MOTOR VIKATAN VOLUME:1 ISSUE:2



How to choose a best Smart TV?



Mahindra goes for a complete Makeover

Intends to launch 15 sensations in 5 Years

Mahindra goes for a complete Makeover



Mahindra intend to be an SUV-specialist brand by launching 15 cars in 5 years



he COVID-19 pandemic has had a swift and severe impact on many industries including the globally integrated automotive industry. The automotive sector had already undergone considerable slowdown over the last 3 years due to structural changes beginning with the goods & services tax (GST), shift to shared mobility, axle-load reforms, the switch from BS4 to BS6 transition and the liquidity crunch. The COVID-19 lockdown has had a multiplier effect - the industry has almost been at a complete standstill since March 2020. A prolonged truncation of consumer demand due to the lockdown has significantly affected auto manufacturers' revenues and cash flows.

Post lockdown many companies launched new cars, especially during the festive season. Many cars tried to impress customers but when it comes to final decision making, Mahindra's second-generation attracted many and racked up impressive sales for the Indian SUV maker. In fact, the waiting period has risen to one year. This success has clearly helped the company decide where it has to head in the next 5-6 years.

SUVs are the bread and butter for Mahindra and the industry trend is also going towards SUV. Therefore the company has revealed that it will focus on developing its core portfolio of sport-utility vehicles (SUVs) and their electric version under its new Managing Director and CEO Anish Shah. M&M is looking at leveraging the true DNA of the brand and have the brand tell its own stories about where it comes from and who they are.

will be SUVs. This includes six hybrid/electric SUV's.

The company is also working on two new products based on the Born EV platform which is Mahindra's dedicated architecture for e-SUVs. These fully electric vehicles are codenamed Born EV1 and Born EV2 and are scheduled for launch in 2025-26. It is expected that Mahindra will use the Mahindra Electric Scalable Modular Architecture (MESMA), showcased at the 2020 Auto Expo, which has a wide range of battery packs.

Before going into an all-electric mode, Mahindra & Mahindra will also come up with four hybrid SUVs namely - XUV300, XUV700, W620 and the V201. These vehicles will pave the way for all-electric vehicles and will compete with the current generation cars like Tata Nexon Electric, MG ZS EV and Hyundai Kona.

out from M&M's lightweight tractor programme, the K2 series, which is developed through close collaboration between the engineering teams from Mitsubishi Mahindra Agricultural Machinery of Japan and Mahindra Research Valley in India.

The investment made to develop mStallion range of petrol and mHawk range of diesel engines, the new electronic architecture and few important areas will help Mahindra for the next few years. Currently, Mahindra employs engines from 1.2 litres to 2.2 litres to power the upcoming models. Similarly, for the infotainment systems, Mahindra doesn't need to invest now, it has already made necessary arrangements with Visteon and developed solutions that will cater to future requirements. With these kind of arrangements, Mahindra &

The launch phase kick starts with the new Scorpio, which is expected in 2021-22. Followed by the company's brand new XUV700, which will be launched in this calendar year.

Mahindra & Mahindra Ltd intends to invest a total of Rs 17,000 crores over the next three years; out of this, Rs 12,000 crores is meant for new models in both the passenger vehicles and farm sectors. The proposed investments, Rs 9,000 crore is for the automotive sector, Rs 6,000 crore for conventional vehicles and Rs 3,000 crore for electric vehicles (EVs). For the farm equipment sector the company will spend Rs 3,000 crore and the remaining Rs 5,000 crore will be invested in the group companies.

The company plans to launch a total of 23 models in the passenger vehicles segment and light commercial vehicles (LCV) category by 2026 and 37 models in the farm equipment vertical under its Project K2 by 2024-25. Now, out of the total 23 new products Mahindra intends to launch in the PV and CV sectors, nine

The launch phase kick starts with the new Scorpio, which is expected in 2021-22. Followed by the company's brand new XUV700, which will be launched in this calendar year. While a five-door Thar and all-new Bolero are set to hit the market between 2023-26. Between 2024-27, the company has planned three new products, including SUVs code-named W620 and V201 along with an all-new version of its compact SUV XUV300, all of which will have electric powertrain options.

The company also have a very strong strategy in the LCV segment, especially in less than three and a half tonne segments. In this space, Mahindra will be launching 14 new products to strengthen its position as the number one player. In the farm equipment sector, the products will be rolled

Mahindra is ready to shake the market and are eyeing a bigger market share in the passenger car and LCV segment.

