

THE RISE OF INDIAN ENTREPRENEURS: A REALITY CHECK

Context

- **Atmanirbhar Bharat**, or a self-reliant India, is among the most prominent stated goals of the present government.
- Recently a **report was released by Capital Group** which highlighted nine factors that made “India appealing compared with other emerging markets.”
- Amidst all these reports and government’s policies it is **imperative to understand the correct employment picture.**

The Vision of Atmanirbhar Bharat (Self-Reliant India)

- The idea is that the country will achieve self-reliance in a whole host of economic activities.
- An associated idea, pushed forward by the government, has been **to convince people that they should not look towards the government for an official job.**
- The Indian government has long sought to boost domestic entrepreneurship.
- The current dispensation has consistently pushed for the private sector to take the lead in creating jobs.
- A necessary corollary of such growth would be **the rise of entrepreneurship in India.**

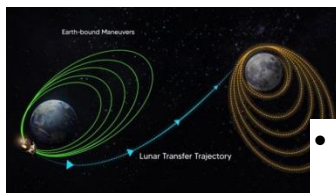
Select Government Schemes to Support Entrepreneurship in India

- **Startup India Scheme**
 - This scheme was launched to promote and support startups in India by providing them with funding, tax benefits, and other incentives.
 - It also provides legal and regulatory support and helps startups to network and collaborate with investors, mentors, and other entrepreneurs.
- **Mudra Yojana Scheme**
 - This scheme provides financial assistance to small and micro enterprises, including startups, through loans of up to INR 10 lakhs.

- The scheme has been designed to cater to the financial requirements of startups and small businesses in the country.
- **Stand-Up India Scheme**
 - This scheme was launched to promote entrepreneurship among women and SC/ST entrepreneurs.
 - Under this scheme, loans of up to INR 1 crore are provided to eligible entrepreneurs to start or expand their businesses.
- **Atal Innovation Mission (AIM)**
 - AIM is a government initiative that aims to promote innovation and entrepreneurship in the country.
 - The mission provides funding, mentorship, and other support to startups and entrepreneurs working on innovative ideas.
- **Electronic Development Fund (EDF)**
 - The EDF is a fund set up by the government to provide financial assistance to startups and small businesses working in the electronics and IT sectors.
 - The fund provides equity, debt, and other forms of funding to eligible companies.

WHAT IS THE TRANSLUNAR INJECTION (TLI)?

The Indian Space Research Organisation (ISRO) recently performed the TransLunar Injection (TLI) to slingshot Chandrayaan-3 towards the moon.



About TransLunar Injection (TLI):

- It is a **critical manoeuvre** performed during space missions to send spacecraft from Earth's orbit to a trajectory that will take them **to the Moon.**
- It is a key step in lunar missions, **enabling spacecraft to escape Earth's gravitational pull and travel to the Moon.**
- **When is it performed?** The TLI is performed when the spacecraft is at a specific point in its orbit known as the 'perigee' or the closest point to Earth.

How is it done?

- During a TLI, the spacecraft's **propulsion system fires its engines to accelerate the spacecraft.**
- The **spacecraft gains enough speed to break free from Earth's gravitational pull** and embark on its journey toward the moon.
- The **amount of thrust and duration** of the TLI burn **depends on various factors**, including the spacecraft's mass, its velocity in Earth's orbit, and the specific mission objectives.

What happens next?

- Once the TLI is successfully completed, the **spacecraft is put on a lunar trajectory**, and it will **continue its journey to the Moon without further propulsion from Earth.**
- After the TLI, the **spacecraft typically enters a transfer orbit**, which is an **elliptical path that intersects with the Moon's orbit.**
- The spacecraft **continues to travel in its highly eccentric orbit until it reaches the Moon's surface.**
- As the spacecraft **approaches the Moon**, it may perform **additional manoeuvres, such as lunar orbit insertion (LOI)**, to enter into lunar orbit or land on the lunar surface, depending on the mission's goals.
- The TLI burn has been performed successfully on many missions to the Moon, including the Apollo missions, the Chang'e missions, and the Artemis missions.

WHAT IS METAVERSE?

A new report has shown that Metaverse users will surpass 600 million by 2026 due to generative artificial intelligence (AI).



