



Vidya Vikas Education Trust's

Universal College of Engineering

Accredited with B+ Grade by NAAC

(Permanently Unaided | Approved by AICTE, DTE & Affiliated to University of Mumbai)

Gujarati Linguistic Minority Institution

CURRENT WAVES

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College Profile

Everything you need to know about us.

Embraced by lush greenery and scenic beauty, Universal College of Engineering is a treasured place for aspiring engineers to leave their imprints on success.

As a college within the wider network frame, we are one of the fastest-growing institutions in India. Our institute has been accredited by the National Assessment and Accreditation Council (NAAC) with a B+ grade in the first cycle of accreditation. Times of India Survey Ranked No. 1 in India among Top Emerging Private Engineering Institutes for 6 consecutive years 2015, 2016, 2017, 2018, 2019, and 2020 and the saga of accolades still continues.

In response to the expectations of quality technical education, our college is approved by the All India Council for Technical Education (AICTE), New Delhi; Recognized by the Directorate of Technical Education (DTE), Government of Maharashtra; affiliated to Mumbai University.

Our college is also associated with professional bodies like IEEE, IETE, ISA, and CSI to update the revolutionary technological advancements.

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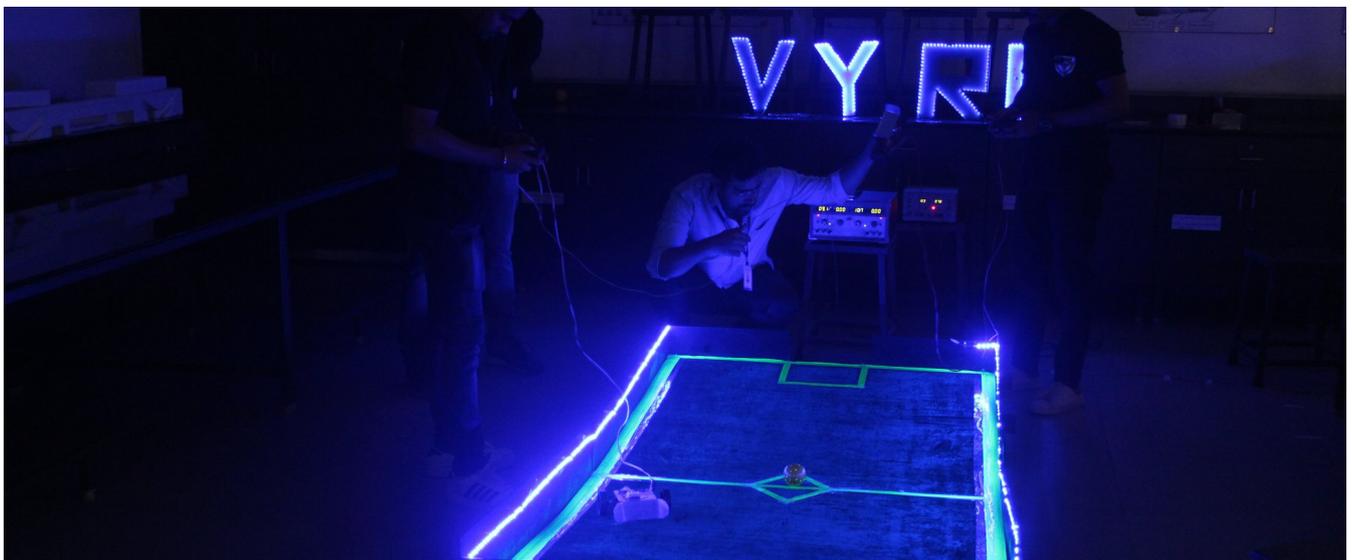
We offer 5 years of full-time Bachelor of Technology in Computer Engineering, Civil Engineering, Artificial Intelligence & Machine Learning, Information Technology Engineering, and Data Engineering.

The unique state-of-the-art facility of the institute has been carefully designed to accommodate the needs of the students. Laboratories are equipped with world-class facilities based on the latest technology of different sectors. Our smart classrooms are well ventilated, spacious, and equipped with overhead and LCD projectors along with the public address system. The College library provides a rich collection of specialist library resources and services to support student's academic work and enrich their research skills.