XUV700

Mahindra is all set to launch its new flagship SUV - the XUV700 in India this year. Based on the company's new W601 SUV platform, it was earlier believed to be the new-gen XUV500, however, now we have been told that the XUV700 will be the official replacement for Mahindra's popular 7-seater SUV. When launched, the XUV500 came with lots of segment-first features. This helped in attracting a lot of people. Mahindra would be replicating the same formula and would be offering a lot of segment-first features with the new XUV700.



Mahindra is expected to offer Advanced Drive Aids System (ADAS) with the XUV700. This would make it the first SUV to offer ADAS features in the segment. So, it can come with adaptive cruise control, lane departure warning, blind-spot detection, lane departure warning and forward collision warning. Currently, the most affordable vehicle with ADAS features is the MG Gloster.

As seen in Mercedes Benz, the new XUV700 would come with a digital driver's display and a large touchscreen infotainment system with Android Auto and Apple CarPlay. The infotainment system would also be able to play videos. There would be soft-touch materials on the touchpoints, leather upholstery and a large panoramic sunroof. The XUV 700 will come with a 2.0-litre petrol engine and a 2.2-litre diesel engine. Both the engines would be offered with a 6-speed manual gearbox or a 6-speed torque converter automatic gearbox. This new car is

expected to be launched during the upcoming festive season.

New Scorpio (Z101)

Recent spy shots of the next Gen Scorpio (Codename Z101) tells us that the car will carry the high stance of an SUV and other premium features have been retained. The bonnet has also been redesigned with an added hood scoop. The new SUV has been made on the same ladder frame design and helps it stand out on the road from the competition. The tail-end of the vehicle will be short and stubby, with a near-vertical tailgate. We expect the taillights to be LED units, and there will probably be 'Scorpio' lettering on the tailgate, which is quite a popular design detail among modern SUVs.

Moreover, the new Scorpio is expected to have a longer wheelbase for better high-speed stability and increased comfort. The next generation Mahindra Scorpio's interiors has been conceptualised and shaped at Mahindra's North American Technical

Centre in Detroit, United States, and engineered and developed at the Mahindra Research Valley in Chennai. Like the Mahindra Thar, the new Mahindra Scorpio will be available with both BS6 compliant Petrol and Diesel engine. The 2.2L 'mHAWK' diesel engine in the Thar produces 130bhp of maximum power and a peak torque output of 300Nm. The 2.0L 'mStallion' petrol engine on the Thar produces a maximum power output of 150bhp and 300Nm of torque. Both the engines will be tuned differently and will produce a slightly enhanced performance in the new Scorpio.

Bolero Neo

Bolero has been one of the highestselling utility vehicles in the country. As a next step, Mahindra is going to take the Bolero legacy forward with the upcoming Bolero Neo, which is essentially the facelifted version of the TUV300, which is discontinued from the Indian market due to poor response. Compared to TUV300, Bolero Neo will



feature updated headlamps, a new grille and bumpers. Even in the interiors, we can expect a new dashboard layout but the powertrain is to be as same as TUV300 with a 1.5-litre three-cylinder diesel engine.

Bolero Upgrade

Mahindra is also working on an allnew Bolero. While the manufacturer is yet to start testing the car on public roads, Mahindra has the car in its upcoming line-up in the next 5 years. The all-new Bolero will get a new platform and the design is likely to remain similar to the current model but with some modern highlights and additions. The Bolero is one of the oldest selling production cars in India.

4-Door Than

The recently launched secondgeneration Mahindra Thar has become an instant success for the brand with the popularity rising so much that many customers have to wait for one year before getting their hands on the vehicle. After receiving an overwhelming response, Mahindra has confirmed that it will launch a five-door version of Thar in India. The five-door version will not be as capable as the three-door version because of the increased wheelbase but Mahindra is also planning to offer the 2WD option to the 5-door version of the Thar.

XUV 900 (W620)

As customers are expecting a new range of SUVs, Mahindra has decided to retrieve its XUV Aero concept that was showcased at the 2016 Auto Expo. The XUV Aero is a coupe based SUV, where it is expected to be slotted above the XUV 700 and rumours indicate that it could be called the XUV900 but the internal codename is W620. Mahindra may open up a new SUV coupe segment with the W620 and it tries to take advantage of the handling characteristics offered by a coupe alongside having the high practicality an SUV offers with ample ground clearance, off-roading nature and a spacious cabin.

