Intelligence (A.I), human emotions etc to Robots is described. One Asura named Sambarasura had the powers to raise himself in the sky and fight from outer space. Rig Veda clearly mentions that Asura does not mean 'Demon. Asura means 'the one who is not sura, or one who has magical or phenomenal powers (according to Rig Veda)'. This Sambarasura created 3 robots using his technology and named them dama, vyāla and kaTa. The name 'dama' is derived from the root dam which means to tame, subdue, conquer, restrain of course the enemy. 'Vyāla' means vicious, fierce, cruel, savage like tiger or snake. KaTa was like a modern tank protecting army. The word 'kaT' means to go, to cover. It could go and cover the army. Those three Robots were lifeless machines and therefore had no sentiments, no emotions, so they were never defeated. These 3 robots always won the wars against Adityas (gods). Later Artificial Intelligence (A.I) was induced into them. So Adityas played a trick to induce sentiments and emotions in them. They fought with the three Robots and ran away, many times, with defeat. This induced Ego in the Robots. Ego arised as the robots were thinking like humans due to artificial intelligence. Adityas observed this change and told them that, because of their valour Sambarasura always wins and enjoys his life at their cost. This added emotions and sentiments. They felt that they should also enjoy their lives. As the human sentiments arose, fear too proped up in them. Naturally they could not fight with the previous zeal and were defeated by Adityas. Modern day robots have Artificial intelligence embedded into them. So one day they might get Ego and then they may rebel against the mankind. It will be difficult to defeat them. They may conquor the mankind. In that situation man can play the same trick as played by the Gods.

4.2. Primeval Civilization and their 'Lost Technologies'

Ancient innovations have always held a fascinating place in people's minds. These astonish the human race, causing them to reflect on such incredible accomplishments from the past. People have invented many inventions to make everyday life and livelihood easier in the twenty-first century. At first, technology was born out of necessity, but it is now also born out of convenience and luxury. People nowadays associate the word "technology" with gadgets, machineries, electronics, and advanced equipment. Lemuria, Atlantis, and Indian (Tamil) cultures all existed in antiquity and date back to more than 10,000 BC. People in those cultures devised brilliant innovations that operated on very high-tech mechanisms. Those developments have plunged beneath the deep ocean of oblivion due to many surges of uplift and downfall. In various

periods of history, the Greek, Roman, Chinese, Indus Valley, Egyptian, and Mesopotamian civilizations all made amazing discoveries. Also at the time, such innovations were praised and criticized in equal measure. Although modern technologies have been used to reproduce some of these, they are severely lacking in precision and efficiency. Sculptures, scripture, architecture, knowledge, machineries, devices, scientific equipment, processes, tools, firearms, objects, and handicrafts are examples of these technologies. Such inventions, if they had existed, would have ushered in a new era of transformation in human history. It is important to understand ancient cultures of the world since innovations are born from the cradle of civilization. The world's oldest civilization dates back to more than 50,000 BC. Indian (Tamil) Civilization (Kumari Kandam), Lemurian Civilization, and Atlantis Civilization are the world's oldest and most primitive civilizations. The sequence is also the same chronologically, from older to newer. Kumari Kandam was a huge continent that existed about 1.64 million years ago in the Indian Ocean. The Hindu religion was discovered by ancient Indian (Tamil) Civilizations, who passed on their knowledge through Vedic literature, which is Hinduism's backbone (James I. Nienhuis, 1989). The vast continent, also known as Kumari Nadu, was once home to the majority of ancient Indian (Tamil) people. Kumari Kandam was first mentioned in the Skanda Purana. Indian (Tamil) Civilization is thought to be the birthplace of all other cultures. The Kumari Kandam sank under the Indian Ocean 1,700,000 years ago as a result of a disastrous under-ocean lithological event, taking with it a large number of ancient miraculous inventions, scriptures, and architectures. Survivors dispersed through landmasses in various parts of the globe, resulting in the emergence of new cultures. Kumari Kandam ascended to the pinnacle of technology and architecture over a 500,000-year period. It's also thought that Ravana, the ancient demon king of the Treta Yuga, ruled over a sizable portion of Kumari Kandam. Kumari Kandam refers to a virgin country where some of their forefathers lived, including king Nediyon, Bali, and Ravanna (James I. Nienhuis, 1989). Lemurian Civilization was considered a part of Indian (Tamil) Civilization after Kumari Kandam lost one million years ago. This land mass was variously referred to as "Lemuria" or the "Indo-African Continent," which was believed to have included parts of modern-day southern Africa and India, as well as parts of what are now the islands of Southeast Asia and Australia (Sumathi Ramaswamy, 1999). It also influenced a large area of the Pacific Ocean in a dispersed form and lasted for a long time. During the same period, the Atlantis Civilization existed (500 years later). Between Kumari Kandam and Lemuria, Atlantis was located. Surprisingly, among the literally hundreds of Atlantis sightings, Indonesia is the only one that has yet to be claimed. More precisely, the location in question is now the region's sunken lowlands, best known as Austronesia (Arysio Santos, 2005). Atlantis and the Lemurians were descended from the ancient Indian (Tamil) Civilization. About 10,000 and 6,000 BC, the Lemurian civilization existed, and between 9,000 and 5,500 BC, the Atlantis civilization existed. These three civilizations are the world's oldest, as well as the cradles of the most sophisticated and incredible inventions ever discovered by humans. Another similarity is that all three cultures flourished in the same land, which is now known as the "Lost Continent" since it no longer exists on the world map. If Indian (Tamil) Civilization was the cradle of all subsequent civilizations, it follows that all amazing inventions once thought to be gifts from various civilizations now belong to Indian (Tamil) Civilization. Ancient civilizations began carving around 4,500 BC, 1000 years after Atlantis was completely destroyed. There was no civilization in the entire world during this 1000-year era. It could be considered a transitional period in the development and formation phase. Civilizations that have existed since 4,500 BC are known as the world's ancient civilizations. Mesopotamia, Egyptian, Minoan, Indus-Valley, Mayan, Jomon, Greek, Chinese, Roman, Aztec, and Inca civilizations are among those listed. None of them dated back further than 4,500 BC. All of these cultures were founded on rivers.

These ancient civilizations were founded by descendants of primeval Indian (Tamil) people who migrated to different parts of the world after the collapse of primeval civilizations. While the majority of recent ancient technology discoveries have occurred in the aforementioned civilization sites, they are all Indian (Tamil), Lemurian, or Atlantian in origin. There are countless inventions that have vanished under the sands of time and cultures. According to some significant scriptures and scholarly literatures, such innovations existed in ancient or primeval times that may have shocked modern technology. These have been discovered in a variety of locations around the world (Arkapratim Changdar, 2019).

Every Indian has a question about whether Lord Rama is real or not. A billion Hindus believe he did, and India has had an unbroken tradition of Rama worship for thousands of years. Rama is also revered as a hero in Indonesia (despite the fact that it is a Muslim country), Thailand, and other Southeast Asian nations. The Ramayana would have been washed away by the tidal waves of conquests that India endured over a period of 1300 years if it hadn't been for the weight of historical history. Others, however, contend that there is no evidence Rama ever existed. These are the very people who would gladly accept that an infant can be born without the use of a human being. Despite the abundant scientific evidence provided by scientists such as Charles Darwin, they believe the earth was created in 4004 BC and that the universe was created in seven days by a being known as god. (Was it six or seven? Yes, he needed to rest on Sunday because he was so powerful.) They won't challenge any Christian or Muslim myths, no matter how outrageous, bizarre, or outright hilarious they are, but Hindu practices are fair game. They want you to show them Rama's birth certificate, and even if you can get a copy, they'll probably want to see the doctor who attested it.

