

“Power is gained by sharing knowledge and not hoarding it”



## EMERGING THOUGHTS

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Chartered Accountants

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# Foreword

We, at SURESH & CO. are extremely glad to release the series “EMERGING THOUGHTS”. This publication is a consolidation of events occurring all around the world and ideas put together by articled assistants (Interns undergoing Chartered Accountancy course) who will be emerging as Chartered Accountants in the near future and employees.

Knowledge is something that will serve you one in their whole life. Knowledge is now at everyone’s fingertips. Those not making use of this opportunity will make their capabilities diminishing in its importance. Keeping oneself updated will ensure to function effectively amongst this rapidly changing world of technology.

The response we receive from the readers is always stupendous and this eternal ritual has been an amazing journey reaching milestones as the learning opportunities have always illuminated our path with the essence of knowledge. It forms part of your personal and professional development in an effort to avoid stagnation and reach your full potential.

At SURESH & CO., every individual is often required to be leading in the name of technology and knowledge and is encouraged to think beyond essential demand of necessity. This not only helps them to enhance their thoughts, enrich their vision but also gives them an opportunity to reconnaissance various things that are beyond their domain.

We at SURESH & CO., wanted to share these gems of initial thoughts as conceived by these young minds and making you all a part of this family. It is to be noted that these updates may or may not have been reviewed by any senior or a technical expert and thus these should be used only to kindle thoughts in certain positive direction. Readers are advised to do further research and analysis on the topics which they find interesting.

**“Reading is essential for those who seek to rise above the ordinary.”**

**“Man reading should be man intensely alive. The book should be a ball of light in one’s hand.**

## Update for the day #1351 | Why are purple flags so rare?

There are 195 countries in this whole world but not a single one of them has a dash of the majestic purple in them. Why? Is it not a color worthy enough of representing an entire nation? Or is there some rational reason as to why no nation has ever put purple in their national flags?



There are a variety of unique patterns and designs we get to see when it comes to national flags of countries. Some have used bright colors like orange and yellow while some have put stars and dragons in theirs.

But nowhere is the color purple seen in most of the flags.

The main reason is because purple fabric was expensive in those days and the countries just couldn't afford such an extravagance back then! It was so expensive in the 16th and 17th centuries that only the super-rich and the royalty could afford to adorn the color. Hence, it was seen as a symbol of opulence.

Origins of purple dye are traced back to the ancient Phoenician city of Tyre (situated in present-day Lebanon) located at the coast of the Mediterranean Sea. People of Tyre used to produce purple dye from a sea-snail known as the spiny dye-murex native to that region. The process included finding thousands of sea snails on the shores of the sea, cracking open their shells and extracting the slimy mucous from their glands which was then exposed to sunlight. In the sunlight, the mucous used to turn white, then yellow-green, then red and finally a deep, vibrant purple color was obtained. This purple dye was popularly known as the Tyrian Purple.

However, the process was very time consuming and labor intensive. On top of that nearly thousands of snails were required to produce just a gram of the dye which clearly explains why it was more costly than its weight in gold.

### How And Why Is Purple Popular Now?

Purple was expensive, but it isn't now. And the credits for this go to the English Chemist William Henry Perkin, who in 1856 accidentally invented the synthetic way of producing the purple dye

when he was just an eighteen-year-old chemistry student! He was actually trying to make synthetic quinine used to treat malaria but instead ended up making the color purple.

He went on to patent this synthetic method of making purple dyes, built a factory and started producing tons of the royal color which made it accessible for the not so rich crowd as well.

### **Why Is Purple Still Not Seen in National Flags?**

Sadly, even though the color became popular after the 1900s, all the national flags had already been designed by the countries and haven't been changed since.

There is only one country Dominica whose modern flag, which was adopted in 1978, has a hint of purple on it.

By **Mounisha Ramesh**



## Update for the day #1352 | Harry Potter and the unknown facts

Harry Potter series of novels written by J K Rowling is every 90's kids' fantasy and so is mine. Growing up, I always dreamed of studying in a school like Hogwarts and living in the world of magic. If you ask me now, I would still say my favourite pass time would be to watch a Harry Potter movie. It wouldn't be wrong to say that this book opened the world of imagination to me. Watching the recent reunion of the Harry Potter cast and crew made me nostalgic about the good times associated with the series and I rewatched the movies for the millionth time! For those of you who haven't read or watched any of the Harry Potter series, I am sure that you at least would have heard of it.

Now to give a brief of what the series encompass, the novels chronicle the lives of a young wizard, Harry Potter, and his friends Hermione Granger and Ron Weasley, all of whom are students at Hogwarts School of Witchcraft and Wizardry. The main story arc concerns Harry's struggle against Lord Voldemort, a dark wizard who intends to become immortal, overthrow the wizard governing body known as the Ministry of Magic and subjugate all wizards and Muggles (non-magical people).



Here are some unknown and interesting facts about Harry Potter series that you may or may not be aware of:

- **J.K. Rowling created Quidditch after a fight with her boyfriend.**

“If you want to create a game like Quidditch, what you have to do is have an enormous argument with your then-boyfriend,” Rowling said in 2003. “You walk out of the house, you sit down in a pub, and you invent Quidditch. And I don't really know what the connection is between the row and Quidditch except that Quidditch is quite a violent game and maybe in my deepest, darkest soul I would quite like to see him hit by a bludger.”

- **The Dementors in Harry Potter are based on J.K. Rowling's struggle with depression after her mother's death.**

Rowling's mother, who had multiple sclerosis, died in 1990, after which Rowling suffered a period of depression. She would use the experience to characterize Harry Potter's



dementors, creepy creatures that feed on human emotion. “It's so difficult to describe [depression] to someone who's never been there, because it's not sadness,” Rowling told Oprah Winfrey. “I know sadness. Sadness is to cry and to feel. But it's that cold absence of feeling—that really hollowed-out feeling. That's what Dementors are.”

- **J.K. Rowling's education came in handy for writing the Harry Potter books.**

At university, she minored in Classics, and she put that education to good use, peppering the books with Latin. “It just amused me, the idea that wizards would still be using Latin as a living language, although it is, as scholars of Latin will know,” she said in 2000. “I take great liberties with the language for spells. I see it as a kind of mutation that the wizards are using.” Expelliarmus, for example, combines expellere, meaning “drive out” or “expel,” with arma, meaning “weapon,” and knocks weapons from an enemy's hands. Incendio, which lights a fire, comes from incendiarius, or “fire-raising.” And Hogwarts's motto is Draco Dormiens Numquam Titillandus—“Never Tickle a Sleeping Dragon.”

- **The plants in Harry Potter come from a real book.**

“I used to collect names of plants that sounded witchy,” Rowling told in an interview with 60 minutes, “and then I found this, Culpeper's Complete Herbal, and it was the answer to my every prayer: flax weed, toadflax, fleawort, Gout-wort, grommel, knotgrass, Mugwort.” The book was penned in the 17th century by English botanist and herbalist Nicholas Culpeper

- **The brooms used in the Harry Potter movies aren't regular brooms.**

They were made by modeler Pierre Bohanna using aircraft-grade titanium. “People think of them as a prop the kids are carrying around, but in reality, they have to sit on them,” Eddie Newquist, chief creative officer of the firm Global Entertainment Services, which put on “Harry Potter: The Exhibition,”. “They have to be mounted onto motion-control bases for green-screen shots and special-effects shots, so they have to be very thin and incredibly durable. Most of these kids weighed 80 pounds, 90 pounds [at the beginning]. Now they're all adults, so they're up over 120, 130 pounds, and you have to really make sure your brooms can withstand that.”

- **Rowling gave her characters names that reflect their roles in the series.**

Fans can all agree that Rowling's world-building is superb — and the whimsical names she gave her characters are no exception. She once revealed that, early in the creative process, she came up with names for 40 Hogwarts students in Harry's year — every member of the Golden Trio included.

For example, Harry's name references his leadership qualities and Ron's pertains to his role as a sidekick.

"Harry" is the middle-English version of "Henry," a name popular among English kings through the centuries. For "Ronald," Rowling seemingly looked to the Old Norse "Rögnvaldr," a title for a ruler's adviser. In contrast, Hermione's name, taken from Shakespeare's "The Winter's Tale" (and Greek mythology, more broadly) has less to do

with her own traits than with her Muggle parents' desire to pick a clever moniker.

- **Rowling planned in advance who would meet a grim fate in the series — but she decided to spare one character's life at the last minute.**

Originally, she planned for Ron's dad, Arthur Weasley, to meet a grim fate in "Order of the Phoenix" — but she changed her mind.

"I think part of the reason for that is there were very few good fathers in the book," she said in an interview with "Today" in 2007. "In fact, you could make a very good case for Arthur Weasley being the only good father in the whole series."

For those of you who have missed reading and watching this wonderful series, I hope this article tweaked your interest into experiencing the magical world Harry Potter series has created. And as for the fans, its never a bad idea to watch it again.

By **Keerthana Umesh**





## Update for the day #1353 | Mysore Palace

The Mysore Palace, also known as Amba Vilas Palace, is a historical palace and the royal residence at Mysore in the Indian State of Karnataka. It is used to be the official residence of the Wadiyar dynasty and the seat of the Kingdom of Mysore. The palace is in the centre of Mysore and faces the Chamundi Hills. eastward. Mysore is commonly described as the 'City of Palaces', and there are seven palaces including this one; however, 'Mysore Palace' or 'Amba Vilas Palace' refers specifically to the one within the Old fort.

Yaduraya built the first palace inside the Old Fort in the 14th century, which was set ablaze and reconstructed multiple times. The old fort was built of wood and thus easily caught fire. The current fort was built of stone, bricks and wood. The current structure was constructed between 1897 and 1912 after the Old Palace burned down and the current structure is also known as the new fort.

### Construction

The last palace, now known as the Old Palace or the Wooden Palace, burned to ashes during the 1896 marriage event. Maharaja Krishnaraja Wodeyar IV and his mother Maharani Kemoananjammanni Devi commissioned the British architect Henry Irwin to build a new palace. Meanwhile, the royal family stayed in the nearby Jaganmohan Palace. Construction was overseen by an executive engineer in the Mysore Palace division. He conducted elaborate architectural studies during his visits to Delhi, Madras and Calcutta and these were used to plan the new palace. The construction cost was placed at Rs 41,47,913 (around \$30 million adjusted to inflation) and the palace was completed in 1912.

The palace was further expanded around 1930 during the reign of Maharaja Jayachamarajendra Wodeyar. Although the construction was completed in 1912, the fort continued to be beautified and its inhabitants were slowly moved to newer extensions built off the palace.

### Architecture

The architectural style of domes of the palace is commonly described as Indo-Saracenic, with blends of the Hindu, Mughal, Rajput and Gothic styles. It is a three-storey stone structure with marble domes and has a 145-foot five-storey tower. The palace is surrounded by a large garden. The entrance gate and arch hold the emblem and coat of arms of the kingdom of Mysore, around which the kingdom's motto is written in Sanskrit: "न बिभेति कदाचन" (never terrified)

The main complex is 245 ft long and 156 ft wide. There are fire extinguishing machines located in all parts of the palace in order to prevent any fires. The Palace has four entrances. The main entrance is called "Jaya Maarthaanda" to the east, "Jayarama" to the North, "Balarama" to the South and "Varaha" to the west.

The three-storey stone building of a fine grey granite with deep pink marble domes has a facade with several expansive arches and two smaller ones flanking the central arch, which is supported by tall pillars.

Above the central arch is a sculpture of Gajalakshmi, the goddess of wealth, prosperity, fortune, and abundance, with her elephants. The kings of Mysore were devotees of Goddess Chamundi,

hence the palace faces the Chamundi Hills. The palace is illuminated on Sundays, on Public Holidays as well as during the Dasara Celebrations where 97,000 electric bulbs are used to illuminate it.