Next- Gen XUV 500 (S301)

Mahindra had initially planned to launch XUV400, a midsize SUV codenamed S301 to compete with Hyundai Creta and it was expected to be built on Ford's B772 platform. However, the joint venture has already

been discontinued. Instead of the XUV400, Mahindra now plans to introduce the next-gen five-seater XUV500. The report claims that the new XUV500 will not be available by 2024. Mahindra is expected to develop new SUVs using an enhanced version of the XUV300 platform. The XUV300 is based on SsangYong's X100 platform and also supports Tivoli SUVs. Mahindra engineers need to work on reducing the weight of the platform to reduce costs. The nextgeneration Mahindra XUV500 fills the gap between the XUV300 and the next XUV700.

The new XUV500 will be powered by a revised version of the XUV300's 1.5-litre diesel engine. It complies with the stricter BS6 Phase II emission standards scheduled for 2023. The SUV will also be equipped with a 1.5-litre mStallion turbocharged petrol engine, which can generate up to 163bhp of power.

With this clear roadmap, Mahindra & Mahindra clearly hold the ambition to be a global brand and there again the electric journey will play an important one.





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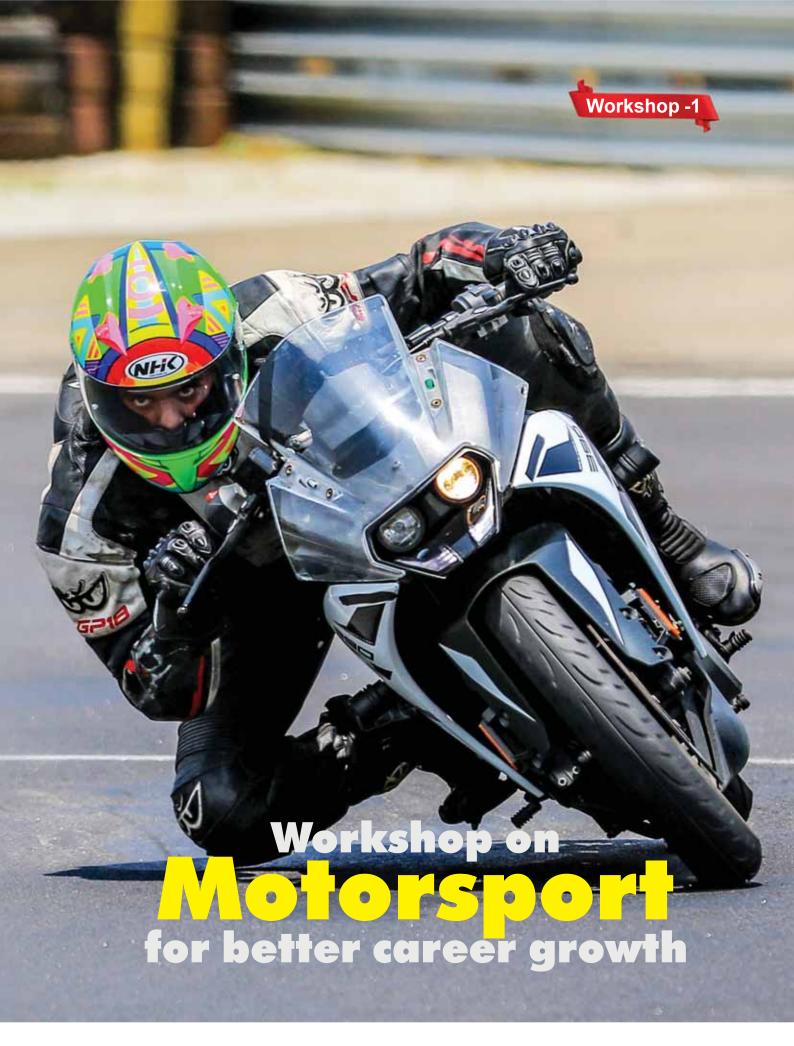


he Olympics and the FIFA World Cup are said to be the two most popular sporting events in the world. Held every four years, the total revenue from these games ranges from 3 billion dollars to 7 billion dollars. Apart from these two another major event that provides huge employment and generates revenue is motorsports. In motorsports, there are many popular sports such as Formula 1 and MotoGP. The total revenue of Formula 1 is \$ 2.2 billion per annum. That is about 16 thousand crores in Indian rupees. The total revenue of IPL (Indian Premier League) held in our country is between Rs 1000 crore and Rs 2500 crore.