The British and their acolytes, such as Max Muller, are to blame for the widespread misconceptions regarding Indian history, religion, and culture. Muller, who worked for the East India Company, also referred to the Vedas as "childish poetry." Academician Romilla Thapar describes the famous Rig-Veda as "primitive animism," the Mahabharata as the glorification of a "local feud" between two Aryan tribes, and the Ramayana as "a portrayal of local disputes between the agriculturists of the Ganges Valley and the more primitive hunting and food-gathering societies of the Vindhyan region" in her History of India. The Ramayana, Mahabharata, and other ancient Indian texts such as the Vedas, Puranas, and Upanishads, on the other hand, are genuine historical accounts intertwined with mythology, religion, and spirituality. It's not fair to dismiss their accounts of kings and other current events as mere story telling only because they mention wars between Gods and Demons. It's crazy that the Bible references various incredible events such as the Great Flood, Pillar of Fire, instantaneous healing of cut-off ears, is full of sexual imagery like incest, and is still considered a history of Christianity and Jews, whereas ancient Indian texts are considered "mere" mythology. The unfortunate part is that many secularists, brown sahibs, and Macaulayites – a class of Indians who are English in outlook but Indian only in appearance – readily accept that India's epics are pure fiction and gladly submit to their former white colonial masters' verdict. Since the British claimed that Indian epics did not predate the Christian Bible, they believe it to be valid.

Science, on the other hand, is not a regional pursuit. Scientific proof is incontrovertible, just as Newton's laws of motion are unquestionable. Science has a way of shaking up even the most solid foundations if they are built on a foundation of lies. In 2009, Catholic Christians – or, more precisely, the Pope – had to finally accept that the Earth was not the center of the universe, despite Galileo's 400-year-old discovery (and which the Hindus knew thousands of years before that). Divers from the National Institute of Oceanography in Goa, led by leading archaeologist S.R. Rao, discovered Krishna's sunken capital Dwarka in the late 1980s, exactly where it is said that Krishna was located in Gujarat. There have been discoveries of palaces, pillars,

fort walls, a harbor, anchors, and various artefacts. This is one of the few times that a historical fact has been proven using scientific methods. It establishes the existence of Krishna. So, if the Mahabharata is real, and it mentions events from the Ramayana, doesn't that mean Rama existed as well? In addition, literary references to characters from the Ramayana Period set boundaries within which the Ramayana could not have taken place. For example, Valmiki is mentioned in the Taittiriya Brahmana (circa 4600 BCE), implying that the Ramayana was written before the Taittiriya Brahmana. The great thing about the Ramayana is that Valmiki made it foolproof when he wrote it. (For the sake of argument, say Valmiki was a foresighted sage who foresaw secularists, fascists, India haters, British invaders, and Macaulayites in the future and try to deconstruct his historical opus.) He crammed so much detail about the various planetary positions of those days, the geography of the areas described in the epic, seasonal events, and the genealogy of various kings into the epic that modern astronomers and scientists might guess when those events took place.

The dating of the Ramayana period is aided by genealogical connections and archaeological discoveries. "In no other nation or religion in the world, true history is so carefully known, backed by umpteen evidences," writes journalist and author B.R. Haran. Any ancient history is backed up by architectural and literary facts. The Sangam literature provides documented evidence of Tamil kings' life and rule, just as the Ramayana and Mahabharata provide documented evidence of Rama and Krishna. Questioning the Ramayana and Mahabharata is equivalent to questioning India's very existence." Only approximate datelines can be determined using archaeological and literary methods. Scientists use astronomical measurements to determine the exact time of the Ramayana events. Several of India's top astronomers, astrologers, and retired nuclear scientists have teamed up to determine the dates of the country's ancient history. Note that the "Hindu epics are myth" movement is led by communist academics with no interest in the facts, Nehru family carpetbaggers, Christian freeloaders who have infiltrated Indian cultural organizations, and Indians who have slept with their Anglo-American PhD guides to become "eminent scientists," in Arun Shourie's words.

In the other hand, scientists make up the majority of those attempting to prove the epics are historical. The late Dr Raja Ramanna, the father of the Indian nuclear bomb, said at a global colloquium (http://ignca.nic.in/nl002503.htm) jointly organised by The Mythic Society, Bangalore, Indira Gandhi National Centre for the Arts, and Sir Babasaheb (Umakanth Keshav) Apte Smarak Samithi Trust on January 5 and 6, 2003, that the "best clock for dating was the sky itself and the These scientists are researching evidence, such as precession or star positions, and they are looking back in time. They aren't regurgitating Karl Marx's debunked writings, the racist German who backed English rule over India. As a result, you must decide for yourself who is telling the truth and who is selling snake oil. So, how does one go about astronomical dating? "Sage Valmiki has recorded the dates of events in detail, albeit by explaining the locations of stars and planets," historian Dr. P.V. Vartak says. Deciphering the astronomical encodings is a difficult process, and few people have attempted it. It's worth noting that the ancient Indians had a flawless timekeeping system. They kept track of the 'tithis' (days) according to the nakshatra (star) on which the moon was visible, as well as the months, seasons, and even solstices. The dates of the events can be determined by noting a specific arrangement of celestial bodies that happens once every several thousand years."

Hundreds of illustrated passages from the epic have been used by Dr Vartak to determine dates. "Valmiki reports Rama's birth as Chaitra Shuddha Navami (9th), on Punarvasu Nakshatra, with five planets exalted

at the time: Sun in Mesha up to 10 degrees; Mars in Capricorn at 28 degrees; Jupiter in Cancer at 5 degrees; Venus in Pisces at 27 degrees; and Saturn in Libra at 20 degrees," he writes (Bala Kanda 18, Shloka 8.9). As a result, Rama was born on December 4, 7323 BCE, when the four planets were exalted. Over 9300 years ago, the Ramayana was written." Only an astrologer or astronomer can make sense of it, to be honest. Nonetheless, Dr. Vartak's passages show how dating can be done with enough details. Events described in an epic like the Ramayana, such as eclipses, planetary or astral positioning, or comet sightings, may have occurred later or earlier. A specific form of occurrence may have occurred several times over a period of 20,000 years, for example. Since stars move about in relation to the earth, the star field we see in the night sky is not the same as what the ancients saw 9000 years ago. This is known as precession, and it must be taken into account in all calculations. To minimise the likelihood of error, astronomical data is backed up with other reference points such as geography (for example, how many eclipses occurred over Ayodhya). According to The Daily Pioneer (http://www.dailypioneer.com/todays-newspaper/ramayana-not-a-work-of-fiction.html), an international team of researchers comprised of geneticists, anthropologists, archaeologists, and historians has discovered that the Ramayana is a chronicle of events and characters described by Sage Valmiki and not a work of fiction. The team included scientists from the Centre for Cellular and Molecular Biology in Hyderabad, Delhi University, Indian Institute of Technology-Kharagpur, and the Institute of Scientific Research on Vedas, and was led by Dr Gyaneshwer Chaubey, a genetics scientist at the Estonian Biocentre in Estonia. The Bhils, Gonds, and Kols populations have been discovered to be direct descendants of characters from the Ramayana. According to the report, the Kol tribe, which lives primarily in Uttar Pradesh's Mirzapur, Varanasi, Banda, and Allahabad, are the descendants of the Kol described in the Ramayana. Guha, the Nishad king who assisted Rama in crossing the Ganga on his way to the forests, is the ancestor of the Kol tribe today. Dr Chaubey said, "These groups of people bear the basic indigenous genetic traits of India... they are the true descendants of Rama and his contemporaries." Who knows, maybe more surprises await further investigation. For, unlike secularists, Macaulayites, and communists, who are adamant that Rama never existed, scientists are unsure about the date. They just want to keep looking, like all good scientists, in the hopes of discovering the truth one day.