### What to see in Mysuru Palace?

- **The Dolls' Pavilion:** The Gombe Thotti was originally meant to display dolls during the Dasara festivities. It is a tradition in Mysuru to worship dolls during Dasara, a tradition which was inherited from the Vijaynagar times.
- **Public Durbar Hall:** Most gorgeously decorated hall with a harmonious composition in colours where the king and his closest advisers would meet to discuss the affairs of state.
- **Paintings Gallery:** Between 1934 and 1945, the Wadiyars commissioned five of the finest artists in Karnataka to paint the glory and grandeur of the Mysore Dasara Procession. 26 panels based on actual photographs were created and are displayed here.
- **Marriage Pavilion:** It's an octagonal shaped hall where all royal weddings, birthdays and ceremonial functions were celebrated. Dome supported by clusters of pillars is of cast iron. There are 26 paintings, which depict Dasara procession. The stained-glass ceiling has a rich tapestry of peacock motifs and floral mandalas held in place by metal beams.
- **Portrait Gallery:** Many valuable paintings and photographs of the Royal Family are exhibited in the portrait gallery on the southern part of the Kalyana Mantapa. The portrait gallery also exhibits two works of the famous royal artist Raja Ravi Varma dated in 1885.
- **Wrestling Courtyard:** The Kings of Mysuru were great patrons of wrestling and here wrestling competitions were conducted.

### Mysuru Palace Temples:

- Sri Lakshmiramana Swami Temple
- Sri Shweta Varahaswamy Temple
- Sri Trinayaneshvara Swami Temple

- Sri Prasanna Krishanswami temple
- Kille Venkatramana Swamy Temple
- Sri Bhuvaneshwari Temple
- Sri Gayatri Temple
- Kodi Bharravasvami Temple

Important information to visit Mysuru Palace:

Timings: Every day from 10.00 AM To 5.30 PM.

Illumination Timings: Sundays & Public Holidays from 7.00 PM – 8.00 PM

Official website: <https://mysorepalace.karnataka.gov.in>

It is recently listed out to be one among the Top 20 “Most reviewed places on Google”. Visit and enjoy the magnificent beauty!

By **Hamsashree H S**



## Update for the day #1354 | Starbucks is a BANK

That's right Starbucks is a bank. Let's see how

Starbucks was a highly profitable and high-growth company, but when the recession hit America and just like every other company, it was in a bit of turmoil. The company reorganized itself to the optimum by appointing fresh talent, amongst them was their CEO Howard Schultz, who is primarily responsible for making Starbucks a global name.

Schultz made some drastic changes in the company, some of which are still used across the world even today.

One of the initiatives was the Starbucks Rewards System.

How Does the Starbucks Reward System Work?

To make transactions cashless and easier, you can deposit money in your Starbucks Account on the App and if you use the balance for buying coffee, you get rewarded in terms of reward points, which could be redeemed at a later date.

Starbucks being the global brand that it is, 41% of its customers pay using the Starbucks App.

According to reports, a total of \$1.5 Billion is lying in these Starbucks Accounts all over the world.

How is the initiative benefitting Starbucks?

A smart investor never lets his money sit idle. Even if he/she may be sitting idle, an investor is always looking at opportunities to make their money grow.

Similarly, instead of letting the money in the Starbucks Account sit idle, the company decided to use it for its investing ventures.

So, whenever you put money in the account, you're actually lending it to Starbucks at 0% interest!

How is Starbucks functioning like an unregulated bank?

85% of the banks in the USA have less than \$1Billion Assets whilst Starbucks has a total of \$1.5 Billion and growing. This makes Starbucks operations like those of an unregulated bank.

The money on the app can only be used to purchase coffee and can never be withdrawn as cash. This allows Starbucks to bypass many financial regulations that are otherwise binding on other banks.

Starbucks Reward System is indeed a stroke of genius. It has helped the brand grow even during periods of recession as the coffee chains were no longer solely dependent on market purchases.

Banks are faced with fluctuating interest rates and the interest it needs to lay aside for all its investors, but Starbucks has no such reason to worry because not only is the lending at 0%, but it is also done in a very obscure way which seldom commands attention.

The ingenuity puts Starbucks at the top of the financial charts, surpassing some of the international banks, who are indeed concerned about the future potential of the brand in the financial space.

The same idea is being used by companies like Amazon with Amazon pay, Alibaba with Alibaba pay.

This kind of arrangement is a Win-Win situation for both customers and the companies. Customers get good discounts and companies get additional funds to either invest or manage working capital.

By **Shashank K E**



## Update for the day #1355 | International Women's day

International Women's Day (IWD) is a day to celebrate women's social, economic, cultural and political achievements. It is observed on March 8 each year. Women's Day has been observed for nearly a century, with the first celebration taking place in 1911.

The day serves as a rallying point for achieving gender parity across the world. Globally, there is a lot of activity on this day as people join together to celebrate women's accomplishments or to march for women's rights.

### **History:**

According to the United Nations Educational, Scientific and Cultural Organisation, International Women's Day first emerged from the activities of labour movements at the turn of the twentieth century across North America and Europe. UNESCO states, "The first National Woman's Day was observed in the United States on February 28 1909, which the Socialist Party of America dedicated in honour of the 1908 garment workers' strike in New York where women protested against harsh working conditions.

In 1917, women in Russia chose to protest and strike under the slogan "Bread and Peace" on the last Sunday in February (which fell on 8 March on the Gregorian calendar). Their movement ultimately led to the enactment of women's suffrage in Russia."

It was in 1945 that the Charter of the United Nations became the first international agreement to affirm the principle of equality between women and men but it was only on March 8 during International Women's Year in 1975 that the UN celebrated its first official International Women's Day.

Later in December 1977, the General Assembly adopted a resolution that proclaimed a United Nations Day for Women's Rights and International Peace to be observed on any day of the year by Member States, in accordance with their historical and national traditions.

Finally, following its adoption by the United Nations in 1977, International Women's Day became a mainstream global holiday where member states were invited to proclaim March 8 as an official UN holiday for women's rights and world peace.

### **Significance:**

UNESCO states, "International Women's Day is an occasion to celebrate the progress made towards achieving gender equality and women's empowerment but also to critically reflect on those accomplishments and strive for a greater momentum towards gender equality worldwide. It is a day to recognize the extraordinary acts of women and to stand together, as a united force, to advance gender equality around the world."



**Theme:**

The United Nation's theme for this year's observance is "Gender equality today for a sustainable tomorrow" in recognition and celebration of the women and girls who are leading the charge on climate change adaptation and response and to honour their leadership and contribution towards a sustainable future.

By **Prathiksha**



## Update for the day #1356 | Operation Ganga and other Govt. of India operations

Operation Ganga was successfully completed on 11th of March with evacuation of all Indians stranded in Ukraine

So lets dive into detail about this operation and other operations Conducted by Government of India

### **What is Operation Ganga?**

It is an evacuation mission to bring back all the Indian nationals who are currently stranded in Ukraine. There were around 20,000 Indians including students stuck in Ukraine. Till now, three Air India flights have been able to bring back more than 900 Indians from Ukraine to India.

The Indian evacuation flights are operating from neighbouring countries like Romania and Hungary. The government is also facilitating evacuation of stranded Indians from its borders crossing Romania, Hungary, Poland and Slovakia.

### **Operation Samudra Setu (2020):**

It was a naval operation as part of the national effort to bring home Indian citizens from overseas during the Covid-19 pandemic.

It successfully brought back 3,992 Indian citizens to their homeland by sea. Indian Naval ships Jalashwa (Landing Platform Dock), and Airavat, Shardul and Magar (Landing Ship Tanks) participated in this operation which lasted over 55 days and involved traversing more than 23,000 km by sea.

### **Evacuation from Brussels (2016):**

In March 2016, Belgium was hit by terrorist strikes at Brussels Airport in Zaventem, and one at Maalbeek Metro station in central Brussels. A total of 242 Indians, including 28 crew members, returned to India in a Jet Airways flight.

### **Operation Raahat (2015):**

In 2015, a conflict raged between the Yemeni government and Houthi rebels. Thousands of Indians were stranded and Yemen was not accessible by air due to a no-fly zone announced by Saudi Arabia.

Under Operation Raahat, India evacuated nearly 5,600 people from Yemen.

**Operation Maitri (2015):**

It is the joint relief and rescue operation by the Indian government and the Indian Armed forces in the aftershock of the 2015 Nepal earthquake. The joint Army-Air Force operation brought over 5,000 Indians back from Nepal by Air Force and civilian planes. The Indian army successfully evacuated 170 foreign nationals from the US, the UK, Russia and Germany.

By **Sai Rahul**



## Update for the day #1357 | Mario Day

People who grew up in the 1980s or 1990s will be sure to know who Mario and his brother Luigi are! Mario and his younger, fraternal twin brother are the most renowned characters of any of the Nintendo games. But Mario day is not just for avid gamers or for kids because pretty much anyone can enjoy the celebration if they know a little bit about Mario.



### History of Mario

The character of Mario was first introduced in Nintendo's game Donkey Kong. He didn't even have his own feature game right away! When he originally appeared in this game in the early 1980's Mario was not the plumber that would be recognized today. In fact, in the early days, his name was simply "Mr. Jumpman" and he was a carpenter. Mario's character in the game is rumored to be named after the first businessman who rented warehouse space to the Nintendo company, Mario Segale.

A couple of years later, in 1983, Mario broke out on his own and changed his name in Super Mario Brothers. From then on, he began what was to eventually become a takeover of Nintendo's offerings. Various games that he has been featured in have sold over 262 million copies worldwide, making it the most successful video game series of all time.

However, it was not just the Mario character that made the game remarkable, but the technology that it was part of bringing to the forefront of the video gaming industry. The release of Super Mario 64, more than a decade later in 1996, brought with it ground-breaking, three-dimensional graphics. It was also the first game to integrate a camera view that could be controlled by the player.

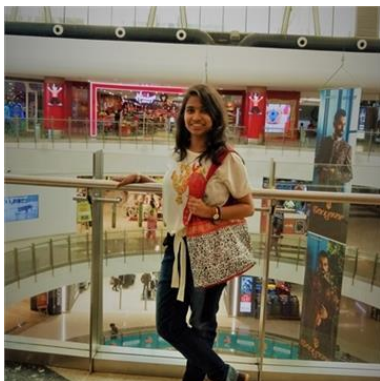
Continuing to breakthrough technologically, Super Mario's Sunshine, released in 2002, made advances in gravitation that allowed players to soar through space and have more movement options than before.

While Mario day was probably created by clever fans, the Nintendo company finally endorsed it as National Mario Day in 2016. In fact, the company has even been known to promote the day by offering discount prices on Mario's games, so it might be a good time to consider buying these classic games at a lower price!

In general, the Mario series of games has been important to the industry of video gaming and the technological advances that have been made through the years in console gaming. It seems that little Mario and his brother have had a very important impact on the world!

Just like how the Mario brothers have been one of the memorable parts of our childhood, hope everyone finds some nostalgic memories to keep the child in them always playful.

By **Varsha S V**



## Update for the day #1358 | How does virtual games make money?

We're spending an extraordinary – and ever-increasing – amount of time playing mobile games. Our smartphones and tablets, packed with addictive apps, entice us to spend on average 3 hours a day playing games - a figure which rocketed 57% from 2014 to 2017.

A new generation of gamers are paying big money for their digital pastime. How much? Well, today's most profitable mobile game, Game Of War – Fire Age, grosses around \$1.5 million per day, whilst Mobile Strike and Clash Royale both exceed the \$ 1 million per day mark.

In all, the global app market (of which gaming accounts for around 80%) is worth a staggering \$ 50 billion per year. Mobile analysts App Annie predict that figure will triple to \$100 billion by 2023. There's a whole new world of mobile gaming out there that's making big money for the developers, marketers and strategists who are tapping into this emerging mobile gaming trend. As digital recruitment specialists since 2001, we've enjoyed front-row seats to the rise of this fascinating industry.