Motorsports, which cost billions, employ thousands of people around the world. The role of Indians in motorsports, which earns 6 times more than the IPL, is less! Team Management, marshal, mechanic, engineer, communications and more are some of the job opportunities in motorsports. There is also a lot of salary on hand. But there is no awareness in India of how what and where to study if you want to get into the motorsports industry.

Therefore Motor Vikatan and CRA Motorsports decided to conduct a workshop on Racing Photography, Marshall Training and Team Management to benefit young people find better employment in motorsports. Some people are more interested in photography. They desire to record on camera everything that they see. And their life slogan is along the lines of: `Photography is life. That's how I'm going to earn.' Motorsport's photography workshop is for these kinds of people.

"Before I used to photograph weddings and birthday parties, I was interested in going into the motorsports sector. I have come to this workshop eagerly looking at Motor Vikatan Facebook page", said Ramesh Balaji.





Aditya Bedre along with participants

The three-day workshop was held at the Kari Motor Race Track in Coimbatore. Aditya Bedre, a renowned photographer in the field of motorsports for more than 10 years, skillfully taught students.

There is a huge difference between photographing festivals and photographing cars and bikes flying at 200 kmph on a race track. This requires specialized lenses. That is, at least 300mm to 600mm lenses will be required. The reason is that during the race, photographers have to take photos from a distance. They cannot go inside the track. Lenses with a longer focal length (mm) can help capture distant objects accurately.

On the first day of the class, Tarun Kumar, the head of CRA Motorsports, made it clear where to be cautious, where not to go on the racetrack and not to stand, all safety measures. Photographers have to stand for several hours on the race track to click good pictures. There will be no shade to sit. It is better to have a hat, shades, loose clothing. These are useful tips. After the first class, Aditya started sharing tips and tricks in motorsports photography. The photographers took the cameras in their hands and started shooting.