Dr. Kalyan Raman, a Chennai-based scientist, asks, "Where do we go from here?" and responds, "Trash western Indological work done with motivation and instead rewrite Indian history." He believes that truth can be seen through the lens of our national heritage. Unlike Krishna, who possessed all 16 kalas (or qualities) that define perfection, Rama only possessed 14 kalas. As a result, the prince of Ayodhya is flawed, as he demonstrates on many occasions, most notably when he asks his wife to undergo a chastity examination. Rama sends his pregnant wife to the forest when an impolite citizen questions his queen's chastity. Instead of banishing his own queen, Krishna would have most likely publicly humiliated and shamed the citizen. Despite his flaws, Indians adore Rama because he elevates sacrifice to a new stage. He is a warrior prince who cheerfully relinquishes the greatest empire of the time so that his stepmother has no cause to complain. He is a husband who abandons his wife because one of his millions of subjects – only one – objected to her presence in the kingdom. From a modern viewpoint, where we naturally genuflect before politicians, Rama was going too far, but for the king of Ayodhya, his own comforts and those of his family were unimportant. He understood that the king's primary responsibility was to serve his people, as dictated by ancient Hindu laws. So how could he possibly have even one dissatisfied resident, no matter how obnoxious? "Rama will discover the truth of things, and men flocked to him from all over the land, as the rivers of the world all flow to the sea," William Buck and B.A. van Nootena write in their moving and brilliant translation of the Ramayana. Rama was revered and adored by all. "His presence flooded my heart. Rama was as gentle as the new moon's rays, and solid enough to serve all men. He never lost his celebrity

or fortune. Men lived long lives when he was king, surrounded by their children, grandchildren, and whole families. Funerals for the young were never held by the elderly. Rain fell and the world became fertile; yes, the earth became bountiful. "Peace and Rama ruled together as mates, and bad things did not happen. Men became more compassionate and fearless. All around him exuded a sense of luck and good fortune. "A king like Rama had never been seen or recognized in any kingdom before, and no one like him followed in the later ages of this world."

5.Other Technological descriptions with modern scientific proofs

Professionals in the technology field must have both knowledge and ideas. Both are mutually exclusive: you can't execute ideas without knowledge, and you can't use your knowledge effectively without ideas. Along with experience, coming up with a new concept that can be realized and implemented for the betterment of society requires a lot of creativity. Interestingly, many of the concepts underlying today's technical advancements were already expressed in Hindu holy books such as the Ramayana and Mahabharata, which are thought to have been written thousands of years ago. Let's take a look at some of these technology-related concepts and consider whether they had the necessary expertise before placing them down on paper. Ravan is said to have kidnapped Sita in the "Pushpak Viman" in the Ramayana. According to the Ramayana, the "Pushpak Viman" depicted in the epic was much more advanced than modern aeroplanes. Ravan received the "Pushpak Viman" from Kuber, who was the richest man in the world at the time. Real, even today, International flights are prohibitively costly, and only the wealthy people can afford them. When "Lava" was lost in another episode, Valmiki created "Kusha" from grass, which is similar to cloning. Again, it appears that the cloning he performed was much more advanced than current cloning techniques. Another related citation is "Raktabij," in which every drop of his blood on earth created his "Adult clone." Ganesh, on the other hand, is a highly advanced organ transplant in which the head of a recently discovered elephant was inserted on the body of a recently beheaded child. The boy would have died if it had been too late. There is also an interesting incident from the Mahabharata. Sanjay was given "Dibya drishti" by Krishna so that he could see a "Live Telecast" of "Kurukshetra" and explain it to Dhritarashtra, who was blind and wanted to know what was going on on the battlefield. "Dibya drishti" is comparable to a modern television set in that Krishna couldn't give it to Dhristarastra without Sanjay's help. Imagine a central computer system with wireless links that can accept voice commands or thoughts, and you can see how cameras in the sky, similar to today's satellites, can point to the locations that Dhritarashtra requested Sanjay to describe. As a result, a modern definition of "Dibya drishti" is a television set with a wireless connection to the satellite and access to the device for controlling the cameras. The System Administrator, Krishna, who had all of the required technologies at his disposal, granted the access permission. The "Astra" used on the battlefield resembled bombs, with the "Bramhastra" resembling the all-powerful nuclear bomb. They would not bring these guns on the battlefield; instead, they would log in wirelessly to a central control system to launch them and use GPS (Global Positioning System) to drop them precisely where they desired. Does that make sense? The aim of reiterating these ancient writings here is to remind the reader that those religious books contain a wealth of ideas, many of which have yet to be realised in order to positively transform human society. You can look at them as theory or a moral tale, but the need of the day is to see them as books full of technological ideas for the future. You can only see things

if you look at them with your eyes; if you look at them with your technological brain, you will understand them. Just a smidgeon of an extreme: would we ever be able to fly at the pace of thinking defined as "Antardhyan"? Men of a previous generation used to say that the Vedas contained all wisdom. The first reaction of someone who hears those words is that it is an overconfident statement. It's important to note that every sloka in ancient Hindu manuscripts has multiple meanings.

5.1. COVID-19 VIRUS IS DESCRIBED IN ANCIENT INDIAN TEXTS

Around 5,000 years ago, a coronavirus-like virus was identified in ancient ayurvedic scriptures. Dr. Smita Naram, the founder and CEO of Ayushakti, said she was surprised to find a chapter in the 'Charak Samhita' called 'Krimi,' which refers to infections, that describes an infection that is identical to the novel coronavirus. Smita Naram explained that in the chapter 'Krimi,' there is a word called 'Sleshma Krimi,' which is described as something that cannot be seen with the naked eye because it is 'Maha Sukshnma,' which means it is so small that it requires a special instrument to see it. "I was taken aback when I came across this explanation in the Charak Samhita. It was hard to believe. There is a chapter on 'krimi,' or diseases, in the Charak Samhita. A overview of Sleshma Krimi is included in the chapter. Smita Naram said, "It's just interesting how they've explained how 'Sleshma Krimi' works." "They are 'Maha Sukshma,' but they can't be seen with the naked eye." This indicates that they are so small that they need a special instrument to see. Dr. Smita Naram revealed, "This was said 5,000 years ago!" "How they settle in your respiratory system is described in the Charak Samhita," she explained. Furthermore, Dr. Smita Naram expressed her surprise at how Krimi was portrayed in the document. She characterised it as being round in shape, strong, and covered in spikes. "The definition of the novel coronavirus in the Charak Samhita is so similar to that of the novel coronavirus." They explain how Sleshma Krimi causes cough, heavy congestion, and breathlessness after settling in the respiratory system, and how it can sometimes lead to death," Dr Smita Naram explained. Three ways to avoid infection and protect oneself are also revealed in the ancient scriptures. Dr Naram explained that ancient scriptures advise people to isolate themselves in order to avoid contracting the infection, as well as not to feed them anything that will strengthen them and make them more active (Indiatoday, 2020).

5.2. THE VALUE OF A PIE

A Sloka in the Rig Veda's 10th book appears to be composed in praise of Lord Indra. The technical translation of that Sloka correctly calculates the value of pi up to 28 digits. It wasn't until the advent of computers that western mathematicians were able to reliably calculate this value up to 16 digits. Here's a challenge for those who believe a machine can perform any calculation. Use the best machine you have and write a programme to correctly measure the value of pi up to 28 digits. You'll understand how tough it is.

In ancient India, many scientific and technological innovations were made. Since many people in today's generation are unfamiliar with them, they will be briefly listed in order for readers to gain a basic understanding of them.

5.3. THE ANCIENT INDIA INVENTIONS

Calculus was created by who? Calculus is said to have been invented by Newton, according to western books. Calculus is found in Sanskrit mathematics texts by Arya Bhatta and Bhaskaracharya, which were written several centuries before Newton. Who invented numbers, for that matter? Indians, to be precise. The number zero was unknown to the ancient Romans. Mahogham (1 followed by 62 zeros) and the corresponding smaller decimal fractions were known to ancient Indians. Ganitha Sastram was written in

Telugu by Paavuloori Mallana in the 12th century. "Sara sasi shatka chandra sara saayaka..." begins one poem in the novel.

It appears that the context is a poetic representation of nature. Each word in the poem has a mathematical term attached to it. It is about a mathematical problem. In the first square of the chess board, one grain is set. The second square contains the double of that number, and so on. In the last square, how many grains must be placed? The response is 18446744073709551614, which is 2 to the power 63, according to the poem.