About Metaverse:

- It refers to a **virtual or digital universe where people can interact with each other and digital objects in a shared online space.**

- **Origin of the term:** The term “metaverse” first appeared in author Neal Stephenson’s 1992 science-fiction novel *Snowcrash*, which describes a future where millions of people use virtual avatars to participate in a cyberspace realm.
- The metaverse is essentially an interconnected network of virtual worlds, augmented reality, and virtual reality environments accessible through the internet.
- In this digital realm, users can create avatars, socialize with others, engage in various activities, explore virtual landscapes, and even conduct business or trade virtual goods and services.
- Elements of the metaverse include virtual reality (VR) platforms, augmented reality (AR) experiences, online games, social media, virtual commerce, and virtual art galleries, among others.
- The metaverse aims to offer a seamless and immersive experience, blurring the lines between the physical and digital worlds.
- Companies such as Meta (formerly Facebook), Microsoft, and Roblox are all investing heavily in the metaverse, and it is seen as a potential major driver of growth in the technology industry in the coming years.

What is Augmented Reality (AR)?

- It is an enhanced version of the real physical world that is achieved through the use of digital visual elements, sound, or other sensory stimuli and delivered via technology.
- It overlays digital content onto real-life environments and objects.
- AR works by superimposing digital information onto real-world objects to create a 3D experience that allows users to interact with both the physical and digital worlds.
- Unlike Virtual Reality (VR), which creates its own cyber environment, AR adds to the existing world as it is.

What is Virtual Reality (VR)?

- It is a simulated 3D environment that enables users to explore and interact with virtual surroundings in a way that approximates reality as it is perceived through the users' senses.

- The environment is **created with computer hardware and software**, and the users **need to wear devices such as helmets or goggles** (Virtual Reality headsets or helmets) to interact with the environment.
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LOKMANYA TILAK NATIONAL AWARD

Prime Minister will be honoured with the Lokmanya Tilak National Award on his visit to Pune.



About Lokmanya Tilak National Award:

- The award was **instituted in 1983 by the Tilak Smarak Mandir Trust**.
- This award is **given every year on 1st August**, the death anniversary of Lokmanya Tilak, to persons who have made **remarkable and extraordinary contributions**, working for the **progress and development of the nation**.

Who was Lokmanya Tilak?

- **Bal Gangadhar Tilak**, commonly known as Lokmanya Tilak, was a prominent **Indian nationalist, freedom fighter, social reformer, and political leader** during the Indian independence movement.
- He was one of the prime architects of modern India and probably the **strongest advocate of Swaraj or Self Rule for India**.
- He is known for his slogan, "**Swaraj is my birthright and I shall have it.**"
- He was born as **Keshav Gangadhar Tilak** and his followers bequeathed upon him the title of '**Lokmanya**', meaning he who is revered by the people.
- **Extremist:**
 - He was considered a **radical Nationalist**.
 - The **British Government** termed him the "**Father of Indian Unrest**".
- **Organisations:**
 - He **joined the Indian National Congress Party in the year 1890**.

- He also **helped found the All India Home Rule League** in 1916–18 with G. S. Khaparde and Annie Besant.
- **Tilak started his Home Rule League in Maharashtra, Central Provinces, and Karnataka and Berar region.** Besant's League was active in the rest part of India. It aimed to advocate for self-rule and **raise public awareness about India's right to govern itself.**
- **Literary works:**
 - Tilak was a prolific writer and journalist. He **used his newspaper, "Kesari" (meaning Lion) in Marathi and later "Maratha" in English to disseminate nationalist ideas.**
 - Some of his notable literary works include **"The Arctic Home in the Vedas,"** where he presented his theory that the Vedas originated in the Arctic region, and **"Shrimad Bhagavad Gita Rahasya,"** an interpretation of the Bhagavad Gita from a nationalist perspective.
- **Educationist:**
 - Tilak believed in the power of education and **established the Deccan Education Society in Pune in 1884.**
 - The society founded **Fergusson College and the New English School,** which played crucial roles in promoting modern education in Maharashtra.
 - **Tilak taught mathematics at Fergusson College.**
- **Social Reform:** Lokmanya Tilak was also an advocate of social reform. He actively **supported the eradication of social evils like untouchability and child marriage and promoted education for women.**
- **Lal-Bal-Pal:** He had popular leaders such as **Bipin Chandra Pal and Lala Lajpat Rai** as his political companions, and the three were popularly known as the **'Lal-Bal-Pal triumvirate.'**
- **Imprisonments:** He was **arrested for sedition on multiple occasions.** His most prolonged incarceration lasted from **1908 to 1914,** during which he wrote the famous book **"Gita Rahasya"** (The Secret of the Bhagavad Gita).
- In 1916 he **concluded the Lucknow Pact with Mohammed Ali Jinnah,** which provided for **Hindu-Muslim unity in the nationalist struggle.**

[RAILWAY PROTECTION FORCE](#)

Recently, A constable of the Railway Protection Force (RPF) allegedly shot and killed four people on board the Mumbai-bound Superfast Express train.