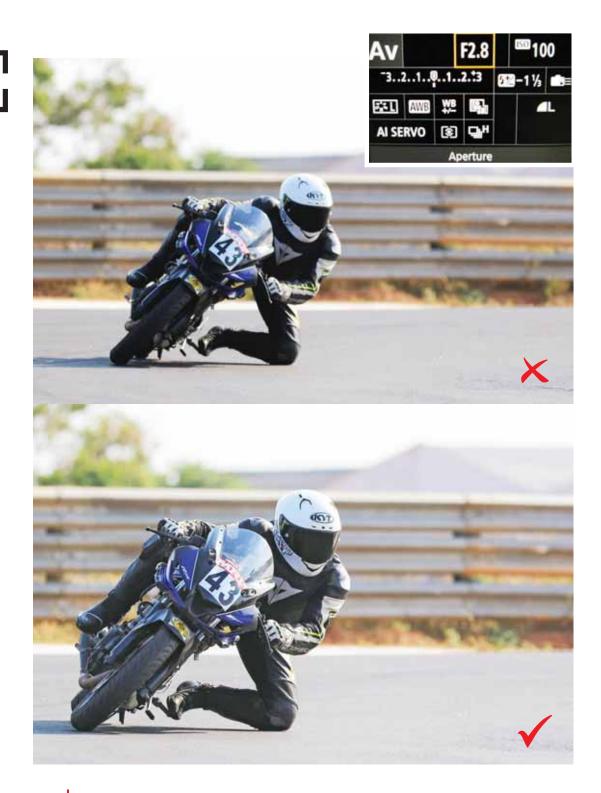


Tharunkumar S - Founder, CRA Motorsports



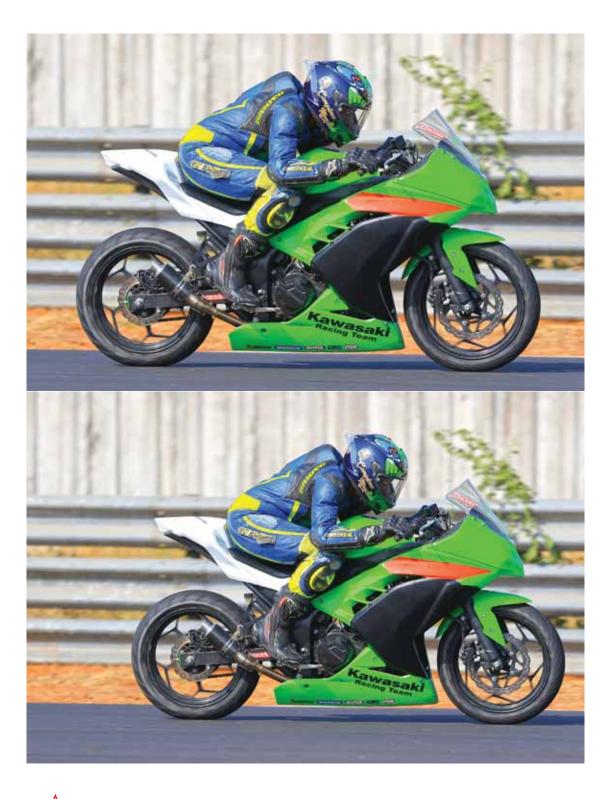
Do not take photos while standing directly in front of the sun. The camera must first be in manual mode; shutter speed should not exceed 320 and F point should be adjusted to suit sunlight. Aditya clicked the shutter and showed how to take a photo from any angle and get amazing photos.

The photographers eagerly got in to click and see what they had learned. These first tips are for training to take high speed bikes clearly and accurately at a certain angle. Aditya looked at the photos taken by each and shared his feedback.



n this aperture priority mode, the white balance should be 'Auto'. f2.8, the shutter speed will adjust automatically. You need to adjust the exposure to suit the sunlight. Except for the subject, all other parts should not be visible, i.e., out of focus. This is called Depth of field. Most of the time, photographs with more depth of field will be liked by everyone. The subject that the photographer intends to show will be sharp.

The tips and tricks that Aditya says can be easy to say and hear. But to click good and sharp photos, you need to practice a lot.



Aditya started his editing tips by saying, "It's not just about taking photos; choosing the right photos and editing them in the right manner is an important job for a photographer. There is a lot of software for photo editing that can be very helpful." The third day's class is to post-process the photographs. All the stickers on the bike, lines and rider must be clear. There shouldn't be 'shadow' on the bike.

At the end of the three days racing photography workshop, the participants gained hands-on experience in getting good racing shots and were delighted with their progress.

J T Thulasidharan 0 1 4





One of the participants conducting pre-race checks

CLASS 1

There are many rules for racing teams in motorsports. The word Formula in Formula 1 refers to the set of rules and instructions. These rules must be followed by all racing teams participating in the competition. For example, on a pit lane, the speed of the bike should not exceed 40 kmph. Violation will result in fines. Accelerate only after going from the pit lane to the race track. Students learned such rules in the first grade.

CLASS 2

No one is allowed inside the race track. There will be marshal towers on either side of the race track. Marshals will signal by waving flags to start or stop the race.

There are many meanings to the multi-coloured flags on the race track, just as a train can go if it shows a green signal at the train station and a train must stop if it shows a red signal. There are a total of 13 types of flags: white, green, red, yellow, blue, black etc. Each flag has its meaning. With these flag signals both the riders in the race and the team management in the pit can know what is going on. In this class, not only the meanings of these flags but also when to use them; how to use them; students also learned what to use from where.

CLASS 3

Weather conditions on a race track and the tyre pressure of a bike are interrelated. Make sure the tyre pressure is in line with the temperature. There should be no malfunction on the bike. The rider must also be in a clear mind. The bike must have the right amount of fuel. Before starting the race, it is important to check several things like this. There is a separate checklist for this. The students practically learned these lessons while holding the checklist during the race.