5.4. INVENTION OF NUCLEAR PHYSICS

Pakudha Katyayana, a Buddhist teacher, taught atomic theory. The atomic theory was written in the Vaiseshika Sutras by Maharshi Kanaada in the 3rd century B.C. Smaller magnitudes are given in the Agni Purana. Paramaanu is the smallest of them all, measuring nearly one billionth of a metre. This number corresponds to the size of an organic molecule as determined by western scientists. Earth, Water, Air, Fire, and Akasa are the five elements of nature, according to the Upanishads. (Akasa was unknown to ancient Greek and Roman philosophers.) The Earth represents the solid state, Water the liquid state, and Air the gaseous state, as one would expect. Plasma, the fourth state of matter, is the source of fire. Even though some nuclear particles are stable, Western science has not accepted nuclear state as a state of matter; Akasa means nuclear state. Maharshi Goutama identified three models of micro-scopes from which atoms and electrons can be seen in the ancient Sanskrit text Anu Sidhdhantam.

5.5. MEASUREMENT OF SPEED OF LIGHT

The following Sloka praising the Sun is found in Sayana Madhava's Rig Veda Bhashyam:

Sahasre dve, satadve, dvecha yojane yojane yojane yojane yojane yojane yojane yojane yojane namosthuthe ekena nimeshardhena kramamaana namosthuthe ekena nimeshardhena kramamaana namosthut Half of Nimesha equals 8/75 fraction of a second, and one Yojana equals 15788.8 metres. The speed of light is calculated to be 325940 km/s. It's important to note that the above figure is an approximation intended for convenience.

Remembering the importance of pi as 22/7 is an example of remembrance. It beats the previous record of 215000 km/s set in 1676 by Danish astronomer Ole Roemer. With so many things discovered, it's only natural to assume that our forefathers used light as the basis for length measurements; after all, modern science considers light velocity to be a Universal Constant! The Sloka's word "kramamaana" has the secret sense of gradual minute transition. This will be dealt with at a later time.

5.6. INVENTION OF WEAVING

Many scholars believe that the origins of primitive gins and spinning wheels can be traced back to India. The earliest samples of cotton cloth were discovered in the Indus Valley excavations. There were also samples of Kalamkari, the oldest mordant dyeing technique for cotton fabrics. In South India, the Kalamkari technique was perfected, and the conventional form is still used today. The Puranas characterise spinning and weaving in terms that are comparable to modern industrial concepts. The weaving industry employed specialised factories that collaborated with domestic businesses and were paid on a piece rate basis. The types of fibres used for spinning and the fabrics created were unlike anything seen in any other country at the time. Indians were known for their excellent spinning and weaving abilities, which have never been

exceeded by people from other countries, except in the past. According to Pliny's Natural History, India exported vast amounts of sheep fur, woollen garments, coloured carpets, silks, cotton clothing, and fabrics ranging from coarse canvas to fine texture textiles to Rome. Indians were known for weaving the thinnest sarees that could fit through a finger ring. The British did not know how to weave and lived naked during Julius Caesar's reign as Roman Emperor.

5.7. INVENTION OF FIRE ARMS

Some people in mediaeval Europe had learned of India's powerful fire cannons. Marco Polo (in the 13th century) was commissioned by the king of his country to discover the secret of Indian fire arms. Gold coins and precious stones were presented to Marco Polo. If required, he even brought some prostitutes to woo people. He began his quest for the secret in the Punjab region. "Get out of our country," they said, pointing a gun at him. Otherwise, we'll shoot you with this gun." He then travelled to southern India in search of the secret. The south Indians, on the other hand, were more accepting. They told him that the secret was kept from the general public.

Generations of the engineers who built the guns live in the king's fort. The weapons were locked in the armory, and the general public would never have seen one. The weapons were only brought out in an emergency, such as a war. A few people told Marco Polo that the Chinese were taught how to make gun powder when some Indians came to visit them in the past. Marco Polo then travelled to China, but he was unable to locate any firearms. The gun powder was used to make fireworks and rockets for the festival. He returned to Europe with samples of gun powder. We know the niter, sulphur, and charcoal powder make up gun powder. Natural niter was scarce in Europe, and what they did obtain from other countries was not always of high quality. The world's purest niter can be found in India's mines in its natural state. The lack of good metallic alloys for the bodies of the weapons, as well as the lack of good machine tools for producing them, are other issues that the Europeans face in the production of the guns. Since the majority of the weapons backfired or exploded, the manufacturing of the guns faded into obscurity. What strategy did the British use to conquer India? With their weapons, no way. During the reign of Hyder Ali, the first battle between the Indians and the British took place in Mysore. The British suffered 90% of the losses, while the Indians suffered just 10%. The British discovered that their guns were no match for the Indians'. In addition to firearms and cannons, the Indians had rockets and missiles. What is a Sathagni, exactly? The majority of us believe it is canon. Satha means one hundred and Agni means fire; it is a missile with one hundred bullets. It's shot out of a cannon. When it arrives at its target, it explodes. Many formulas for producing gun powder can be found in Sanskrit manuscripts such as Sukra Neethi Sastra. Indian niter was the first item exported by the British East India Company.

Sir A. M. Eliot, Heinrich Brunnhofer (a German Indologist), and Gustav Oppert have all said that ancient Hindus were familiar with gunpowder. According to Eliot, the Arabs learned how to make gunpowder in India, and that they had previously relied on naptha-based arrows. It is also said that, despite Persia's abundance of saltpetre, India was the birthplace of gunpowder. We may trace the evolution of fire-arms in ancient India based on the above observations.

5.8. BUILDING THE FIRST SHIPS

Only soft wood trees can be found in Europe. These woods are suitable for sailing in the Mediterranean or a smaller sea. They are unsuitable for ocean sailing. As Vasco de Gama arrived in India, his ship was on the verge of sinking. Indian marine engineers were responsible for repairing the ship and restoring its seaworthiness. Which country has the toughest wood-producing trees? India is a country in Asia. Deva

Tharu, the tree that gives the best wood, was the Sanskrit term for the deodar tree, which is native to India. Teak and mahogany are two other hard woods native to India.

J. Ovington, the British King's Chaplain, was a seventeenth-century English traveller who visited Surat and wrote a book called "A Voyage to Surat in the Year 1689." He was astounded by the Indians' expertise in shipbuilding, which he discovered to be superior to that of Europeans. He urged the English to use the Indians' timber because it was so heavy that it would not break even if hit by a bullet, and he urged them to use it "to help them in battle." Ovington remarked that the Indian Teak was more stable than the English Oak. Ships with 100 oars are listed in the Rig Veda. Ships of this kind sailed through seven oceans before returning to India. During pre-Christian times, visitors to India from Greece and Rome wrote that the Brahmins of India understood that the world is shaped like a globe and that one can enter the same location by sailing across the seven oceans. Large Indian ships carrying 700 people were described in Buddhist Jataka tales. Koutilya wrote about the Board of Shipping and the Commissioner of Port, who controlled sea traffic, in the Artha Sastra. During Vaivasvata's reign, the first geographical survey of the planet was carried out, according to the Harivamsa. Maps depicted the cities, villages, and agricultural land demarcation of the time period. The best and most detailed depiction of a world map drawn on a flat surface with an accurate scale can be found in the Brahmanda Purana. According to the Padma Purana, world maps were prepared and preserved in book form and held in chests with care and protection. Surya Siddhantha discusses the development of a wooden globe to represent the earth, as well as the labelling of horizontal circles, equatorial circles, and other divisions. The Indian ship was the second item exported by the former British East India Company. A few of these ships are still in existence, and they are used to train British Navy cadets. Hundreds of Maharajas of India's ships were lent to the British during World War II for use as hospital ships.