Following are the different ways to monetize virtual games -

- **In-game advertising**

Advertising is one of the most common and easy ways to monetize your VR games. By introducing in-game ads, you can keep the application free of charge and still have the game bring in decent revenues. As users are more likely to have the ads running rather than pay for playing their favourite game. However, there is one side effect: most users find ads annoying and obtrusive. So, it is important to have a "Close" button for the ad or offer an ad-free subscription.

- **Freemium**

Another great way to monetize your game is by releasing its free "lite" version to let the users taste it a bit only to offer full access at a reasonable fixed price after some time. To make this method work, your game must have a number of valuable additional features and improved functionality available after the purchase.

- **Cross-marketing**

You can also join the affiliate market and make money on promoting some other apps inside your game. You can make money by letting other companies use your app as a platform for their product promotion. Alternatively, you can promote your own game inside their app. However, if you opt for this method, make sure to work with neighbouring niches and not your business rivals as well as do not make the ads take over your app. Do not let them be annoying and obtrusive.

- **In-app purchases**

In-game purchases are one of the most popular sources of revenue for businesses. As you understand from the name, money comes from all the purchases made inside the account. According to the trusted sources, this type of monetization is very successful. AppsFlyer states that any user spends \$0.50/ month on average on in-app purchases per application with purchase activity. They also state that Asian users spend more (\$0.7 per user per app) than European, while the Latin users spend the least (\$0.16 per user per



app). Besides, iOS users spend more (\$1.08 per user) on in-app purchases than Android ones (\$0.43 per user).

- **Subscription**

This method has a huge potential even though it did not become as popular among the developers as other types of monetization. Paying to play some game within a specific time is one way to run your business and increase profits, but this method will only work if you can offer fresh content on a regular basis. Otherwise, the subscription will bring no value to the target audience.

- **Premium content**

Having limited content available for free and then offering users to pay to get full access to premium content is another way to monetize your VR games. Thus, you can specify what other features you have to offer for an additional cost. Users will want to have exclusive functionality at hand, and you will get a steady source of income.

By **Nikitha M A**



## Update for the day #1359 | The Unstoppable Dabbawalas



Long back in 1890, a man named Maadeo Havaji Bachche started a lunch delivery service employing around 100 men. Over time, they formed an official association called the Mumbai Tiffin Box Suppliers' Association, otherwise known as "The Dabbawalas". The term "Dabbawala" or "Dabbawallah" can be translated to "tiffin box delivery man".

Dabba, means box, although when it comes to dabbawalas, it refers to the cylindrical aluminium containers they use to transport the lunchboxes. They registered themselves for the charitable trust under the name of Nutan Mumbai Tiffin Box Suppliers Trust.

The Dabbawala network consists of more than 5000 dabbawalas / workers, who collectively transport and deliver more than 350,000 dabbas or lunches in a day, and all of them, on time. Their work, while seemingly simple is quite challenging and involves commuting all over the dense urban landscape to deliver the lunches on time, all the while fielding train delays and traffic.

Not to mention carting around heavy crates of lunch boxes and ensuring the contents do not spill. They deliver them to their respective workplaces before 1:00 PM you will be surprised to know that without using any technology and paperwork the rate of error of the developers in Mumbai is about one in our 16 million deliveries.

Their clients are usually middle-classed professionals who prefer home-cooked meals to the restaurant fares. Which means they have to provide good service at affordable prices.

They only used bicycles and hand cards for the final delivery they don't even use any type of private vehicle or fueled vehicle in their whole process. To ensure that the tiffin reaches the right recipients, dabbawalas have their own unique color-coded system in place.

The major challenges faced by the dabbawalas is ensuring timely delivery against traffic and train delays. Even so, mistakes in delivery are rare, and delays infrequent. The rate of mistakes is reported to be less than 1%.

The Dabbawalas are an excellent example of teamwork and commitment to work. Their commitment to their jobs is so much that even various dignitaries including Prince Charles and Richard Branson, have met and admired these remarkable individuals. Even famous university such as Stanford University, Microsoft, and practically all IITs and IIMs have been influenced by the Dabbawalas precision and professionalism.

By **Priyank N Jain**



## Update for the day #1360 | How to Protect eyes from Mobile and Computer screens

Computer eye strain perhaps isn't something you think about a lot, but once it affects you, it's hard not to notice.

Protecting eyes from computer screens and smartphones is more important than ever, but effectively tackling the problem is more about prevention than treatment.

Digital Eye Strain (DES) is more common today than ever owing to the fact that virtually everybody uses a screen in daily life.

While not everyone spends every day looking at a computer screen, most people do use smartphones. Experts suggest that DES occurs in around 50% of computer users.

So, do screens make your eyesight worse? Well, the good news is that eye strain is not a long-term problem.

There is no evidence that strain makes your eyesight worse in the long run, but it does cause extreme discomfort and makes getting through a work day difficult.

### How To Protect Eyes from Computer Screen

#### **Use The 20/20/20 Rule**

Your eyes aren't designed to stare all day at something directly in front of you. With the 20/20/20 rule, you give your eyes a much-needed break during long work days.

If you look at the screen for 20 minutes, you must look at something at least 20 feet away from you for 20 seconds. The longer you look away from your screen, though, the better!

#### **Ensure Your Room Is Well Lit**

It may sound counterintuitive, but less light in your room is actually better for your eyes when you're working on a computer. Offices shouldn't be too bright, so when possible, close your curtains and reduce your use of fluorescent lighting.

Use lower voltage bulbs and make sure your ambient lighting is about half as bright as the average office.

#### **Have Regular Eye Examination**

Regular eye examination help you keep your eye health in check and ensure your problems aren't worse than normal eye strain. It also gives you a great opportunity to talk to an expert about your habits and eye health!

#### **Reduce Glare**

Glare on your computer screen can cause eye strain as it stops your eyes adjusting as easily as

they should to the content you're trying to focus on.

Use an anti-glare matte screen where possible (rather than glass-covered LCDs). If you're a glasses wearer, make sure your lenses have an anti-reflective coating.

### Use High-Resolution Screens

Most people don't have to use CRT screens any more. Those are the old computer screens with low refresh rates that created a noticeable flicker that made your eyes feel uncomfortable.

Today, screens typically offer refresh rates of 75Hz or more. The higher the better. Furthermore, screens with higher resolutions appear more lifelike. When you can't see the pixels, your eyes don't work as hard to make sense of the images in front of you.

### Reduce Blue Light

Blue light has a short wave-length and is known for causing damage to the eye. Reduce blue light by using specialist glasses or reduce the color temperature of your screen. It's ideal for long-term use.

### Important Advice For Protecting Your Eyes

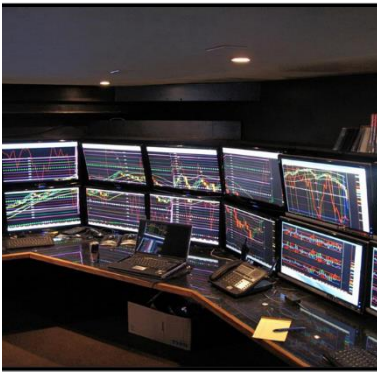
Adjusting the brightness on your phone is important, but your phone can often do that automatically. The ambient light sensor on your device means the light will shift depending on how much light is already available. And, as mentioned, the night mode feature reduces the impact blue light has on your eyes.

The warmer the screen colour, the better. Long wavelengths are better for you, so it's important to reduce the amount of blue light you see.

By **Adithiyya J S**



## Update for the day #1361 | Algorithmic Trading



**Algorithmic trading** is a process for executing orders utilizing automated and pre-programmed trading instructions to account for variables such as price, timing, and volume. An algorithm is a set of directions for solving a problem. Computer algorithms send small portions of the full order to the market over time.

Algorithmic trading makes use of complex formulas, combined with mathematical models and human oversight, to make decisions to buy or sell financial securities on an exchange. Algorithmic traders often make use of high-frequency trading technology, which can enable a firm to make tens of thousands of trades per second. Algorithmic trading can be used in a wide variety of situations including order execution, arbitrage, and trend trading strategies.

### Understanding Algorithmic Trading

The use of algorithms in trading increased after computerized trading systems were introduced in American financial markets during the 1970s. In 1976, the New York Stock Exchange introduced the Designated Order Turnaround (DOT) system for routing orders from traders to specialists on the exchange floor.<sup>1</sup> In the following decades, exchanges enhanced their abilities to accept electronic trading, and by 2009, upwards of 60 percent of all trades in the U.S. were executed by computers.<sup>2</sup>

Author Michael Lewis brought high-frequency, algorithmic trading to the public's attention when he published the best-selling book *Flash Boys*, which documented the lives of Wall Street traders and entrepreneurs who helped build the companies that came to define the structure of electronic trading in America. His book argued that these companies were engaged in an arms race to build ever-faster computers, which could communicate with exchanges ever more quickly, to gain an advantage on competitors with speed, using order types that benefited them to the detriment of average investors.

### Do-It-Yourself Algorithmic Trading

In recent years, the practice of do-it-yourself algorithmic trading has become widespread. Hedge funds like Quintilian, for instance, crowdsource algorithms from amateur programmers who compete to win commissions for writing the most profitable code. The practice has been made possible by the spread of high-speed internet and the development of ever-faster computers at relatively cheap prices. Platforms like Quantises have sprung up in order to serve day traders who



wish to try their hand at algorithmic trading.

Another emergent technology on Wall Street is machine learning. New developments in artificial intelligence have enabled computer programmers to develop programs that can improve themselves through an iterative process called deep learning. Traders are developing algorithms that rely on deep learning to make themselves more profitable.

### **Advantages and Disadvantages of Algorithmic Trading**

Algorithmic trading is mainly used by institutional investors and big brokerage houses to cut down on costs associated with trading. According to research, algorithmic trading is especially beneficial for large order sizes that may comprise as much as 10% of the overall trading volume.<sup>3</sup> Typically market makers use algorithmic trades to create liquidity.

Algorithmic trading also allows for faster and easier execution of orders, making it attractive for exchanges. In turn, this means that traders and investors can quickly book profits off small changes in price. The scalping trading strategy commonly employs algorithms because it involves rapid buying and selling of securities at small price increments.

The speed of order execution, an advantage in ordinary circumstances, can become a problem when several orders are executed simultaneously without human intervention. The flash crash of 2010 has been blamed on algorithmic trading.

Another disadvantage of algorithmic trades is that liquidity, which is created through rapid buy and sell orders, can disappear in a moment, eliminating the chance for traders to profit off-price changes. It can also lead to instant loss of liquidity. Research has uncovered that algorithmic trading was a major factor in causing a loss of liquidity in currency markets after the Swiss franc discontinued its Euro peg in 2015.<sup>4</sup>

By **Umesh Pareek**



## Update for the day #1362 | Zomato, Blinkit sign term-sheet for merger

Recently listed food delivery giant Zomato and instant delivery service Blinkit, formerly Grofers, have signed a term sheet as a precursor to the merger. Sources in the know suggest that the term sheet was signed in February 2022.

Zomato already owns a 10 percent stake in Blinkit, since August 2021, and will be filling for Competition Commission of India very soon.

In what is supposed to be an all-stock transaction, Blinkit's existing investors which include SoftBank, Tiger Global Management, and Sequoia Capital India will get shares of Zomato as part of the merger deal. It is noteworthy that Tiger Global and Sequoia are already shareholders in Zomato.

Interestingly, Softbank is a majority shareholder in Zomato's rival Swiggy as the Japan-based investor led the \$1.25 billion round in Swiggy in July last year — a week before Zomato hit the primary market with its initial public offering (IPO).