Rider sharing his inputs on handling and brakes to team management participants



CLASS 4

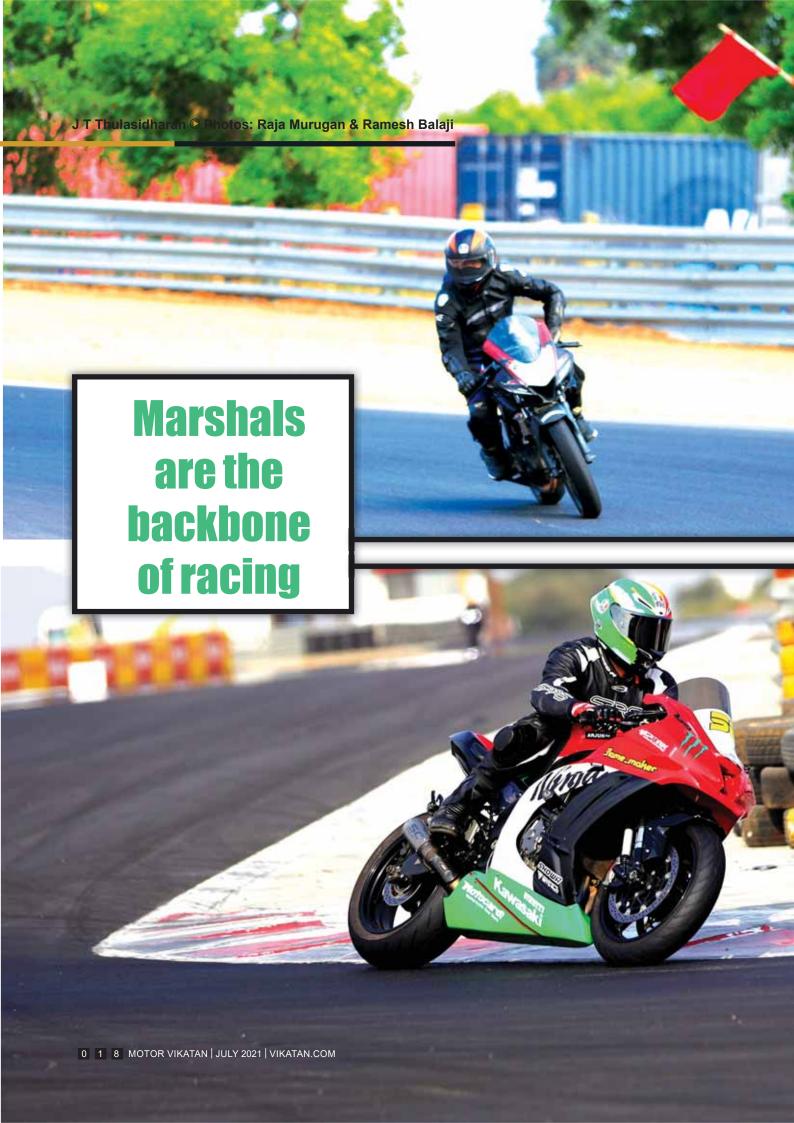
You have to handle many tactics to win the race. The races do not take place on the same race track. There will be different race tracks in different countries. Tactics need to be adjusted accordingly. It needs a lot of information. How the rider handles the bike; how he brakes; the team management checks on the riders how he feels while riding in the corner. The chief engineer will understand the nature of the bike and know the rider's skill and will come up with many ideas. They analyse a wide range of data to find the answer to the question of whether there is anything wrong with the bike or whether the rider should ride better. This was an interesting class on data analysis.

CLASS 5

Tarun from CRA Motorsports explained about all the types of racings in India and the world - how many types of racing are there, where the race takes place, how one prepares oneself for it, how much salary for any job, what job for which course, etc.

At the end of the three-day workshop, all the students asked the same question with great enthusiasm 'When is the next workshop?'