5.9. INVENTION OF STEEL

Steel called "wootz" is mentioned in the Rig Veda. South India has evidence of steel production dating back to ancient times. The Arabians used to benefit handsomely from the sale of Indian steel ingots to Europe. The queen of England sent a scientist called Benjamin Hauntsman to India in 1746 to learn how to make steel. Hauntsman remained in India for a few years before returning to Britain and submitting a report to Queen Elizabeth. According to some historical documents, he did not write the key secret and founded his foundry in his hometown. We don't need to know how the secret got to Henry Bessemer because his process was simply the Indian crucible method of producing steel. The method of casting was another Indian contribution to European industries. Wood was used to build the frames of machine tools at the time. Clocks and other mechanical devices were available in Britain as early as the 1300s. They were not the work of precision machine tools, but of professional craftspeople. The high precision machine tools could not be produced until the structures of the machine tools were cast using Indian casting methods and their other parts were made of hard metals using Indian steel making methods. This was crucial to Europe's so-called Industrial Revolution in the 1800s.

5.10. INVENTION OF THE AEROPLANE

Tripura Vimaanam is defined in the Vaimaanika Sastra as a solar-powered vehicle that can fly on ground, under the surface of water, and in the air. Sakuna Vimaanam is a space shuttle that looks like a hybrid between an aeroplane and a rocket. During their reign in India, the British stole the majority of our Sanskrit

manuscripts. Sivasankar Thalpad of Bombay designed an engine-powered aircraft that flew to a height of 1500 feet in 1895. He used to lecture at the J.J. School of Arts and was a Vedic scholar.

He learned about the technology from some ancient Sanskrit texts. Praacheena Vimaana Vidye Chaasodha is a book he wrote in Marathi. The Maharaja of Baroda, Lalaji Rayanji, was one of the many witnesses to the plane's flight. Prof. Thalpad's legal heirs sold his property after his untimely death. To the British, he gave all of his scripts and materials. (You can look up the Wright Brothers' first flight year.)

5.11. DISCOVERY OF POWDER METALLURGY

Indians, to be precise. The iron pillar in Delhi, which is now rust-free, is evidence of this. It is not the only one of its kind; many more can be found across India. The Russians who took scrapings from the pillar reported that powder metallurgy was used in its construction. Powder metallurgy can only produce small parts in today's so-called space-age technology; they're mostly used as cutting tool tips. How did our forefathers use powder metallurgy to build such a massive pillar? The pillar is a time capsule that is posing a challenge to the universe. Will we hit the pinnacles of accomplishment that our forefathers did?

5.12. INVENTION OF NUCLEAR WEAPONS

You've probably heard of the great Astras mentioned in our Puranas. However, you may not have read all there is to know about them: "A terrible weapon is mentioned in the Mahabharata, an ancient Indian epic written 3000 years ago. Unfortunately, in our age of the atomic bomb, the description of this device exploding would not seem to be exaggerated: '.... a flaming shaft possessed of the effulgence of a smokeless fire (was) set go...' That was the general impression of this weapon. Involuntary connections are also evoked as a result of its use. '... As a result, the remains of the deceased are unidentifiable.... The survivors' nails and hair fall out, and their food becomes unfit to eat. The Sun, the stars, and the atmosphere were all covered in clouds and poor weather for many years after that.' This weapon was known as Brahma's Weapon or Indra's Flame......" 1st.

5.13. INVENTION OF PLASTIC SURGERY

Indians, to be precise. Maharshi Susruta, an ancient Ayurvedic surgeon, describes it in detail in his Samhita. Acupuncture was created by who? Indians, to be precise. Who is the inventor of martial arts? Indians, to be precise. Who is the inventor of remote sensing and imaging? Indians, to be precise. Who was the first to discover Advanced Astrology? Indians, to be precise. Who was the first to discover Advanced Astronomy? Indians, to be precise. Who was the first to discover Groundwater Hydrology? Indians, to be precise. We can read the Brihat Samhita of Varaha Mihira; the Indian approach is superior to modern space satellite techniques. Who were the first to construct planned cities with high-tech water supply and sewerage infrastructures? Indians, to be precise. Who came up with the concept of hanging bridges? Indians, to be precise. Chinese visitors to India a few thousand years ago wrote about our steel beam and steel rope hanging bridges.

5.14. FIRST DISCOVERY OF HIGHER PHILOSOPHY

Indians, to be precise. Did ancient India have Doora Sravana and Doora Darsana machines? Yes, indeed. Did our forefathers have access to radar and laser weapons? Yes, in the Sanskrit manuscript Samarangana Sutra Dhara, the technology is defined. Irrigation Engineering was discovered by who? Yilaa Varta was another name for India. Jala Maaruta, the country of water-laden winds, is the secret sense of this name. Monsoons are found nowhere else on the planet. India receives more precipitation than the rest of the world

combined. India is the land of mighty rivers, which outnumber all other countries in terms of number. In the past, the Ganga's water flow rate was greater than that of any other river on the planet. With exceptional managerial and social skills, the people of South India developed and maintained an extensive system of irrigation tanks and associated canals. They have shared the waters since the beginning of time, following the natural order. Tiny dams were built in any possible area, to the point that a British engineer in the nineteenth century thought it would be difficult to add another tank to the irrigation system. It was an example of Indian engineering and human cooperation at its best. There was nothing like it somewhere else in the world at some point in the past. Although peasants in other countries toiled for a single harvest, Indians produced two or three bumper crops per year. During times of crisis, the harvest in the Krishna and Kaveri river basins was sufficient to meet the needs of the rest of our nation. In pre-Christian times, visitors from Europe and China described India as a land of plenty. The same is mentioned in our Buddhist and Jain religious records. Who was the first to propose the universe's infinity and the multiplicity of inhabited worlds such as the earth? Indians, to be precise. According to the Vishnu Purana, the planet is only one of thousands of millions of inhabited worlds like it in the universe.

5.15. LORD SHIVA'S TRIPURA VIMAN IS AN ANCIENT FLYING MACHINE THAT IS TECHNOLOGICALLY ADVANCED THAN TODAY'S ONE

Did you know that in ancient times, aerial battles and chases were very common? When you read our ancient Indian epics, we bet Flash Gordon, Buck Rogers, and Star Trek would seem insignificant! So, did airships exist in those days? What did they seem to be? The Mahabharata describes Vimana as "an aerial chariot with the sides of iron and clad with wings." Maya, an asura, scoots a flying disc measuring 12 cubits in diameter. They are described as double-decked circular aircraft with a dome and portholes in the Ramayana. Ravana, the asura king, rides in an aerial chariot that resembles "a light cloud in the sky."

In 1875, Maharshi Bhardwaj's text Vaimanika Shastra, written in the 4th century BC, was rediscovered in an Indian temple. It's a comprehensive guide to operating Vimanas, including safety precautions for long flights, how to secure airships, and more. The Rigveda also mentions "golden artificial birds" that can transport people to the heavens. A Tripura or Tripurajit Vimana, an airship that sails at the speed of the wind, exists. It is said to have been constructed for Lord Shiva. This Vimana is said to be a three-story flying large craft powered by solar rays, according to Vyamanik Shastra. Its shape is elongated, similar to that of a modern blimp.

It consists of three aavaranas, or enclosures, or levels. Pura is the name given to each aavarana. Tripura Vimana is so called because it consists of three aavarana. By altering its structure, each of the three aavaranas enables it to travel naturally on sea, land, and in the sky. Trinetra loha, a metal, is used to create this divisible plane. The first portion is 100 feet wide, 3 feet thick, circular or square, with 80 feet long, 3 feet wide, 5 feet high boat shaped drones to allow it to float on water, according to the Vimanika Shastra. The Vimana, on the other hand, has a mechanism for drawing wheels that allows it to fly on ground. The second floor, which is slightly lower than the first, is 80 feet wide and 3 feet thick. The burning-sun defence unit, Sooryaathapopasamhaara Yantra, is also included in this technologically advanced Vimana. It has the ability to draw dark material from the sun's rays and use it to conceal the Vimana from the enemy, a skill known as Goodha.