Blinkit rebranded itself in December 2021 to focus on its pivot to quick commerce. During the time of this rebranding, Zomato, already an investor in the company, had said that it would invest an additional \$500 million to help the e-grocer to bolster its fast delivery.

While the August Zomato investment of \$100 million elevated Blinkit to the unicorn club, reports have pegged the merger deal size at \$700-750 million, which is below the unicorn valuation for Blinkit

In the past year, Zomato has made cash investments worth \$225 million across three companies namely, Blinkit (erstwhile Grofers), Shiprocket, and Magicpin

By **Ganesh S Bhat**



## Update for the day #1363 | The Kashmir Files

Kashmir Files: Vivek Agnihotri's film exposes India's new fault lines



The Kashmir Files, released on Friday, tells the fictional story of a university student who discovers his Kashmiri Hindu parents were killed by Islamist militants - and not in an accident as his grandfather told him.

It received middling reviews from mainstream critics - more than one called it "exploitative" - but the film soon set off a heated debate on social media. Supporters said it shines light on a neglected, bloody part of Kashmir's history but critics say it's careless with facts and Islamophobic.

### **Kashmir is a controversial subject**

The movie delves into the history of Kashmir, and the restive region along India's border with Pakistan has long been a sensitive subject. Its Muslim-majority valley has seen an armed insurgency against Indian rule since the late 1980s. Islamist militants began targeting Kashmiri Hindus - upper-caste Pandits - who were a minority group, in the 1990s. Many were killed and, by some estimates, hundreds of thousands of them fled their homes. Most never returned.

The movie which is based on video interviews with first-generation Kashmiri Pandit victims of the Kashmir Genocide begins with the episode of the year 1990 when the then CM of Jammu and Kashmir Farooq Abdullah had tendered his resignation. Abdullah had lost control back in 1984, probably after he had visited a conference in Kashmir and shared the platform with the Jammu and Kashmir Liberation Front's (JKLF) leader Yasin Malik. Later Ghulam Mohammad Shah, who was supported by the Congress party had replaced his brother-in-law Farooq Abdullah and assumed the role as the state Chief Minister.

Given the immense reaction that the film has received on Day 1, the drama film has also achieved a huge feat as it has scored 10 out of 10 rating on IMDB, the highest rating on the audience-voting platform. Veteran actor Anupam Kher shared a post about it on Instagram and stated that the audience's love is taking the film forward. However, after a few days, the rating system for The Kashmir Files changed to 8.3/10

In conclusion, I would like to say that in today's world where the youth is continuously invested in building the future, we must also not forget the roots and importance of our history and this movie does exactly that in reminding us one of the easily forgotten but important part of our history and is definitely a must watch for all Indians.

By **Dhruv Bajoria**



## Update for the day #1364 | Can UPI ever replace the SWIFT banking system?

The Russian invasion of Ukraine has resulted in European countries quickly knocking off Russian banks from the international payment network SWIFT (Society for Worldwide Interbank Financial Telecommunication). Effectively severing the banking connection between Russia and the rest of the world, including India. This decision shows the control Europeans have over international trade transactions and why there is a need to build a parallel system, at least for the developing countries.

The exclusion of Russia from the SWIFT will lead to missed payments and disruption of the global commodities market, especially in oil and gas. As the supply chain and missed payments in the commodity market overflow into adjacent markets like equities and bonds, the shock of this disruption will add to the volatility and price shocks across global markets. European countries have in one shot disrupted global payment systems and global markets. The echo of this disruption will reverberate for a long time.



The advantage of the e-Rupee in global transactions is that it will increase the speed, volume, and frequency of transactions, which will, in turn, reduce the cost of forex transactions. The competitiveness of Indian exporters will, as a result, improve manifold, especially commodity exporters who work on large volumes and thin margins. To make this happen, a crucial relationship must be established between the RBI and central banks of other countries that also have digital currency.

The reported pact between the central banks of India and Singapore to link their respective payment systems, Unified Payments Interface (UPI) and PayNow, to step up cross-border payments and remittance flows is commendable. The fintech cooperation (after the two countries boosted interoperability using QR codes) will enable users to make instant, low-cost fund transfers while staying in their own system. Both UPI and PayNow enable people to transfer money from their accounts instantly at any time to another bank or e-wallet account in their respective countries using a mobile phone. Starting July next year, users in India will be able to transfer funds instantly to Singapore using a mobile phone number, while transfers can be made from Singapore to India via UPI virtual payment addresses.

The average global remittance cost, at around 5%, is prohibitive. An efficient real-time payment system offers the scope to **lower the remittance cost to 2% per transaction**. Rightly, the Bank for International Settlements has recommended collaboration between regulators to make remittances more efficient. PayNow has been linked to Thailand's PromptPay. The RBI's Payment Systems Vision 2021 document too has underscored the need to lower remittance costs. SWIFT, an international organization, promoted the electronic transfer of funds for decades.

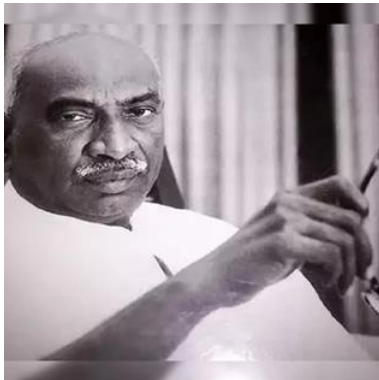
Early systems were built on the then-available low-speed links with message switching systems. The UPI, a new-generation payment system, stands out for its open architecture and flexible user interface. If the linkage between UPI and PayNow is successful, it can be replicated in other countries (read: Financial Action Task Force-compliant jurisdictions), leading to network effects, greater trade, and investment.

India has to take global leadership in creating the GPI and build a parallel banking network with countries that can cut the cost of SWIFT (Society for Worldwide Interbank Financial Telecommunication) as well as check the hegemony of European powers to take unilateral decisions on which country can or cannot do trade with Russia or any other country. The hegemony of SWIFT has to end and be replaced by GPI.

By **Rithick Kumar**



## Update for the day #1365 | "Kingmaker" Kamaraj.



Kamaraj was an Indian independence activist and politician who served as the Chief Minister of Madras State (Tamil Nadu) from 13 April 1954 to 2 October 1963. He was the founder and the president of the Indian National Congress, widely acknowledged as the "Kingmaker" in Indian politics during the 1960s. He also served as the president of the Indian National Congress for two terms i.e., four years between 1964–1967.

After the death of Nehru, he refused to become the next Prime Minister himself and was instrumental in bringing to power two Prime Ministers, Lal Bahadur Shastri in 1964 and Nehru's daughter Indira Gandhi in 1966. For this role, he was widely acclaimed as the "kingmaker" during the 1960s.

US Vice-president Hubert Humphrey, called Kamaraj as "one of the greatest political leaders in all the countries of the free world" in January 1966.

Born in a poor family, Kamaraj lost his father very early in life and started working when he was only 11 years old to supplement the family's income. After a stellar role in the freedom movement, Kamaraj, who first became a member of the provincial assembly in 1937, became chief minister of undivided Madras in 1954. In between, he remained a member of the Constituent Assembly, which had been given the task of drafting our Constitution.

On 13 April 1954, Kamaraj became the Chief Minister of Madras Province. To everyone's surprise, Kamaraj nominated C. Subramaniam and M. Bhakthavatsalam, who had contested his leadership, to the newly formed cabinet.

As Chief Minister, he reopened 6000 schools closed in the previous government by C. Rajagopalachari citing financial reasons and reopened 12,000 more schools. He introduced the Midday Meal Scheme to provide at least one meal per day to the lakhs of poor school children. He introduced free school uniforms to weed out caste, creed and class distinctions among young minds.

During the colonial era, the local education rate was at 7%; after Kamaraj's reforms, it reached 37%. To improve standards, the number of working days was increased from 180 to 200; unnecessary holidays were reduced; and syllabi were prepared to give opportunity to various abilities.



### Kamaraj Plan.

Kamaraj remained Chief Minister for three consecutive terms, winning elections in 1957 and 1962. Kamaraj noticed that the Congress party was slowly losing its vigour.

On Gandhi Jayanti day 2 October 1963, he resigned from the post of the Chief Minister. He proposed that all senior Congress leaders should resign from their ministerial posts and take up organisational work. This suggestion came to be known as the Kamaraj Plan, which was designed primarily to dispel from the minds of Congressmen the lure of power, creating in its place a dedicated attachment to the objectives and policies of the organisation. Six Union Ministers and six Chief Ministers including Lal Bahadur Shastri, Jagjivan Ram, Morarji Desai, Biju Patnaik and S.K. Patil followed suit and resigned from their posts.

### Personal life

During his tenure as Chief Minister, when the municipality of Virudhunagar provided a direct water connection to his house in his hometown, Kamarajar ordered it to be disconnected immediately as he did not want any special privileges. He refused to use the Z-level security that was provided to him as the CM of Tamil Nadu and instead travelled with just one police patrol vehicle. He did not marry, did not own any property and was never tempted by power. When he died, he left behind 130 rupees, 2 pairs of sandals, 4 shirts, 4 dhotis and a few books.

Kamaraj died at his home, on Gandhi Jayanti day (2 October 1975), which also was the 12th anniversary of his resignation. He was aged 72 and died in his sleep due to a heart attack.

By **Divya NY**



## Update for the day #1366 | Holi Festival

When you think of the Hindu holiday Holi, you may imagine people celebrating by throwing colorful powder on each other in the streets. It's true that playfully dousing people in vibrantly colored liquids and powders is an important part of Holi, a spring festival also known as the Festival of Colors, that is celebrated by many Hindus around the world. However, this colorful tradition is just one part of Holi. The holiday is actually a series of celebrations that takes place over two days, and it's rooted in a few different Hindu legends, and carries important symbolic meanings.

### **What is the Holi festival?**

Often called the Festival of Colors, Holi is a vibrant celebration that involves dancing, singing, and the playful throwing of colored powders and water at fellow revelers. Holi is celebrated widely across parts of India, where it originated, as well as in other countries in South Asia and across the Hindu diaspora in Europe and North America.

On the night before the main Holi festival, Holika Dahan, many families traditionally burn wood or cow dung in bonfires. The next day, people gather in the streets to dance, enjoy sweets and snacks, and throw powder and colored water, sometimes using water guns or balloons to soak others.

### **What is the meaning of Holi?**

Holi celebrates the arrival of spring. It also represents the triumph of good over evil, as well as a day to celebrate love, happiness, and a good harvest, according to India Today.

The rainbow of colors thrown in the form of powder or water also carries symbolic meaning. Red, for example, is considered the color of life and marriage and is often worn by women in India on their wedding day, according to the Smithsonian. Blue, meanwhile, is associated with divinity, as many Hindu gods, including Krishna and Vishnu, are often portrayed as having blue skin, while green is associated with nature.

### **What is Holi celebrated for?**

Holi is celebrated to honor the arrival of spring, as well as love, fertility and renewal. Today's Holi festival has its roots in a few different Hindu legends, including the story of Prahalad and Holika.

In a version of the ancient tale summarized by the BBC, Holika is the evil sister of the demon king, Hiranyakashyap. The king wants his son, Prahalad, to worship him like a deity. However, Prahalad refuses and remains loyal to the god Vishnu.

The demon king is furious and attempts to kill Prahalad. He fails, however, and asks his evil sister, Holika, to kill his son instead. The gods had previously given Holika the power of immunity to fire, so she decides to kill Prahalad by sitting with him in her lap in the middle of a fire. She figures the flames will kill the boy while she remains unburned.

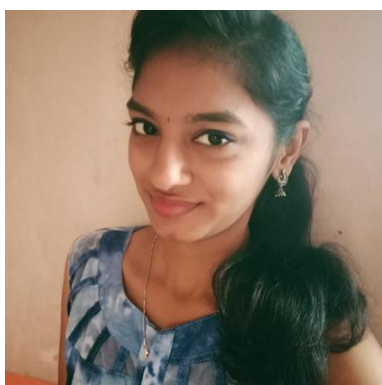
However, the gods are upset to see the powers they gave Holika being used for evil, so they decide to spare Prahalad, and let Holika burn instead. The gods also kill the demon king, and

Prahalad becomes king in his place.