We are obliged to equip our students to get placed in highly reputed companies by mentoring their necessary skill set for cutting-edge technologies. The core highlighted areas are helping students with their technical competency, communication skills along with career guidance and counseling.

Universal College of Engineering has produced a large number of successful alumni who are working in reputed organizations in India and abroad and have contributed immensely to the cause of nation-building and society. We welcome all engineering aspirants to create an incredible legacy in the field of engineering.



The Maharajah goes back to Tata

In today's special story, we revisit Air India's journey through the years and see what the sale means for the company and the Indian government.



Business *The Origins*

Our story begins in the year 1932—in the city of Karachi. This was at a time when Karachi was still part of undivided India. On 15th October 1932, a 28-year old Jehangir Ratanji Dadabhoy (JRD) Tata climbed aboard a single-engine plane and took to the skies. His **destination** was Chennai (then Madras) and he intended to reach his destination after a brief stop at Mumbai (then Bombay). With him, he also carried a small pouch of airmail. It read —‘First Flight Madras-Karachi Airmail Service.’

And thus...Tata Air Mail had arrived.

Before you knew it, the airlines went from ferrying mail to ferrying passengers.

Within six years, the company owned 15 planes. And it was renamed, Tata Airlines. By 1946, it carried one in every three passengers in India and owned 50% of the country's fleet. The same year, it became a public company and adopted the **name** we're all familiar with—Air India.

And as you can probably imagine, a private airline ruling the skies was quite something. Even by global **standards**.

“Scarcely anywhere in the world was there an air service operating without support from the government. It could only be done by throwing on the operator the financial risk. Tata Sons were prepared to take the risk,” Sir Frederick Tymms, the then chief of civil aviation told a **newspaper in 1934**.

The takeover

Shortly after independence, the Indian government whipped up a joint venture with the Tata Group. They formed Air India International. But by 1953, the aviation sector had become a bit of a mess. Multiple airlines were **trying to** grab a piece of the fledgling industry and losses were mounting. Only Air India remained profitable.

And then in a nationalization spree, the Indian government took over the company for a sum of Rs 2.8 crores. It then **merged a bunch of entities** flying India's domestic routes, including Air India's domestic operations, and rebranded it—Indian Airlines.

And Air India International? Well, it became just Air India.

The fall

Air India lost market share in the post-liberalization period of the 1990s. And losses mounted. Indian Airlines, the domestic carrier, suffered a similar fate. And by 2007, the government merged both entities.

Here's what Shashank Shah, the author of *The Tata Group: From Torchbearers to Trailblazers*, **wrote**:

“Between 2007 and 2009, combined losses increased from ₹770 crores to ₹7,200 crores and borrowings rose from ₹6,550 crores to ₹15,241 crores. The merged company had over 30,000 employees i.e., 256 employees per plane, twice the global standard. Air India ended up spending almost one-fifth of its revenue

on employee pay and benefits while other private airlines spent about one-tenth.

Even before the merger, the Civil Aviation Ministry had decided to purchase 111 new narrow and wide-body aircraft for a whopping ₹67,000 crores funding it via debt.

As a result, between October 2012 and March 2013, the merged entity suffered an average loss of ₹400 crores every single month.”

Oh yes, it turned into a proper dumpster fire.

The comeback?

The government finally had enough of the beleaguered airline and it began its bid to wash its hands off Air India in 2017. And 4 years on, the journey has finally come a full circle. Tata Group has emerged with the winning bid and they're all set to take control of Air India.

So let's look at the deal itself and figure out what Tata is putting at stake right now.

All in all, they're shelling out about Rs 18,000 crores in enterprise value terms. You don't have to know too much about Enterprise value. But know this much—Tata isn't actually putting up all of this money. Instead, they're taking up about 15,300 crores worth of debt from the beleaguered airline and they're paying close to 2,700 crores in cash—which will ultimately go to the government.

In return, they're getting a pretty decent deal. There's the presence that Air India has built over the years—the brand

equity and all the airport slots. They will now control 4,400 domestic and 1,800 international landing and parking slots at domestic airports. As well as 900 slots at overseas airports.