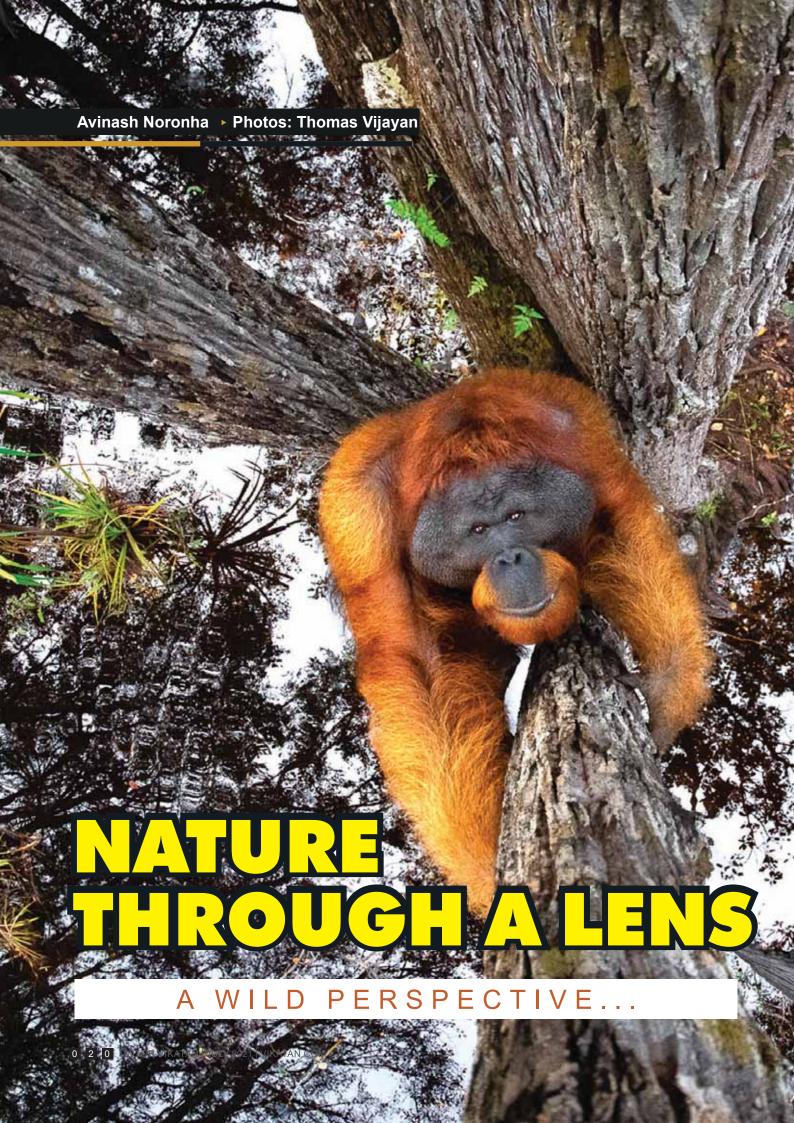




ace Marshal Training - Every flag has a meaning on the race track. There is a total of 13 flags on the race track: white, green, red, yellow, blue, black etc. Every flag has a different meaning. There are a variety of race marshals as well. Post Marshals stand at every post on the race track; Flag Marshals to show the Flags during the race, and Intervention Marshals to clear the crash site on the track.

There will be a control room to monitor the race going on. The details that Marshals give to the control room will help decide the next step. For example, if there is an accident in the race, organisers will not stop the race immediately. Instead, the nearest post marshal will communicate the details via walkie-talkie to the control room and display the yellow flag. There are codes to communicate the details. 'Calling from Post 7, rider down, request for Intervention Marshals'. Intervention Marshals will immediately clear the accident area as soon as possible and the race will resume.

The students who attended the workshop practised by waving the required flag standing on a post on the race track and communicating the details to the control room through a walkie-talkie. The students realized how important is the work done by Marshals.





e are in conversation with Wildlife Photographer, Thomas Vijayan. Originally from Bangalore and currently settled in Canada, he is an architect by profession and a photographer by passion. This passion has taken him across the 7 continents, from the North Pole to the South, and everything in between. All this in search of that 'perfect frame'.

But as Thomas believes, perfection does not exist. A photograph is an experience, in which he learns something new, especially by giving importance to quality over quantity. Words of wisdom, which can be applied to every walk of life.

Photography for Thomas combines his love for nature, travel, practice, patience, passion, care, friends and gear. But for the most part he feels it is a blessing witness the marvellous creations of nature. His patience over the years has borne fruit and he has got over 1000 awards for Wildlife Photography. Including being a Brand Ambassador for one of the most established brands in the market, Nikon.



A: This is indeed a special frame to me hence I was expecting it to win. Behind this shot was months long waiting for the right season and hours long waiting in the location on the shooting day to get this frame correct. I had visited this location sometime back and this frame stuck in my mind. I wanted to capture all 4 elements in one frame; the sky, the water, the amazing habitat they live in, and the subject facing me. It was a difficult shot I am happy it won and all of you are now able to see it. The motivation behind this shot was the pitying situation of the Orangutans. When I visited them, their face looked like they really had something to communicate to us. When I looked around, I could see 1000 years old highly matured trees were cut down for palm oil plantation and these poor helpless beings were losing their habitat. They only know to live on trees and feed







Q: Share your experiences and happenings about the award photo. How it was made possible? And what is the theme behind that?