University of California at Ervine in April 2017, Aerospace Engineer Travis Taylor, PhD obtained a model of an Aircraft design specification from Ancient Indian Texts believed to be written around 500 BC. He tested the model by subjecting it through wind tunnel analysis to determine if the said design is a viable flying machine or not. The Aerospace vehicle model is connected to a boom armature which has a force gauze to determine airflow go past 50 miles/ hour measuring the normal force out of it. The test denotes that the aircraft exhibited slight lift upward (steady & stable). There is no sign of side movement & sensors recorded measurement of various forces & torque & pitch to determine how aerodynamic the body of the model aircraft is. The normal force recorded positive between 0.03 – 0.06 which is positive lift in terms of Aircraft lift. The result of the Scientific experiment has found that the shape of the model aircraft designed from the design specification from Ancient Indian texts is viable flightworthy ([Ancient Aliens: Vimana Model Aircraft Experiment (Season 12, Episode 11) | History - YouTube](#)).

5.16. THE NAME OF THE COUNTRY

Why was India given the name Bhaarata Desam? The majority of today's generation believes that India was named after Emperor Bharata. This interpretation is most likely not quite old, only a few hundred years old. Is there another country on the planet named after a man? All religions regard the earth as a female, a mother goddess. All European countries were named after local mother goddesses prior to the spread of Christianity. The same can be said for any other country on the planet. From the beginning of time, India has inherited the greatest number of ancient manuscripts of any country on the planet. They covered the broadest spectrum of topics known to humans. In ancient times, Indians were the originators of all higher knowledge. What was considered unlikely by our Maharshis in the past? "Pogadaraa nee thalli bhoomi Bhaarathini" – honour your mother land Bhaarati! – wrote a Telugu poet. Bhaarati (Saraswati), the goddess of wisdom, was the inspiration for the name India. This coveted title could not be claimed by any other ancient civilization on the planet. Scholars from China and Europe used to come to India to study at some of the world's oldest educational institutions. Bhaarati Aalaya, the goddess Bhaarati's temple, is another secret sense of the word Yilaa Varta.

So much for the Indians' psyche, but we're psychosomatic creatures. The mind and body are inextricably linked. Is there something in the bodies of Indians that demonstrates goddess Bhaarati's blessings? Yes, indeed. During World War II, British military doctors conducting autopsies on the dead discovered that the Indian pineal gland is much larger than that of the British. The third eye is the pineal gland. According to esoteric teachings in mediaeval Europe, it is the seat of higher understanding.

Yoga and Tantra texts in Sanskrit tell the same thing. Indians make up the largest community of foreign computer programmers in the United States at the moment, accounting for more than 70%.

After researching Hindu manuscripts such as "Vimaana Sastra" and "Amsu Bodhini," the Birla Science Center in Hyderabad produced some alloys. The alloys have certain unusual properties that are not known in Western countries.

How will the next generation of computers be designed? The old processor has been replaced by a dual-core Pentium processor. However, since electron currents are still used, progress would be slower. Light travels faster than electron current, as we all know. The next major breakthrough in computer manufacturing will occur when they use laser flows instead of electron flows, as discovered by Nobel Laureate Sir

C.V.Raman. Some researchers in the United States of America are already working in this region. The Numeric Co Processor in the C.P.U. operates according to arithmetic logic, which is the next disadvantage in a machine. We all know that multiplying an eight-digit number by another eight-digit number is impossible in one stage. However, ancient India knew a one-of-a-kind method – Vedic mathematics – that provided this response in a single step. Even with today's computer hardware, if the Numeric Co-Processor is programmed using Vedic mathematics, each personal computer would perform like a supercomputer.

Our forefathers did not use light as a criterion for measuring length. Light bends as it passes by the side of a big mass, according to Albert Einstain. How can anything that bends be said to be unchangeable? Time affects all created; there is no such thing as a universal constant. This rule applies to the speed of light as well. Our Sun's light velocity was higher in the Krita Yuga than it is now, even if only by a small fraction. Light's velocity is equal to the amount of energy contained in the Sun or any other star. Modern science also acknowledges that over billions of years, the Sun has lost a significant amount of energy. Then there must be several other stars in the universe that have more accumulated energy than the Sun and emit light that is faster than the Sun's? Yes, indeed. After developing more advanced equipment than what they have now, modern science will confirm this.

So, why aren't we able to make use of our own ancient knowledge? All in life must go through cycles of time because it is a natural law. A period of darkness must precede a period of light, and a period of wakefulness must precede a period of sleep. And a period of happiness must be accompanied by a period of sadness, otherwise the human mind would not value happiness appropriately. Following a time of sadness, the happiness that follows will be even more heartening. As a result, the higher psyche of Indians is currently sleeping, according to that rule. Is it going to wake up some time soon? Is it possible to see it in our lifetime? Yes, indeed. Some Indian and Western astrologers expect that India will reawaken to a portion of its former glory in the next two decades. "(In India), good character and culture would be inculcated in all spheres of life," one visionary wrote. ....Indian society would shed its degenerate culture and become egalitarian as a result of its technological advancement and increased friendship with America. By the year 2020, Indian society will have greatly broadened its horizons. …. Spiritual books from India will become immensely popular and will appeal to a worldwide audience. Spiritualism's winds will sweep around the globe starting in 2010, awakening an increasing number of people. Spiritualism starts where the boundaries of (modern) science stop. .... As science advances, scholars will begin to recognise the value of spiritualism. A new age will begin in 2050......." [2nd]. Our Hindu scriptures also support this with science and technology. They are priceless gifts from our forefathers. They would undoubtedly aid India's growth.

6. Sanskrit as Natural Language for Artificial Intelligence
6.1. Sanskrit: Designed for Machines by Nature

Sanskrit, as the oldest language (as evidenced by the Bhagvad Gita's description of the universe's evolution), is also well organised, necessitating the creation of compilers for it. This will aid in the most effective and productive application of Vedic knowledge. The ancient Vedic scriptures, which are believed to be practised by the world's oldest and most advanced cultures, can't be discussed better than how a computer can better understand human beings and function for the good of the human race. The proposed artificially intelligent system's states and actions are based on knowledge from Vedic literatures, and it uses this information to determine the next phase or method to be taken. By means of the method One of the main tasks that this artificial intelligence system must understand is analysing the outside world and other living

and non-living objects. To take care of many aspects of human life, a framework that is similar to a human's thought process is needed.

Artificial intelligence has infiltrated a wide range of fields, including natural language processing. The need to feed natural languages as inputs to machines emerged as a result of man's constant attempts to stay away from computer jargon. There is a lot of complexity in all natural languages. Though humans correctly interpret the languages as a result of their use, uncertainty is a disadvantage for a machine that lacks the ability to differentiate between the different interpretations on a contextual basis. As a result, today's world needs a language that can greatly reduce uncertainty while still being ideal for information representation in artificially intelligent systems. Sanskrit, which has been in use for thousands of years and has not worn out or been moulded by human use, may be used to represent such information.

6.2. Processing of Natural Language

Natural language processing is an artificial intelligence subfield dedicated to making machines understand statements or words written or spoken in human language. The field of Natural Language Processing (NLP) is concerned with programming computers to perform useful tasks using human languages. Natural language processing is divided into two parts: natural language comprehension on the input side and natural language production on the output side. Text or voice can be used as input and output in natural language processing.

Understanding natural language entails:

• Mapping natural language input into useful representation.

• Examining various aspects of the language.

The Process of Generating Natural Language

• Text preparation entails locating relevant information in a knowledge base.

• Sentence preparation entails the use of required words and the development of coherent phrases.

Natural Language Processing in Action

Natural language processing offers a stronger human-computer interface, which may help artificial intelligence systems integrate more effectively into today's applications, such as:

• A natural language processing device for blind people using speech data to communicate with computers.

• Stephan Hawking's chair, which translates text into expression.