And since the Tata Group already operates 2 other airlines—Vistara, a joint venture (JV) with Singapore Airlines, and Air Asia India, a JV with AirAsia Investment Ltd—the new acquisition should bolster their aviation ambitions and give them a commanding market share.

And if you're thinking that the government can simply walk away hereafter offloading the company, well, that's not entirely true.

As of 31st August, the airline was carrying a debt of ~Rs 61,500 crores. So the government will still have to service about Rs 46,000 crores worth of debt—not an insignificant sum by any account.

Also according to the aviation ministry, the fixed assets—land, buildings, planes—worth more than \$6 billion (over Rs 45,000 crore) won't all be sold to Tata. The planes will go to them of course. But the land and building, worth approximately Rs 14,700 crores will stay with the government.

There's also this massive collection of art—close to 40,000 pieces in total. But since we don't know the value of these assets, we can leave that for now. The only other silver lining for the government perhaps is that they won't have to worry about running the company and any 'future' debt the entity may see.

So yeah, Air India is finally going back to the Tata's. But they'll still have to be on their toes with the aviation competition heating up. You can expect to see a revived Jet Airways and the soon-to-be-launched Akasa Airlines in 2022. And as to how the airline's fortunes may turn under Tata's stewardship, we'll just have to wait and watch.

PS: Also, if are you wondering about the Maharajah reference in the headline? It's the famous Air India mascot of a mustachioed, turbaned man. The mascot has been around since 1946.

How Apple made privacy profitable?

In today's newsletter, we talk about how a privacy update created a new revenue driver for Apple



Business

The story

Do you remember that [ad Apple](#) released in May? A person walks into a coffee shop and buys a drink. When he leaves, the barista follows him. He gets into a cab (with the barista). When he exits the cab, the driver and the barista follow him into the bank. And this goes on. Apple call this dystopia the “data industrial complex”. A world where everyone knows everything about you!

And it created a massive buzz because right around that time, Apple also released a new software update with a renewed focus on user privacy.

Over 1 billion Apple users began seeing pop-ups about “tracking”. For instance, if you opened the Facebook app on your iPhone, you received a prompt that said something like this—“Allow Facebook to track your activity across other companies' apps and website?” And of course, you could choose to say no and prevent the app from tracking your activity.

Bottom line—Apple’s spiel was this—“Hello! I care about your privacy. So I’m giving you the choice to block all those pesky apps that track your activity.”

So now imagine you were given the chance to stop apps from tracking you, what would you do? Choose to block the tracking, yes? Well, 96% of US users thought the same way. And just like that, Apple took away the advertiser's most potent weapon—personalized ads.

How?

Well, think about it this way.

If you want to use Facebook, you have to let them track your activity on the website—see what places you check into, what kind of content you interact with, your nationality, and all that stuff. This data is then used to let advertisers target you and there's very little you can do about this. But Facebook also tracks you across other websites. So when you eye that new pair of sneakers on an e-commerce platform, it knows. When you buy a tub of ice cream, it knows. It understands your preferences. And over time, it collects so much data that it probably knows you better than yourself. Facebook then tells advertisers that it can offer them personalized and targeted ads on its app based on this information.

But if Facebook can't track you across websites anymore, what happens? Well, its in-app ads on iPhones won't be so personalized anymore. And it's hard to judge the efficacy of those ad spends when you don't know what users are doing elsewhere. In fact, by some estimates, Facebook could lose as much as 10% of its revenue owing to this update alone. They even placed print ads in *The New York Times*, *The Wall Street Journal*, and *The Washington Post* [declaring that](#) it's "standing up to Apple for small businesses everywhere."

The argument is that small businesses rely on such personalized ads to keep their shop running. Apple immediately posted a curt reply —“We believe that this is a simple matter of standing up for our users. Users should know when their data is being collected and shared across other apps and websites—and they should have the choice to allow that or not. App Tracking Transparency in iOS 14 does not require Facebook to change its approach to tracking users and creating targeted advertising, it simply requires they give users a choice.”

But this isn't just about user privacy. Tech giants like Apple see an opportunity everywhere and as one report from the *Financial Times* notes—Apple may have a new revenue driver with this new update.