Holi's message of good triumphing over evil can trace its origins to this legend. According to the BBC, some people also burn effigies of Holika on their bonfires during Holi, a reference to Holika perishing in the flames.

The Holi festival also has ties to a more light-hearted religious tale. Some people believe that colored powders are thrown because the god Krishna used to playfully throw colorful water over his milkmaids as a child, according to the BBC.

By **Sonibai**



## Update for the day #1367 | India's first hydrogen-powered fuel cell electric car project

Union Ministry for Road Transport and Highways, inaugurated a first of its kind pilot project for Hydrogen-based advanced Fuel Cell Electric Vehicle (FCEV) that will be a huge shift from fossil fuel and towards the conservation of our environment.

Toyota Kirloskar Motor Pvt. Ltd. along with International Center for Automotive Technology (ICAT) initiated this Pilot project to study and evaluate the world's most advanced FCEV Toyota Mirai which runs on hydrogen, on Indian roads and climatic conditions.

This aims at spreading awareness about Hydrogen, FCEV technology, and disseminating its benefits to support hydrogen-based society for India.



Here is all you need to know ..

Toyota Kirloskar Motor claims that the Toyota Mirai is powered by a hydrogen fuel cell battery pack and capable of providing a range up to 650 km in a single charge, with a refueling time of five minutes. 'Mirai' in Japanese means 'future'.

FCEV, which is powered by hydrogen is among the best zero-emission solutions and is completely environment-friendly with no tailpipe emissions other than water.

The Toyota Mirai was launched in 2014, was one of the world's first hydrogen fuel electric vehicles.

Green hydrogen can be generated from renewable energy and abundantly available biomass. Introduction and adoption of technology to tap into the green hydrogen's potential will play a key role in securing a clean a ..

Toyota Kirloskar Motor & ICAT are conducting a pilot project to study and evaluate the world's most advanced FCEV Toyota Mirai on Indian roads and climatic conditions.

The statement had noted that green hydrogen offers huge opportunities to decarbonise a range

of sectors, including road transportation, and is gaining unprecedented momentum globally. Union Power Minister R K Singh said he has given a target to NTPC to start buses (which will run on hydrogen) from Delhi to Jaipur.<br ..

Gadkari said, "Green Hydrogen can be generated from renewable energy and abundantly available biomass. Introduction and adoption of technology to tap into the Green hydrogen's potential will play a key role in securing a clean and affordable energy future for India."

"FCEV powered by Hydrogen is one of the best zero-emission solutions. It is completely environment friendly with no tailpipe emissions other than water," he added.

Green Hydrogen offers huge opportunities to decarbonize a range of sectors including road transportation and is gaining unprecedented momentum globally.

By **Charvika Rathore**



## Update for the day #1368 | Padma Awards 2022

President Ram Nath Kovind conferred two Padma Vibhushan, eight Padma Bhushan, and 54 Padma Shri Awards for the year 2022, at the Civil Investiture Ceremony- held at Rashtrapati Bhavan.

Amongst the prominent awardees at Investiture ceremony were Padma Vibhushan recipients; Radhey Shyam and General Bipin Rawat (Posthumous), Ghulam Nabi Azad, Smt. Gurmeet Bawa (Posthumous), N. Chandrasekharan, Devendra Jhaharia, Rashid Khan, Rajiv Mehrishi, Dr. Cyrus Poonawalla, and Sachchidanand Swami who received the Padma Bhushan awards.



Padma Vibhushan   Padma Bhushan   Padma Shri

### What are Padma awards?

The Padma awards are the highest civilian honour of India after the Bharat Ratna. They are announced every year on the eve of Republic Day. The awards are given in three categories: Padma Vibhushan (for exceptional and distinguished service), Padma Bhushan (distinguished service of higher order) and Padma Shri (distinguished service). The award seeks to recognise achievements in all fields of activities or disciplines where an element of public service is involved. The awards are given in certain select categories which include Art, Social Work, Public Affairs, Science & Engineering, Trade & Industry, Medicine, Literature & Education, Civil Service and Sports. Awards are also given for propagation of Indian culture, protection of human rights, wildlife protection among others.

The PADMA Awards Were instituted in 1954 along with Bharat Ratna. At that time only Padma Vibhushan existed with three sub-categories – Pahela Varg, Dusra Varg and Tisra Varg. These were subsequently renamed as Padma Vibhushan, Padma Bhushan and Padma Shri vide Presidential Notification issued on January 8, 1955. During the years 1978 and 1979 and 1993 to 1997, Padma awards were not announced. The awardees do not get any cash reward but a certificate signed by the President apart from a medallion which they can wear at public and government functions. The awards are, however, not a conferment of title and the awardees are expected to not use them as prefix or suffix to their names. A Padma awardee can be given a higher award only after five years of the conferment of the earlier award. Not more than 120 awards can be given in a year but this does not include posthumous awards or awards given to NRIs and foreigners. The award is normally not conferred posthumously. However, in highly deserving cases, the Government could consider giving an award posthumously.

**Who is eligible for Padma awards?**

All persons without distinction of race, occupation, position or sex are eligible for these awards. However, government servants including those working with PSUs, except doctors and scientists, are not eligible for these awards. The award seeks to recognize works of distinction and is given for distinguished and exceptional achievements or service in all fields of activities and disciplines.

According to Padma awards selection criteria, the award is given for “special services” and not just for “long service”. “It should not be merely excellence in a particular field, but the criteria has to be ‘excellence plus’.

**Who nominates the awardees?**

Any citizen of India can nominate a potential recipient. One can even nominate one’s own self. All nominations are to be done online where a form is to be filled along with details of the person or the organization being nominated. An 800-word essay detailing the work done by the potential awardee is also to be submitted for the nomination to be considered. The government opens the Padma awards portal for nominations between May 1 and September 15 every year. It also writes to various state governments, governors, Union territories, central ministries and various departments to send nominations. There is also no rigid criteria or trenchant formula for selection, according to MHA. However, the lifetime achievement of an individual is among the main considerations.

**Who selects the awardees?**

All nominations received for Padma awards are placed before the Padma Awards Committee, which is constituted by the Prime Minister every year. The Padma Awards Committee is headed by the Cabinet Secretary and includes Home Secretary, Secretary to the President and four to six eminent persons as members. The recommendations of the committee are submitted to the Prime Minister and the President of India for approval.

By **Chaithra P**





## Update for the day #1369 | Zomato is breaking the Domino's Barrier

At 7 pm on Monday, Deepinder Goyal sent Indians into a tizzy. The founder of Zomato published a blog post explaining how the company was going to attempt something that had rarely been done before — 10-minute food deliveries.

And almost immediately, the internet was split into two factions. On the one side, you had the optimists lauding Zomato for this bold new initiative. But most people who chanced on this blog post weren't too pleased. In fact, they were livid that Zomato was putting the lives of its delivery folk in grave danger by setting such absurd targets.

Everybody wanted in on the conversation. But here's the thing — This isn't the first time it's happening. You could argue that this very same conversation transpired some 18 years ago — when Domino's decided to deliver Pizzas in under 30 minutes.

At the time people didn't believe this claim. But Domino's had a plan in place.

And no, they didn't just ask drivers to risk their lives. In fact, they restricted the speeds of delivery vehicles to 45 kmph. On the side, however, they spent a whole year mapping different possibilities. They opened stores in dense localities and had their riders memorize every pothole and traffic light in the city. And by eking out inefficiencies bit by bit, Domino's did the unthinkable. They broke the 30-minute barrier.

However, they had to do it consistently. So they innovated some more. They incorporated technology to forecast orders. They worked with math and probabilities. For instance, once a customer added a pizza to the cart, the likelihood of making a purchase shot up to 60%. If they added an address, it went up to 80%. If they reached the payment page, the probability rose to 95%.

And by this time, Domino's already had a Pizza in the works.

So, how exactly does Zomato plan to break the barrier that Domino's once set?

Well, they'll like do all of this and some more —

They'll incorporate warehouses/cloud kitchens in neighbourhoods that experience peak demand  
They'll pursue demand prediction using algorithms. With over 1.35 billion orders served, Zomato knows what people want and when they want it. They also know that momos and biryanis are hot favourites. And they can prepare custom menus for micro-communities. They'll know what not to sell. If you want a paneer butter masala and garlic naan, you'll probably still have to wait. The 10-minute menu will be different from your regular menu

They'll also likely incorporate automation to expedite stuff. They recently invested \$5 million in Mukunda Foods, a food robotics company and it's likely they'll build on this And no, they won't pressurize their drivers. At least that's what Zomato is stating for now. Okay, all this sounds wonderful. But why on earth is Zomato doing it?

For Domino's, it was a compelling value proposition. People were legitimately excited at the prospect of receiving a pizza in under 30 minutes. But in Zomato's case, public perception is vastly different. Why do it then?

Isn't this a solution begging for a problem? A problem, which by the way doesn't even exist right now. A quick perusal of comments on Deepinder Goyal's post tells you about the degree of displeasure brewing underneath.

"We don't want this" is the popular chorus and people from all walks of life are chipping in, seemingly in unison.

But the thing is... It's not about you. It's not about the public. It's not even about 10-minute deliveries.

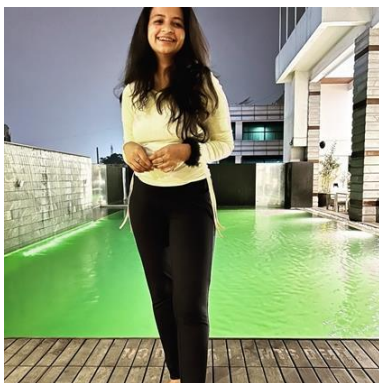
This is about competition. A competition that will eventually crop up with a seemingly unsustainable value proposition, disrupting the ecosystem altogether. As Deepinder Goyal pointed out — "If we don't do it, somebody else will."

And that somebody else will force Zomato and Swiggy on the backfoot and plunge them into another bloody protracted war with millions and billions of dollars at stake. It's an insurance, if you will. By pre-empting the move altogether, they mitigate the chances of a new startup upstaging them completely. Think about it — How many investors are willing to fund a 10-minute food delivery startup now that Zomato has already made the announcement. They'll probably respond by saying — "Zomato is already doing it."

And that's all there is to it.

Zepto did it to Grofers and Big Basket. Somebody else will do it to Swiggy and Zomato. And so, even if you don't want it, even if you think it's a needless enterprise, Zomato will try and deliver your food in 10 minutes. And when that day comes, even the most staunch critics will change their minds. Chai, samosas, biryani and momos will start arriving in under 10 minutes and the controversies will be a thing of the past.

By **Ishika Jain**



## Update for the day #1370 | Can India become a wheat exporting superpower?

The world is running out of Wheat. That beautiful commodity that goes into pasta, biscuits and bread. It's a tragedy. But how did it come to this? How did we run out of staple food?

Well, blame Russia's invasion of Ukraine. Both Russia and Ukraine export enough wheat to feed 30% of the world. However, with the war in full swing, there are massive disruptions in supply. Take Egypt for instance. It imports nearly 80% of its wheat from the two countries and is now scrambling for supplies elsewhere. Or the United Nation's World Food Program which buys 50% of wheat from Ukraine to feed 125 million people all over the world, but now finds itself in dire straits.



The world needs a saviour!!!

Enter India, the world's second-largest producer of wheat! We've had bumper harvests for 5 consecutive years and the government godowns are filled to the brim. So how does the Indian government plan to step up?