About Railway Protection Force:

- The history of the RPF dates back to 1882 when various Railway companies appointed their own guards for protection of Railway property.
- It was declared as **statutory force in the year 1957** by an enactment of Parliament and subsequently declared as an armed force of the Union of India in the year 1985.
- In 2003, the RPF partially took up the duties of escorting of passenger trains and access control at the railway stations”.
- It is led by a **director-general**.
- It is an armed force under the operational and **administrative control of the Union Ministry of Railways**.
- It is tasked with **protecting and securing railway property**, the passenger areas, and the passengers themselves.

What is the Government Railway Police (GRP)?

- The GRP is a **part of the district police force**, reporting to the state government.
- It works alongside the RPF, and should, under ideal circumstances, complement and strengthens its operations.
- They responsible generally for the **prevention and detection of crime on railways**.

AKIRA RANSOMWARE

Recently, the Computer Emergency Response Team of India issued an alert for ransomware dubbed Akira.



About Akira Ransomware:

- It is **designed to encrypt data**, create a ransomware note and delete

Windows Shadow Volume copies on affected devices.

- The ransomware gets its name due to its ability to modify filenames of all encrypted files by appending **them with the “.akira” extension.**

How does Akira Ransomware work?

- The ransomware is designed to **close processes or shut down Windows services** that may keep it from encrypting files on the affected system.
- It uses VPN services, especially when users have not enabled two-factor authentication, to trick users into downloading malicious files.
- The ransomware also **terminates active Windows services** using the Windows Restart Manager API, preventing any interference with the encryption process.
- It is designed to **not encrypt Program Data, Recycle Bin, Boot, System Volume** information, and other folders instrumental in system stability.
- It also avoids modifying Windows system files with extensions like .syn, .msl and .exe.
- Once sensitive data is stolen and encrypted, the ransomware **leaves behind a note named akira_readme.txt** which includes information about the attack and the link to Akira’s leak and negotiation site.
- Each victim is given a unique negotiation password to be entered into the threat actor’s Tor site.
- Unlike other ransomware operations, this negotiation **site just includes a chat system that the victim can use to communicate** with the ransomware gang.

How does ransomware infect devices?

- Ransomware is typically **spread through spear phishing emails** that contain malicious attachments in the form of archived content (zip/rar) files.
- Other methods used to infect **devices include drive-by-download**, a cyber-attack that unintentionally downloads malicious code onto a device, and specially crafted web links in emails, clicking on which downloads malicious code.
- The ransomware reportedly also spreads through **insecure Remote Desktop connections.**

BHOJPATRA TREE

Recently, the Prime Minister of India, in 103rd edition of 'Mann ki Baat programme highlighted the business of 'bhojpatra calligraphy' by the women of Mana village near Badrinath.



About Bhojpatra Tree:

- It is also known as **Himalayan Birch** and it is widely found in the Himalayas.
 - It is a **deciduous tree native to the Western Himalayas** that grows at elevations of up to 4,500 metres
 - It has a **high freezing tolerance potential**, allowing it to form a treeline in the Himalayan region.
 - It is a **long-lived species** which can survive up to 400 years and the only angiosperm in the Himalaya which dominates an extensive area at sub - alpine altitudes.
 - **Distribution:** It is widely distributed in the **altitudinal range from 3100 - 3800 m** in North-western Himalaya.
 - It contributes to the **preservation of the Himalayan ecosystem** by reducing soil erosion and creating a bio-shield for the remaining forests and sub-alpine meadows below the treeline.
 - The bark of this tree **was used for centuries** in our Country **for writing lengthy scriptures** and texts in Sanskrit and other scripts, particularly in historical Uttarkhand and Kashmir.
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