The company's very own Search Ads now drive 58% of all iPhone app downloads when users click on an ad. Last year, Search Ads only had a 17% market share. That's a massive jump. So in effect, with Facebook and other apps losing teeth, advertisers are now turning to Apple's walled garden. Meaning, if you wanted to get people to download your amazing podcasting app, then the best way to get their attention is to advertise on the app store. Pay Apple money to show your ads when people search for the word “podcasts” and you could probably get their attention.

All in all, Apple continues to defy all expectations and make more money with everything they do.

India's retirement planning needs a boost

A global study by the Mercer CFA Institute Global Pension Index placed India 40th out of 43 countries when rating how nations were preparing their ageing populations for retirement. So in today's newsletter, we examine the need for a strong social security system post-retirement.



Policy

The story

Before we get into the nitty-gritty of pension design, we need to understand a little bit about how pension systems have changed over time.

Let's start with the defined benefit (DB) pension system. Think of this as the public pension funds set up to aid all Indian government employees. The workers did not contribute to the pension fund. But the employer i.e. the government did chip in. They even managed the fund for the employees. And upon retirement, the workers were promised a guaranteed income for life based on things like pre-retirement salary and years of services.

This was how pensions were administered for a long time. And back in the day, even [private sector](#) companies like Godrej, Marico, and Tata Tea deployed this model.

But over time, companies and governments realized that this may no longer be feasible. Because—costs!

If you have a company promising to pay employees a fixed pension for decades, then they have to back up that promise. But what happens when you invest in a fund that does poorly? The company then will have to make up the difference. And if you're strapped for cash, it can become a massive problem. Also projecting long-term payouts and calculating long-term liabilities can be extremely complicated.

So defined benefit plans started going out of fashion and defined contribution (DC) pensions kicked in. In a DC plan, the employee makes contributions towards the pension fund by taking a small sum out of their salary while also getting their employer to contribute a similar sum. In effect, where DB schemes determined the pension based on things like final salary and years of service (difficult to forecast), DC plans offer a lot more flexibility to employers since there wasn't a lot of pressure to generate the monies needed to adequately compensate their employees. Pay-outs in DC plans are based on total contribution and interest generated from said contributions and it gave employers a lot of breathing room.

Take the Indian government for instance. It **stopped** defined-benefit plans for its new employees in 2004. And introduced the National Pension System (NPS)—with the hybrid model of sorts. Equal parts contribution from the employee and equal parts contribution from the employer.

If you're working in a private sector company, you're thinking that it sounds pretty similar to the Employee Provident Fund (EPF). And it is. In the NPS for central government employees, the government makes a contribution. And in the EPF for private-sector workers, the company contributes too. Both are hybrid models.

So, India's pension policy today largely hinges on funding from both employer and employee participation.

But how does this shift from DB to DC pension, matter to India?

Well, India's median age is 28.4 years. By 2050, it's **expected** to be 38.1 years.

The population is aging slowly. And with growing life expectancy, you can expect people to spend more time in retirement as the days progress.

If a **survey** by PGIM India Mutual Fund and market research firm Nielsen is anything to go by, 89% of the Indian respondents believed they are not prepared for retirement. And 48% said they didn't know what kind of money they would need.

But that's not the only reason why we may need better-designed social security nets or pensions. 90% of India's workforce is the unorganized sector. And we have a lot of self-employed folks too. And since they don't have access to occupational pension schemes like the EPF and the NPS, we must acknowledge that there is a large part of the population without a safety net.

Thankfully, however, a few things are changing.

A few months ago, the government announced the "**Code on Social Security**" to cover gig and platform workers. This code proposed setting up a social security fund—where aggregators like Zomato and Ola are expected to contribute. With provisions for the central and state governments to chip in as well, maybe these people will have some security as retirement closes by.

There's also the Atal Pension Yojana (APY) which is a voluntary pension scheme for people in the lower-income and unorganized sectors. Apart from an individual's monthly contributions, the government funds a part of the contribution as well.

And while this does show that the government is in fact paying attention to the social security problem, awareness about retirement planning across income strata is the need of the hour. Because you can have 100 different pension products out there, but if people don't know how to use it, well...

That doesn't bode well for anyone, does it?



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