Well for starters, they are being proactive. India is trying to reach out to countries like Egypt, Turkey, Sudan, Nigeria, Lebanon and Iran, offering to meet any potential shortfalls. They are also trying to make sure the wheat can actually reach the intended destination in a timely manner. Elsewhere, the government is mandating lab tests to check for quality issues. And they are doing everything in their power to prevent a diplomatic row—something that could happen if the wheat were found to be of poor quality. Also, they are asking the railways to put together extra wagons to transport all the excess wheat from farms to ports. And they're asking Indian ports to allocate special terminals in a bid to expedite access.

They are doing a lot. But here's a question for you.

Why did we have to wait all this while to start pushing wheat? Why did we only contribute a measly 1% to the global exports? Well, to understand this we probably need to go back in time and recognise a critical aspect of our agricultural program—the Minimum Support Price (MSP). Now back in the 1960s, the government wanted to promote the cultivation of a special variety of wheat and it thus laid the foundation for what would become the Green Revolution. The plan was to incentivize cultivation by promising to buy the produce at a guaranteed price. A minimum support price if you will. And so, despite the actual demand for wheat, farmers were compensated

for their efforts and production soared.

However, when you try and set a price for any commodity inside the chambers of Krishi Bhavan, you are effectively distorting the demand-supply equation. It's like this—You can never know the true price of a commodity unless a large group of buyers and sellers haggle and bargain on the matter. If the government subverts this process and fixes a price nonetheless, it's going to be sub-optimal. And in this case, domestic prices remained elevated even as our stock buffers continued to build up. We were producing more wheat than we could possibly consume. Ideally, this should have provided the perfect setting to kick start our export program. However, since the Indian government set a minimum price, farmers typically made more money by selling it to the government than exporting it elsewhere.

And this set off a chain reaction. With little incentive to export wheat, the state had little reason to invest in transport, quality assessment and infrastructure. It was never going to work.

But things are different today. With international wheat prices soaring, farmers are able to sell their wheat for ₹2,700 a quintal. This is way higher than the current government MSP of ₹2,015. So now they're finally willing to sell their produce elsewhere and the government is trying to facilitate this process.

In fact, a while ago, Brazil, Australia and Guatemala all registered formal complaints against India by contending that the government was providing excessive financial support to sugar producers in the industry—beyond what is deemed acceptable according to rules laid out in the General Agreement on Tariffs and Trade (GATT). And the WTO agreed with this assessment.

To put it simply, the government will have trouble exporting wheat, since they've extended financial support using the Minimum Support Guarantee.

By **Rajesh.S**



## Update for the day #1371 | Falguni Nayar A self made Billionaire

Falguni Nayar an IIM Ahmedabad alumnus, she worked as a venture investor and merchant with Kotak Mahindra Group for around 20 years. After working for the group's global operations in the US and UK, she headed the institutional equities division. 2005 saw her as the managing director of the venture saving money business of the group.

In April 2012, leaving her 'ideal' life behind, Falguni Nayar gave herself the tag – CEO of Nykaa. People thought She was crazy. She observed the online market and its growth in India. The choice of the beauty segment came both from her love for make-up and the potential online market waiting for someone to come up with such a platform.

It is hard for a person to quit their job at 50 and then think about starting a business from scratch. Well, had it been easy, there would not have been exemplary stories like Falguni Nayar's who bid adieu to her well-established career, only to give birth to her entrepreneurship dream, Nykaa.

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Drawing inspiration from entrepreneurs like Ronnie Screwvala of UTV and Ajay Bijli of PVR Cinemas, she headquartered her company in Mumbai, where she was born and brought up. Seeing her father run a small bearings business, she knew she had it in her to become an entrepreneur. Stock market and trade were a common discussion in her house during the growing years.

While the idea and the dream to be an entrepreneur lived inside her, Nykaa happened when Falguni Nayar had some spare time on her hands, after her children (twins Anchit and Adwaita) left for their studies to the US. With a deadline of 50 (which was self-imposed), the one woman army took a leap of faith and quit her job at Kotak.

Her love for make-up, along with the instinct that India needs an online platform for cosmetics and wellness, drove her. Bridging the gap and changing the way women shop, she has successfully curated more than 850 brands and 35,000 products. The company also has its presence in many cities with 17 stores across India. There are two store formats – Nykaa Luxe and Nyka On Trend. Luxe has Indian and international beauty brands along with Nykaa Beauty, the in-house beauty products collection, and On Trend is a collection of popular market products.

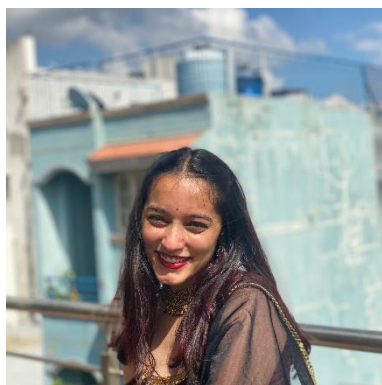
The young yet super successful online beauty company has a target audience in the age group of 22 – 35, and has also launched private labeled products in the bath and body care category, in March 2016. Working in an inventory based model, Nykaa has warehouses in Mumbai, New

Delhi and Bangalore, and offers all leading brands including Kaya Skin Clinic, Lakmé, L'Oréal Paris and more.

Falguni Nayar Nykaa has now become a singular identity in the market. The brand's association with its founder is deeply engraved everywhere and is a result of the passion she had for her dream. Nykaa, derived from Nayika, which means the actress of one's life, is certainly the perfect name to beautify and inspire women at the same time.

She once said, "Think big but start small."

By **Aditi Jain**



## Update for the day #1372 | A Chapter Fans Will Never Forget

Virat Kohli

The name, I believe everyone knows:

The failure to win an IPL title despite being the skipper of Royal Challengers Bangalore for nine seasons will be a heavy cross to bear for Virat Kohli. Soon after the Kolkata Knight Riders completed a spirited win over the Royal Challengers Bangalore in the Eliminator on Monday, the spotlight turned on Virat Kohli. The cameras followed him wherever he went; from the hyperbolic commentators to fans on social media, the talk was about Kohli's legacy as RCB captain.

For a man who has just won 66 of the 140 matches he has led the Royal Challengers in and attained a best finish of runners-up way back in 2016, the question that immediately arises is - has Kohli really left behind a legacy worth emulating? True, it's the end of an era at RCB with the 32-year-old having already decided to step down as captain.

So, what is Kohli's legacy? The answer is simple: A wonderful one as a player and as a captain. As a batsman, there is no one like Kohli in the IPL. With 6,283 runs in 207 games at an average of 37.39, Kohli has not only led RCB's batting phenomenally but is also way ahead in the all-time run-makers list. As a captain, Kohli has amassed 4,881 runs at an impressive average of 42.08 with five hundreds and 35 fifties. None of the other captains come close to him in terms of individual performances.

The amount of energy, girt and determination he brings in the squad and on the field is tremendous and has set such high bars for one to achieve.



The name, I believe none of them will forget:

On Friday i.e, 25/03/2022 the whole cricketing world experienced Mahendra Singh Dhoni's charisma once again when the 39-year-old wicketkeeper-batsman led Chennai Super Kings to their fourth IPL title victory. After beating Kolkata Knight Riders by 27 runs in Dubai, Dhoni and his team were crowned champions. CSK has been outstanding throughout the season. They remained in the top half of the points table throughout the India leg and the second half of the



competition, which began in the UAE, and became the first franchise to qualify for the playoffs and ultimately the championships.

The most talked-about topic was Dhoni's leadership, particularly the manner in which they were eliminated from IPL 2020. It was the first time they had failed to qualify for the playoffs and ended in the bottom half of the standings in the tournament's history. And now, as the question of Dhoni's future with CSK and in what capacity lingers, former India opener Virender Sehwag believes the famous wicketkeeper-batter should play one more year in the IPL before calling it a day.

"The legacy of captain is renowned for the number of trophies he has won," Sehwag told Cricbuzz after the last match. "And this skipper [MS Dhoni] has four titles to his name and has appeared in nine finals. Any other skipper will have a difficult time matching him up. Rohit Sharma is close, but he needs more nine-season nine season finals."

"Without a doubt, Chennai Super Kings is the most reliable squad in this T20 tournament." They finished last on the table last year and were previously banned for two years. So they were out of contention for three of the 13-14 years. However, in the other seasons, they have made the playoffs nine times and reached the final.

"The two most known and respected players have handed over their captaincy and left behind the legacy to be carried forward, by setting their own standards at such high".

By **Akshit Jain**



## Update for the day #1373 | 10 types of banking frauds in India customers should know about

10 types of banking frauds in India customers should know about

- **Phishing**  
Fraudsters create a phishing website that appears to be a legitimate website, such as a bank's website, an e-commerce website. Fraudsters distribute links to these websites by SMS, social media, email, and Instant Messenger, among other methods.
- **Vishing**  
Imposters acting as bankers, firm executives, insurance agents, government officials, and others call or approach customers over the phone or over social media. Imposters disclose a few consumer facts, such as the customer's name or date of birth, to win trust. Imposters may pressure or trick customers into sharing confidential information such as passwords, OTPs, PINs, and CVVs.
- **Frauds using online sales platforms**  
On online sales platforms, fraudsters pose as purchasers and express an interest in the seller's product(s). Several fraudsters pose as defense personnel stationed in remote regions to gain trust.
- **Frauds due to the use of unknown/unverified mobile apps**  
According to RBI, fraudsters circulate through SMS, email, social media, Instant Messenger, etc., certain app links, masked to appear similar to the existing apps of authorized entities.
- **ATM card skimming**  
Skimming devices are installed in ATM machines by fraudsters who take data from the customer's card.
- **Frauds using screen sharing app / Remote access**  
RBI warns customers stating the procedure that "Fraudsters trick the customer to download a screen-sharing app. Using such an app, the fraudsters can watch/control the customer's mobile / laptop and gain access to the financial credentials of the customer.
- **SIM swap or SIM cloning**  
In cases like SIM swap or SIM cloning, "Fraudsters may obtain a duplicate SIM card for the registered mobile number linked to the customer's bank account by gaining access to the customer's SIM card,"
- **Frauds by compromising credentials on results through search engines**  
Customers use search engines to find contact information for their bank, insurance company. These contact details on search engines are frequently modified to appear as if they belong to the respective entity by scammers.

- Scam through QR code scan  
Fraudsters often contact customers under various pretexts and trick them into scanning QR codes using the apps on the customers' phone. By scanning such QR codes, customers may unknowingly authorize the fraudsters to withdraw money from their account.
- Impersonation on social media  
Fraudsters create fake accounts using details of the users of social media platforms such as Facebook, Instagram, Twitter, etc. Fraudsters then send a request to the users' friends asking for money for urgent medical purposes, payments, etc.

By **Shreemanth B**



## Update for the day #1374 | PVR and INOX Merger

A sharp surge in shares of INOX Leisure and PVR, after merger announcement between the two multiplex chains, says a lot. Investors are happy over the merger deal that is expected to boost free cash flow, increase the merged entity's bargaining power, ensure stranglehold over real estate and bring in cost synergies.

Deal favours INOX investors more?

As per the share swap ratio, investors will get three shares of PVR for every 10 shares of INOX Leisure. Analysts said the ratio is slightly favourable to INOX investors by about 12 per cent, probably due to its zero net debt situation compared with PVR's net debt at Rs 857 crore.

This was visible in the 20 per cent surge in shares of INOX compared with a 10 per cent rise in PVR shares. Based on the swap ratio, INOX is valued at 17 times EV/Ebitda and EV/screen of Rs 9 crore, which is 15 per cent higher than its current price, but 18 per cent below PVR's valuation on a FY20 basis.

"The upside could be larger as we believe valuation multiples could expand beyond what we have baked in. We are looking at an entity which can deliver Rs 1,800 crore in Ebitda by FY24 if there are no hiccups," Nirmal Bang said in a note.