A translation software that can convert one human language to another.

• A software that examines a text for grammatical errors.

6.3. Natural Language Processing Ambiguities

The property of words or sentences having more than one interpretation or being perceived in more than one way is referred to as ambiguity. In certain cases, machines are unable to extract the required meaning of the input language since most natural languages are ambiguous. The following are some of the ambiguities that may occur when processing natural languages:

Ambiguity in the scope

I was eating ripe mangoes and bananas, for example. The term "ripe" can refer to only mangoes or both mangoes and bananas.

Ambiguity of Attachment

For instance, I stroked the girl who was holding the rose. A individual can touch a girl who is holding a rose or a girl who is being touched by a rose.

Example of Semantic Ambiguity: When driving, the car collided with a pole. The sentence can be interpreted to mean that a moving car collided with a stationary pole or that a moving car collided with a stationary pole. The inability of computers to differentiate between what is rational and what is not causes this uncertainty.

Example of Pragmatic Ambiguity: I adore you as well. I love you (just as you love me) I love you (just like someone else) I love you (and I love someone else) I love you (and I love someone else) I love you (and I love someone else) I love you (and I love someone else) I love you (and I love someone else) I love you (and I love someone else) I love you (and I love someone else) I love you (and I (as well as I like you).

6.4. Natural Language Processing in Sanskrit

Sanskrit is one of the few languages in the world with a clearly established grammar. Unlike other natural languages, which are learned over time through constant contact, learning this language begins with an understanding of the basic rules and norms that must be followed. Many scholars consider the ancient grammarian Maharshri Panini's grammatical "Treatise" "Ashtadhyayi," which contains 3959 sutras (formulae or rules), to be the crude form of coded effective language. This language has a rich and sometimes rigid declension of nouns that indicate their relationship to one another in sentences, which makes it easier to estimate using a semantic net model in an artificial intelligence framework.

In Sanskrit, vibhakti means love.

There are eight predefined vibhaktis in Sanskrit (cases). Words in a sentence that decline in one of these eight cases together convey to the reader the sentence's accurate, precise, specific, and unambiguous sense. The following are eight vibhakti cases in use:-

Ram eats a fruit. 1. Nominative: To address nouns (proper/common).

2. Accusative: In most cases, the accusative aspect of the sentence refers to the object of the action. Ram, for example, gives the book.

3. Instrumental: It refers to the instrument used to perform the action. Ram, for example, writes with a pen.

4. Dative: The object on which the action is being done is denoted by this case. Ram, for example, works for his children.

5. Ablative: It reflects the object's point of separation. Ram, for example, was thrown from his chariot.

6. Genitive: The possessor of the object is the word declined in the genitive case. Ram's house, for example, is made of bricks.

7. Locative: It denotes the object's location. Ram, for example, is sitting on the floor.

8. Vocative: When addressing a person or an entity, this case is used. Oh Ram, for example! Please assist us.

5. The Relationship of Sanskrit to Programming Languages

Sanskrit can be compared to a programming language with classes and objects, with all of its vibhakti's and grammatical laws. In Sanskrit, all of the terms that make up a sentence are fundamentally properties that can be considered as objects when they are appended with a proper case. Take the phrase "Sadhujanahpoojitavyahdevahkhaluprithivyaam" as an example.

Meaning: The positive one, who is a God on Earth, was worshipped.

'Saadhujana' refers to the quality of being healthy, 'poojitavya' to the quality of worshipping, and 'deva' to the quality of being holy. When declined in the nominative case, all three words function as pointers to a single object, i.e. words declined in the same case function as pointers to the same object. The object in this case may be a person with the qualities of being holy, deserving of worship, and of godly stature.

6.5. Converting Aphorism to Neurons: Building Atoms

The real challenge at hand is to produce neurons for the overall system to operate on, which is the most difficult of all. From Sanskrit aphorisms to tiny bits that can be converted into binary code using the required compilers, knowledge representation and observance can be broken down even further. The data available from the Vedic scriptures in the form of neurons can be used by the neural network in the machine. We can build a simple system that includes working parts that can understand Sanskrit-like language and can operate on more complex systems using natural language processing and genetic algorithms.

6.6. Better Decision Making:

Vedic Knowledge Systems based on such knowledge would enable people to make better decisions and rationalize situations in an ethical way. To support society, a definition for a well-versed set of structures is devised. Like NASA's plan to echo Sanskrit into space, AI may explore new paths into the universe. As a result, we can infer that Vedic awareness is extremely important in the field of AI.

7. Significance of AI in future of human civilization

"Value-based expert systems: a societal boon"

Transferring information to the so-called zero IQ machine is a time-consuming and dangerous process. Similarly, building a computer that can make decisions on its own is much more difficult. The key concept is to put ancient Vedic wisdom to use in teaching the human race. Vedic text and value-based learning from scriptures are well-established and widely regarded as a source of all kinds of data, facts, and knowledge for rationalizing the basis for making a decision. Such information can be processed in order to construct expert systems that can use Vedic knowledge. Being able to build such a device is crucial so the computers can perform optimally. As a result, Vedic expertise is very important as a source of basic data for expert systems to use during the decision-making process. Corruption, which is the most troubling aspect of today's society, can be eliminated by using computers that can make decisions based on Vedic knowledge. Since machines may become corrupted, other machines can be used to solve problems at some stage, according to value-based wisdom from the Vedic scriptures. Some of the benefits of incorporating Vedic knowledge into your daily life include:

The following are examples of AI-based systems:

• Meets the needs of modern society • Increases sustainability • Increases autonomy • Increases comprehension • Improves reliability • Improves output

It should be noted, however, that all of the above benefits related to the application of Vedic knowledge are contingent on the conditions of application and may become complicated if not handled properly, such as –:Increased complexity Initial implementation costs more Personnel with less experience

As a result, implementing AI-based tools and techniques is a viable option for improving the efficiency of AI systems.

Deep Artificial Neural Networks are attempting to mimic the actual brain, and improved AI capabilities are constantly emerging as better theories of how the brain functions are developed, though they are still a long

way from imitating the human brain. Industrial automation (manufacturing), information and communication technology, and medical sciences all use AI.

Cities face major challenges in dealing with ageing infrastructure, reducing carbon emissions and energy use, incorporating renewables, improving health care, reducing traffic, and reducing ambient noise, to name a few. AI tools will help solve these issues by facilitating the convergence of information technology with physical assets in cities, resulting in greener, cleaner, and more sustainable urban environments. In public, self-driving (driverless) vehicles that can cope with unknown scenes and dynamic interactions on the road would be commonplace.

Medical services will be improved because the brain will be able to interact with a robotic arm, allowing the patient to have more power. Patients' digital health records research may lead to tailored medication recommendations for treatment and prevention.

Big Data and Climate Change Artificial intelligence (AI) approaches examine patterns and use the data to develop solutions to the world's climatic disasters.

Business Development:

The results of an AI analysis of the organization's past actions can suggest improvements in how work is done and reinforce the role of each employee in driving business growth with greater accuracy.

Robotics: Using robots to inspect extraterrestrial objects would improve the efficiency of space exploration. Robots may be used to perform difficult tasks such as producing hazardous chemicals, running high-temperature devices, and functioning in ear-piercing noise. The growth of AI will be sustained by advances in four basic AI ingredients: data, compute resources, algorithms, and human talent. Robotic systems will be extremely advanced for performing knowledge-based back office tasks, and a growing number of industries will be AI-driven, changing the face of the global economy and the role of humans in the near future. No matter how dangerous AI is for society or how many opponents there are, there is no way to stop it from progressing because the wheels of change are steadily turning with a slew of social and ethical concerns as well as technological problems.