Synergies visible

While PVR has dominance in north and south, INOX remains more focussed on eastern and western regions, thereby allowing the entities an opportunity to expand faster and profitably in their respective markets. PVR operates 871 screens across 181 properties in 73 cities. INOX, on the other hand, owns 675 screens across 160 properties in 72 cities.

The combined entity would be operating 1,546 operating screens across 341 properties and 109 cities. Such a scale would offer "substantial bargaining power over the entire ecosystem including customers, real estate developers, content producers, technology service providers, the state exchequer and employees," said JM Financial.

Around 70 per cent of the market consists of single screen cinemas, which are facing a shutdown, whereas multiplexes, with 30 per cent share and about 2,700 screens, are seeing strong growth.

"Given the large movie market (over 2,000), healthy box office collections, lower number of screens/cinemas, and a concentrated multiplex market (PVR/Inox command over 40 per cent market share), the multiplex market has healthy room to add new screens. The combined entity could deepen the network in Tier II and III markets.

INOX has a lower share of non-ticketing revenue at 42 per cent against PVR's 48 per cent. This will allow INOX to leverage the scale of the merged entity.

A tough business environment

Abhay Agarwal, Founder, and Fund Manager at Piper Serica noted that multiplex is very tough business with high capex and high fixed opex. Even in a fast-growing market like India, the multiplexes have been struggling to generate free cash flows, he noted, adding that the business model in its current form is that of a glorified quick service restaurant (QSR) since more than 80 per cent of the profits come from the sale of high-priced food and beverages.

By **Nagarjuna A M**



## Update for the day #1375 | Hydrogen Water: Miracle Drink or Overhyped Myth?

### Hydrogen Water: Miracle Drink or Overhyped Myth?

Plain water is the healthiest choice to keep your body hydrated. However, some beverage companies claim that adding elements like hydrogen to water can enhance health benefits. This article reviews hydrogen water and its purported health effects to help you decide whether it's a smart choice.

**What Is Hydrogen Water?** Hydrogen water is simply pure water with extra hydrogen molecules added to it. Hydrogen is a colorless, odorless, non-toxic gas that binds to other elements like oxygen, nitrogen, and carbon to form various compounds, including table sugar and water. Water molecules consist of two hydrogen atoms and one oxygen atom, but some assert that infusing water with additional hydrogen produces benefits that plain water cannot deliver. It's thought that the body can't effectively absorb the hydrogen in plain water, as it's bound to oxygen. Certain companies claim that when extra hydrogen is added, these hydrogen molecules are "free" and more accessible to your body. The product is made by infusing hydrogen gas into pure water before packing it into cans or pouches.

Hydrogen water can be pricey — with one popular company selling a 30-pack of 8-ounce (240-ml) cans for \$90 and suggesting consumers drink at least three cans per day. Additionally, hydrogen tablets meant to be added to plain or carbonated water are sold online and in health food stores. Hydrogen water machines can also be purchased by those wanting to make it at home. Hydrogen water is marketed to decrease inflammation, boost athletic performance, and even slow your aging process. However, research in this area is limited, which is why many health experts are skeptical of its supposed benefits.

**Does It Benefit Health? Provide Antioxidant Benefits:** Free radicals are unstable molecules that contribute to oxidative stress, a major cause of disease and inflammation. Molecular hydrogen fights free radicals in your body and protects your cells from the effects of oxidative stress.

**May Benefit Those with Metabolic Syndrome:** Metabolic syndrome is a condition characterized by high blood sugar, increased triglyceride levels, high cholesterol, and excess belly fat. Chronic inflammation is suspected to be a contributing factor. Some research shows that hydrogen water may be effective at reducing markers of oxidative stress and improving risk factors related to metabolic syndrome.

**Benefit Athletes:** Many companies promote hydrogen water as a natural way to enhance athletic performance. The product may benefit athletes by reducing inflammation and slowing the accumulation of lactate in the blood, which is a sign of muscle fatigue.

**Should You Drink It?** Though some research on the health effects of hydrogen water shows positive results, larger and longer studies are needed before conclusions can be drawn. Hydrogen water is generally recognized as safe (GRAS) by the FDA, meaning that it's approved for human consumption and not known to cause harm. However, you should be aware that there's currently no industry-wide standard on the amount of hydrogen that can be added to water. As a result,

concentrations can vary widely. Plus, it remains unknown how much hydrogen water needs to be consumed to reap its potential benefits. If you'd like to try hydrogen water, experts suggest purchasing products in non-permeable containers and drinking the water quickly to obtain maximum benefits. There's a lot of buzz surrounding this beverage — but until more research is conducted, it's best to take the purported health benefits with a grain of salt.

**The Bottom Line:** Small studies show that hydrogen water may reduce oxidative stress in people undergoing radiation, boost performance in athletes, and improve certain blood markers in those with metabolic syndrome. Still, extensive research confirming its health effects is lacking, making it unclear whether the drink is worth the hype.

By **Rithik Jain**





## Update for the day #1376 | National Nutrition Month

Although many people like to set resolutions and try turning over a new leaf around the New Year, March is also a great time for a healthy focus, after the long winter is almost over. At the beginning of springtime, this month is often a time when people feel that the winter is ending, the sun is beginning to shine and hope is beginning to rise.

With this in mind, March has been declared National Nutrition Month—a time for people to start learning and thinking a bit more carefully about what kinds of foods they put into their bodies.

### **History of National Nutrition Month**

National Nutrition Month is celebrated every March and is sponsored by the Academy of Nutrition and Dietetics in the United States. National Nutrition Month focuses on helping people to make correct food choices as well as developing good eating and exercising habits.

1973 saw the launch of Nutrition Week by presidential proclamation (from Richard Nixon), and by 1980 it had been transformed to cover the entire month of March. Federal and state governments as well as the American Dietetic Association (as the Academy of Nutrition and Dietetics was then known) enthusiastically embraced National Nutrition Month as an excellent vehicle to promote healthy eating and also as a way to educate the public.

National Nutrition Month is centered around a different theme each year, and during the years 1977 to 1980, Nutribird, who had a bright green cabbage for his head and a bold orange carrot beak, was the character who acted as the sponsor for the month.

### **Themes for National Nutrition Month have included:**

- 1973. Invest in Yourself—Buy Nutrition
- 1978. Nutribird Says: Eat a Balanced Diet Every Day
- 1989. A Lifetime Decision—Choose Good Nutrition
- 1994. Nutrition Fuels Fitness
- 2002. Start Today for a Healthy Tomorrow
- 2014. Enjoy the Taste of Eating Right

Food can be an exciting adventure and National Nutrition Month serves to help people discover this by focusing on healthy cooking and eating during this month. Get ready to celebrate National Nutrition Month!

### **How to Celebrate National Nutrition Month**

Get on board celebrating this month for 31 whole days in a variety of ways! Try out these interesting ideas for enjoy this month and sharing it with others as well:

### **Visit Nutrition Websites**

The Academy of Nutrition and Dietetics makes it easy to celebrate National Nutrition Month as they have a bundle of activity hand-outs and nutrition tip sheets available for children and

adults. The experts at this organization suggest trying out a new healthy food each week to give variety, eating at some of the many ethnic restaurants because they often offer lots of healthy options, and varying cooking methods which gives foods a different taste to keep things interesting.

### **Eat More Fresh Foods**

This is a great month to begin finding fresh fruits, veggies and other foods at a local grocery store. Even better, visit a farmers' market if the weather permits in the area. Don't be afraid to ask the vegetable seller to share ideas for ways that certain foods should be prepared, or look up some recipe ideas online.

### **Avoid Fast Food**

One way that many people can make an easy change is by cutting out fast food during National Nutrition Month. If it's a matter of convenience, either take a few minutes to pack a lunch in the morning or choose a quick meal at a place that serves a healthy salad or soup option.

### **Plant a Garden**

March is a great time to start thinking forward into the coming year. If it's still cold out, that's okay. Seedlings can be begun inside and then moved outside when the weather gets warmer. Some easy to grow and healthy plants include lettuces, beans, radishes, peas, carrots, cucumbers and kale.

Start during National Nutrition Month and then have a whole summer full of healthy and delicious vegetables to help carry things further on throughout the year. Try planting different vegetables from every color of the rainbow!

### **Choose Whole Grains**

One simple but super healthy substitute that doesn't require much effort is trading out the empty calories of white rice, white bread and plain pasta for whole-grain versions. Brown rice and whole wheat or oat bread don't spike the blood sugar as much and take longer for the digestive system to break down. A great way to sneak a serving of vegetables into a meal is by serving healthy spaghetti squash instead of pasta that is filled with empty calories.

By Yesh R Solanki



## Update for the day #1377 | China's Atmanirbhar Problem

China once wanted to usurp the US and claim technological superiority. But today those dreams lay in tatters as they aren't making good progress on domains such as AI research, operating systems and aircraft manufacturing and it doesn't appear as if they have a wide enough pool of specialised talent to make headway anytime soon either. All in all, China is grasping at straws here and may find themselves left behind as the US keeps gaining ground on breakthrough tech that could come to shape the future.

Not America, nor India. Instead, the rather unpleasant truth comes from no less than China itself as one of China's most respected think tanks—the Institute of International and Strategic Studies (IISS) at Peking University—published a damning report titled “China-US Strategic Competition in Technology: Analysis and Prospects”.

Their main contention—As China and US grow distant, both countries are likely to lose. But China may be the ultimate losers here since they have more at stake. Now you may already know that the US has been cracking down on Chinese tech quite heavily. First, they placed a ban on a string of Chinese companies from receiving US capital and supplies. Then they placed export restrictions on Chinese companies operating in the US. They were also tacitly discouraging all Chinese-US scientific cooperation fearing espionage. And relations between the two countries are at an all-time low.

So the think tank's admission shouldn't come as a shocker. In fact, China has long been wary of losing the tech battle with the US. The same think tank had previously indicated that a “targeted decoupling of supply chains” was one of the top 10 global risks China is likely to face in 2022, along with mutations of the Covid-19 virus.

Targeted decoupling of supply chains is a fancy word to explain what we talked about earlier—the end of economic engagement. However, this recent academic introspection is slightly different in its approach since the report lays bare China's less than satisfactory progress in developing key technologies at home. In other words, the difficulties of being truly Atmanirbhar.

For instance, the country is struggling to make inroads in the development of operating systems. According to The Economist, Chinese companies have invested around \$4 billion between 2019 and 2021 to develop alternatives to US operating systems like Android and Apple's iOS. Huawei a Chinese phone manufacturer—cut off from accessing chips and software back in America, felt a particular need to develop an alternative. The end result? A domestically developed OS called “Harmony OS” (also known as “Hongmeng OS” in China). The OS was touted as the next big rival to Android. Except, anyone who ever used Harmony OS calls it the ‘forked android version without Google services’ or ‘Android with new skin’. Meanwhile, the majority of Chinese people still continue to use Android and iOS, like the rest of the world.

Then there is AI, and China isn't faring any better here. The report notes, China “lags far behind the United States” when it comes to AI-related research. Although China is known to publish as many academic AI papers as America (if not more), they lack in terms of originality and are rarely considered groundbreaking work. Now bear in mind, you could attribute America's success to

the fact that the US is still the top destination for people who intend to study and research AI. In fact, a considerable number of overseas Chinese students also head over to the US to study AI. Unfortunately for China, most of them do not return. The report found, 88% of Chinese students chose to stay in America, while only 10% of the Chinese nationals returned home.

Then there's aircraft manufacturing. China has long harboured ambitions of building passenger airplanes that could rival the two western mainstays—Boeing and Airbus. In fact, they funnelled more than \$72 billion in state funding to help its cause. Its biggest success has been the development of c919—a Chinese made passenger airplane. Except, it is not all that Chinese, according to the Peking think tank. They claim that the aircraft is a hodgepodge of foreign-made parts imported from the west with almost three-fifths of the C919's parts originating from American companies, including critical components like flight controls and jet engines. And if America chooses to further alienate China, this dream could unravel quite quickly as well.