8. Way Forward

8.1. Today's AI Research

AI research is ongoing and expanding in today's world. According to technology writer Alice Bonasio, AI research has expanded at a rate of 12.9 percent per year over the last five years. China is expected to overtake the United States as the world's leading source of artificial intelligence in the next four years, having overtaken the United States' second position in 2004 — and it is rapidly closing in on Europe's top spot. In the field of artificial intelligence research, Europe is the largest and most diverse area, with high levels of international collaboration. India is the third-largest country in terms of AI research production, after China and the United States. In terms of specifics, there are seven distinct research areas where AI ethics research has limitations.

Search and Optimization

Fuzzy Systems

Natural Language Processing and Knowledge Representation

       Computer Vision
       Machine Learning and Probabilistic Reasoning
       Planning and Decision Making
       Neural Networks

Neural networks, machine learning, and probabilistic reasoning and computer vision show the largest volume of research growth.

8.2. Present Effects of AI

Artificial intelligence is being used for so many things and has so much potential that it's difficult to imagine our future without it — particularly when it comes to business. Machine learning systems are boosting productivity like never before, from process management software to trend forecasts and even the way brands promote through advertising. Artificial Intelligence can gather and arrange vast volumes of data in order to draw inferences and guesses that are beyond the human ability to process manually. It also improves operational efficiencies while lowering the risk of making a mistake, and it detects unusual trends, such as spam and fraud, to warn businesses in real time about suspicious behavior, among other items. AI is said to save money in a variety of ways, including "training" robots to manage incoming customer service calls and thereby eliminating several employees. It's also common knowledge that if your company doesn't use AI, it's likely to fall behind its competitors. AI has grown in importance and sophistication to the point that a Japanese venture capital firm became the first to appoint an AI Board Member for its ability to forecast business trends faster than a person. Artificial intelligence can and is already being used in many aspects of life, such as self-driving vehicles in the future, more precise weather forecasting, and earlier health detection, to name a few.

8.3. A Smarter Future

It is said that we are on the verge of the Fourth Industrial Revolution, which would be unlike any of the previous three. From steam and water power to electricity and assembly lines, computerization, and now, the question of what it means to be human is being challenged. The Fourth Industrial Revolution, according to Forbes, "describes the exponential shifts in the way we live, operate, and relate to one another as a result of the adoption of cyber-physical technologies, the Internet of Things, and the Internet of Systems." Smarter technology in our factories and workplaces, as well as connected devices that can communicate, imagine the entire supply chain, and make autonomous decisions, are only a few of the ways the Industrial Revolution can lead to business advancements. One of the most significant benefits of the Fourth Industrial Revolution is the ability to boost the world's population's quality of life and increase income levels. As computers, humans, and connected devices work together to improve supply chains and warehouses, our workplaces and organizations are becoming "smarter" and more productive.

According to Gigabit Magazine, AI would help to build a smarter planet in seven stages:

1. Rule-Based Systems (RBS) — everyday apps and RPA software that are all around us.

2. Context Awareness and Retention — algorithms that compile a body of data that machines can use and update. Chatbots and roboadvisors, for example.

3. Domain Specific Knowledge — computers that can gain expertise in a specific field that goes beyond what humans can do because of the vast amount of information they can access rapidly to make a decision.

4. Reasoning Machines — these algorithms possess a "theory of mind," or the capacity to assign mental states to themselves and others. They are conscious of their own reasoning and have a sense of morals, intentions, and understanding. As a result, they can think, negotiate, and communicate with humans and other devices.

5. Self-Aware Systems — Those employed in the AI sector strive to build and improve systems that are intelligent in the same way that humans are. There is no proof of this today, but some believe it will be in five years, while others believe we will never reach that degree of knowledge.

6. Artificial Superintelligence — creating AI algorithms capable of outperforming even the most brilliant humans in any domain.

7. Singularity and Transcendence — an ASI-enabled development path that could lead to a vast expansion of human capacity, with humans one day being able to bind their brains to each other and to a potential internet successor.

8.4. Envisioning AI in the Next 20 Years

2020-2025

Between 70% and 90% of all initial consumer interactions are expected to be performed or handled by AI by 2020–2025. AI could increasingly be used to create and test products in a variety of industries, from apparel and consumer goods to manufacturing equipment.

Individuals will be able to identify and design the customized goods and services they need in a variety of industries, including travel, banking, savings, and insurance. Autonomous vehicles will begin to appear in many cities around the world, with only the most complicated cases involving a human judge and full court proceedings. Our intelligent assistants will now be in charge of several aspects of our lives, from travel planning to gathering details for a meeting.

2026–2035

As we move closer to a single global medium of exchange, smart crypto tokens will be accepted alongside fiat currencies. Artificial intelligence is likely to have made its way into every industry. With the advancement of AI, a wide range of fully automated DAO businesses, such as banks, travel agencies, and insurance companies, could emerge. The advent of self-aware and self-replicating software systems and robots could lead to the development of artificial animal and ecosystem intelligence. Artificial General Intelligence is a plausible possibility; Artificial Super Intelligence is a marginal possibility; and the singularity remains an impossible possibility in this timeframe.

9. References

Alexander Gorbovsky, Riddles of Ancient History, The Sputnik Magazine, Moscow, Sept. 1986, p.137.
Swami Dattavadhut, Prophecies 1998 to 2100, Vanita Books, Mumbai, 1997, pp. 33-42.

An Exploratory study on Origin of AI: Journey through the Ancient Indian Texts & other technological descriptions, its past, present & future

Anjali MK, Babu Anto P. Ambiguities in Natural Language Processing, 2014. [online],rroij.com http://www.rroij.com/open-access/ambiguities-in-naturallanguage-processing.pdf

Abhimanyu Chopra, Abhinav Prashar. Natural Language Processing, 2013. [online],ijtee.org http://www.ijteee.org/final-print/nov2013/Natural-Language-Processing.pdf~ 81 ~International Journal of Sanskrit Research

AI – Natural Language Processing, tutorialspoint, 2015. [online] http://www.tutorialspoint.com/artificial_intelligence/artificial_intelligence_natural_language_processing. htm

Robin. Natural Language Processing-Overview, 2009. [online] language.worldofcomputing.net, http://language.worldofcomputing.net/nlpoverview/ natural-language-processing-overview.html

Shah GS. Similarities between Sanskrit and Programming Languages, Uttishthabharatam. Wordpress,com, 2011. [online] https://uttishthabharata.wordpress.com/2011/05/30/sanskrit-programming/

Rick Briggs. Knowledge Representation in Sanskrit and Artificial Intelligence, 1985. [online] aaai.org https://www.aaai.org/ojs/index.php/aimagazine/article/download/466/402

Kale MR. Panchatantra in Vishnusarman Motilal Banarsidass Publishers Pvt Ltd. Delhi, India. Reprint Ed, 2005.

The History of Artificial Intelligence - Science in the News (harvard.edu)

'Barbarik' - Did Ancient India have AI Robot Technology? Khatushyam Temple Mystery| Praveen Mohan | - YouTube

Adrienne Mayor – Gods and Robots_Myths, Machines and Ancient Dreams of Technology-Princeton University Press, 2018

ANCIENT LOST TECHNOLOGIES, Arkapratim Changdar; IJRAR June 2019, Volume 6, Issue 2 www.ijrar.org (E-ISSN 2348-1269, P- ISSN 2349-5138)

Ancient Aliens: Vimana Model Aircraft Experiment (Season 12, Episode 11) | History - YouTube

http://www.hinduwisdom.info/Hindu_Cosmology.htm

http://www.hinduwisdom.info/Advanced_Concepts.htm

http://www.hinduwisdom.info/Yantras.htm

http://www.hinduwisdom.info/Dwaraka.htm

http://www.hinduwisdom.info/India_and_Egypt.htm

http://www.hinduwisdom.info/India_and_Greece.htm

http://www.hinduwisdom.info/India_and_China.htm

http://www.hinduwisdom.info/Dwaraka.htm

http://www.hinduwisdom.info/War_in_Ancient_India.htm

http://en.wikipedia.org/wiki/Science_and_technology_in_ancient_India

5,000-year-old ancient scriptures describe something similar to coronavirus - India News (indiatoday.in)