Needless to say, the report itself has since been purged from the Chinese Internet. No one really knows why, but if you had to take a guess, you could bet that the Communist Party didn't exactly want to parade its admission of defeat to the entire world. Especially since its leader, Xi Jinping is banking on the success of the self-reliance movement to be appointed as president for life

By **Dylan Fernandes**



## Update for the day #1378 | Asian Paints is a IT Company

Asian Paints is indeed an IT company and as bizarre as that sounds, Asian Paints' secret to its 60+ years-long success is, foraying into the IT sector.

We've all had our houses painted at some point in time. As an avid grayscale enjoyer, I find just exploring the colour catalogue to be plenty entertaining. But those with artistic inclinations find the colour selection process joyous and something of an entertaining endeavor. The creative ones are probably already stirring up a colour combination storm in their minds...

But what if I told you, every colour combination you've thought of, are thinking of and will ever think of, is partially known by an algorithm sitting in a computer. Now imagine what a paint company could do with this information that only grows as time passes.

Well, this near mythological and niche algorithm does exist, and Asian Paints has it, using it regularly to stay in the pink of health. The algorithm has been in its possession since 1970.

Asian Paints has been a leader in the pigment industry from long before 1970 though. What are the secrets to its palette of success that no competitor ever tries to come after its crown?

### **The Mixing Bucket**

When it comes to the paints and pigments industry, the companies are not price makers. With similar production techniques, unchanged chemical compositions and no major disruption, the competitors are too similar to warrant the strength to set distinct prices for their products.

Currently, the paint industry is being led by three major players, namely, Asian Paints, Kansai Nerolac Paints and Akzo Nobel India. Here's a look at their financial standing:

Notice the massive difference between Asian Paints and its peers? In any particular numerical, Asian Paints is more than 5 times bigger than the next in line.

Just in case the vast rift between Asian Paints and the rest seems hard to believe in.

Back to the blush baron, Asian Paints enjoys such a dominant position because, in an industry that has somewhat peaked in terms of future developments, Asian Paints is choosing to change. Change not the industry but itself in such a radical fashion that no other player could achieve a similar feat.

### **Asian Paints: A hipster of the paint industry**

As mentioned before, the paints and pigment industry are saturated in terms of development that can take place inside the industry. So, what does Asian Paints do? It innovates from an angle outside the industry.

Giving customers the reigns: Originally, the paint industry had been commodity centered, i.e., customers would buy the very few options available for residential colouring. The paint was

usually picked by the contractor or builder and had no input from the end-user.

The paint company that entered the space race

So far, we've seen how Asian Paints changed the paint and pigment industry from a commodity-led industry to a consumer-centered industry. This change, however, created greater opportunities for the industry altogether. Asian Paints wouldn't solely benefit from these changes.

To understand how getting close to the customers was just setting the stage and what exactly was the actual play, let's go on a tangent about the paint manufacturing supply chain.

Traditionally paint manufacturers would sell their paints to wholesalers or distributors, who would then sell to the retailers to bring paint to the end-user.

This system, while effective, would cost manufacturers about 15-20% of their margin to pay the middlemen.

What Asian Paints decided to do, which at the moment seemed like madness, was to axe these middlemen.

In an industry where the prices wouldn't change because the companies couldn't change them, Asian Paints created profits by changing its cost. Now instead of the 15-20% of its margin going to the distributors of the supply chain, Asian Paints saved its cost to wholesalers and, as a result, increased its profit.

Asian Paints now earned 97% of its MRP, and the remaining 3% went to the retail seller, compared to the competitors who earned only 60-70% of their MRP due to middlemen.

If only the call was that easy to make though, the cost saved by removing the middlemen caused distress among the retailers as they couldn't keep such high inventories. Wholesalers were the infrastructural aid to store inventory in large capacities.

Asian Paints, continuing its revolutionary idea, decided to alleviate the storage issue by employing a different aid to trade, transport.

The decision was not to make the retailers maintain a significant inventory but to keep restocking them at a high frequency. How high, you ask? Every three hours, during the working day, meaning 4 times a day and 28 times a week!

To put this number in perspective, other brands were restocking once every 2-3 days.

This abrupt, revolutionary decision was made in 1969. Yeah! That long ago.

But how could a paint company possibly anticipate what paint it would need to supply? Would the deliveries be demand-based? But that would cause a delay and could potentially hamper the consumer's experience with Asian Paints. The deliveries would have to be pre-emptive.

The whims of humans are unknown to even the real ones; how could a legally created artificial one predict them? The answer is simple. It couldn't. Tech, however, was leagues ahead and the next step.

This is where the prime paint producer brought in a programmable powerhouse in the pigment

play.

Supercomputer in 1970's

In the year 1970 Asian Paint, for a grand sum of ₹8 crore, bought a supercomputer, the first to ever exist in India. This was 10 years before ISRO and IIT Powai (the places you'd expect a supercomputer to be) and 22 years before any other company would do the same.

So, a paint company bought a large, fancy computer, big deal! Yep, it was a big deal. Putting aside the sheer pioneering in technology, the supercomputer turned into a goldmine of insight, giving Asian Paints a look into consumer buying habits based on past habits.

This supercomputer didn't just zero in on the colours that would be demanded, but the can sizes, paint base types as well as the quantity of the colours being bought. Each purchase added to the data pool the computer drew from, bolstering the accuracy of the predictions.

The introduction and usage of trend-based data was not just useful for the distribution process but also had far-reaching effects into the pre-production process of procurement of raw materials and the production process itself. Knowing exactly what was to be sold meant knowing precisely what was to be produced as well.

By **Pratham Sakaria V**





## Update for the day #1379 | Indian startup Pixxel launches 'Shakuntala' satellite with Elon Musk

Launched on Friday aboard SpaceX's Transporter-4 mission from Cape Canaveral in the US, this launch puts the company within touching distance of its ambitious mission to assemble one of the world's most advanced constellations of low-earth-orbit imaging satellites.

Spacetech startup Pixxel has successfully launched its first fully-fledged commercial satellite called 'Shakuntala' with Elon Musk-run SpaceX's Falcon-9 rocket. Being Pixxel's first fully-fledged satellite, 'Shakuntala' hosts one of the highest resolution hyperspectral commercial cameras ever flown to space, bringing it one step closer to building a 24x7 health monitor for the planet, it said in a statement.



"From being one of the very few finalists in the SpaceX Hyperloop Pod Competition in 2017 to now launching our own satellites as part of SpaceX's fourth dedicated rideshare mission, life has come full-circle for us," said Awais Ahmed, CEO of Pixxel.

Weighing less than 15 kg, Shakuntala (TD-2) is capable of capturing orbital images in more than 150 bands of colour from the visible and infrared spectrum with a resolution of 10-metres per pixel, far exceeding the specificity of 30-metre per pixel hyperspectral satellites launched by a few select organisations such as NASA, ESA, and ISRO.

In just a few weeks from launch, Shakuntala will begin amassing information and uncovering the invisible changes wreaking havoc on our planet like natural gas leakages, deforestation, melting ice caps, pollution, and declining crop health. The launch came at the heels of Pixxel's \$25 million

Series funding from Radical Ventures, Seraphim Space Capital, Relativity Space co-founder Jordan Noone, Lightspeed Partners, Blume Ventures, and Sparta LLC, among others. It sets the stage for Pixxel's first commercial phase satellites, to be launched in early 2023. With six satellites flown in a sun-synchronous orbit (SSO) around a 550-km altitude, Pixxel's hyperspectral constellation will be able to cover any point on the globe every 48 hours.

By **Khushi Jain**



## Update for the day #1380 | Mr. Poonawalla

Cyrus Poonawalla is the chairperson of the Poonawalla Group, which includes Serum Institute of India which is one of India's top Biotech Company and one of the world's cheapest vaccine producing company. Forbes Magazine's Richest Billionaire List in 2015 ranked Dr. Poonawalla as India's 11th richest person and the 208th richest person worldwide. He is a prominent figure in India in the field of horse racing. Dr. Cyrus Poonawalla has contributed tremendously, both as the Chairperson of the Royal Western India Turf Club and as breeder of classic race horses and has received every possible top national and international award for the same.

### **Cyrus Poonawalla's Personal Life**

Cyrus Poonawalla was born in a family whose ancient business was horse racing and they owned Poonawalla Stud Farms. He did his schooling from Bishops School, Pune and completed his graduation from Brihan Maharashtra College of Commerce (BMCC) in 1966. He was awarded a PhD in 1988 by the Pune University for his thesis entitled as "Improved Technology in the Manufacture of Specific Anti-toxins and its Socio-Economic Impact on the Society". Dr Poonawalla is married to Late Villoo Poonawalla. His wife died on 8th June 2010 due to a massive cardiac arrest. She is survived by her husband, son Adar who is the Executive Director (Operations) at the Serum Institute, Adar's wife Natasha, and a grandson..

### **Beginning of Dr Poonawalla's Career**

By the age of 20 Dr. Poonawalla realized that horse racing had no future in India. So he experimented with cars. He along with his friend built a \$120 prototype sports car modeled on the D-type Jaguar. But producing such cars on commercial basis would require huge capital than they had. So Dr. Poonawalla relinquished that idea, and realized that making car for the masses is a better choice than targeting just the elite community of society. During that time horses were donated to government owned Haffkine Institute in Mumbai, which made vaccines using horse serum.

Dr Poonawalla observed the scope in the serum industry. He realized that he can take upon this challenge of producing vaccines extracting horse serum and supplying it throughout the country at affordable prices, satisfying the demand for vaccines in the country. He with his brother Zavaray raised \$12,000 by selling horses and convinced their father to put up the rest. They set up their venture in 1966 on a 12-acre lot and started producing vaccines.

### **Business Journey of Cyrus Poonawalla**

- 1996-Dr. Poonawalla with his brother Zavary founded Serum Institute of India which launched its first therapeutic anti-tetanus serum within just two years and started with the production of the anti tetanus vaccines.
- 1974-They began producing DTP vaccine, which protects children from diphtheria, tetanus and pertussis and then introduced an anti-snake venom serum for snake bites.
- 1989-They started with the production of the Measles Vaccine M-VAC and in a year Serum Institute became the nation's largest vaccine manufacturer.
- 1994-Cyrus Poonawalla's Serum Institute was commissioned by the World Health Organization to export vaccines from India and began supplying high quality vaccines to U.N. Agencies such as PAHO (Pan American Health Organisation) and UNICEF.
- 1998-By 1998 Serum Institute was supplying vaccines to over a 100 countries.

- 2000-By 2000 one out of every two children was vaccinated by vaccines of Serum Institute of India.
- Serum Institute Of India has over the years emerged as India's leading Biotech company and presently is exporting vaccines to more than 140 countries around the world.

#### **Dr. Poonawalla's contribution to the society**

- Dr. Cyrus Poonawalla has not only contributed in providing low cost vaccines to the masses who otherwise would not be protected against deadly diseases such as measles, diphtheria etc. but has also contributed immensely to the society in the following ways :
- Contribution in the field of education, for example establishment of Soli Poonawalla Memorial High School in Hadapsar ,“Dr.Cyrus Poonawalla Conference Hall” at Brihan Maharashtra College of Commerce, Pune.
- Beautification of the City by building Parks and Gardens for example the Gool Poonawalla Park in Pune etc.
- He is also an active associate of Executive Council Member of the Poona District Leprosy Committee, which is a Public Charitable Trust.
- Gives donations to poor individuals who are suffering from life-threatening diseases.
- Participated in Confederation of Indian Industries’ Program of “Zero Load Shedding” by Captive Power Generation by Private Companies making life of citizens of Pune better.
- Arranging Camps with Rotary International for free rubella immunization of girls from slum areas.

By **Vaibhav Bhansali**





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