A: After spending few days in Borneo, I got this frame stuck in my mind. Firstly, to get this shot, I selected a tree that was in the water so that I can get a good reflection of the sky and its leaves on the tree on water forming a mirror like effect which will make the image look upside down. Then I waited for a month to enter rainy season only then the water will collect below the tree. Finally, on the day of the shoot we began our journey with a 3-hour boat ride across a sea with waves that get as high as 5 feet tall, in small fibre boats that can barely fit 2 people. We entered the mouth of a small river that only has an opening between high tide and low tide; which made it impossible for us to leave the location in the afternoon as the tide departed and the ocean became too rough for our boat to pass through. As we got closer to the targeted location, the trees and jungle got too thick for our boat to pass so we were forced to continue on foot. Trekking through tree limbs with huge crocodile-infested waist deep water and cameras held above our head. I made it to my final destination, the huge tree and I climbed up on it for this shot and waited for a nearby orangutang to climb







up and pass me. I purposely wanted to get the beautiful sky as well as the subject facing me. Since the orangutan only likes to face upwards as it climbs, I knew the only way I could combine these two elements in one frame was to be above the orangutan and point downwards to capture the face and perfect reflection of the sky in the still water below it. The most challenging part of this experience was staying calm while the orangutan was in front of me.

Q: Is it possible for middle-class people who are interested to explore the world and travel, considering the expenditure is high?

A: Yes, it is a costly affair. But definitely if you are passionate then you can achieve it.

Q: What are the hazards/problems/challenges you face when you travel abroad? And how is the language barrier managed? As well as the food and culture?

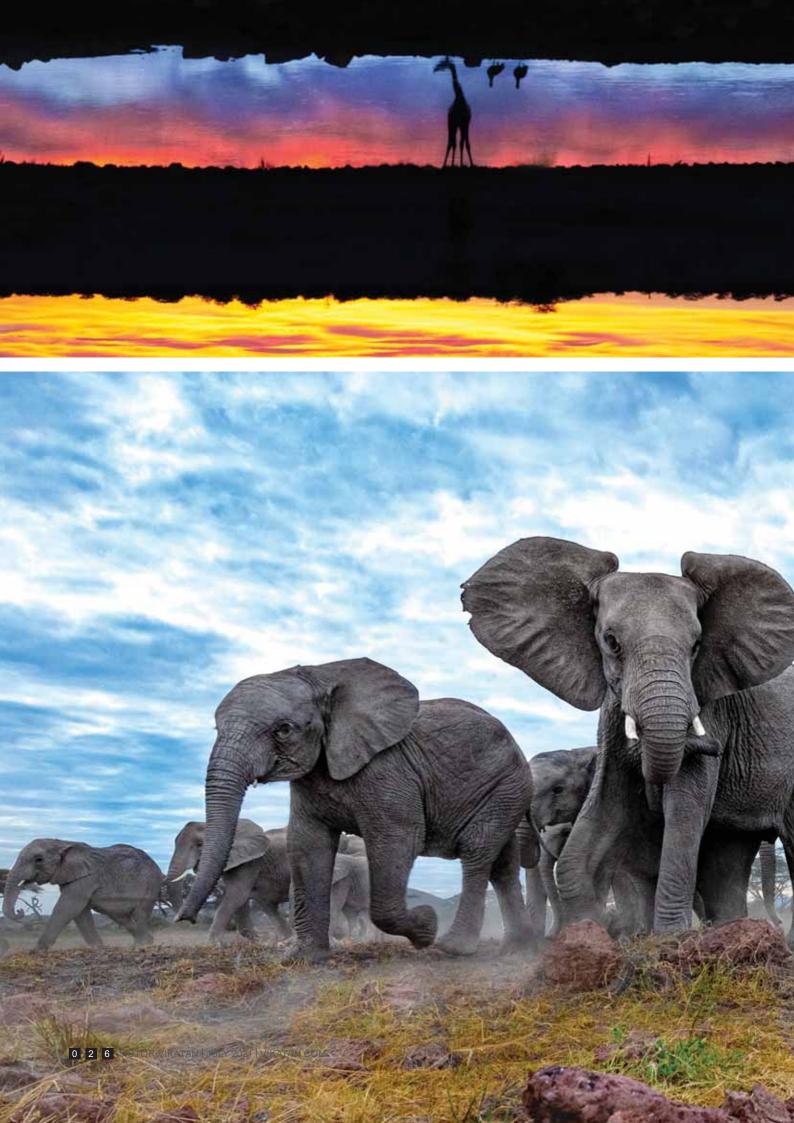
A: Weather, safety, language all these are a cause of concern when you go to a new location. Hence it is always better to have a local guide if you are going to any place for the first time.

Q: Tell us about some interesting an ecdote from your photographer's diary.

A: After spending years in photography and clicking most of the commonly photographed species, now I am keener on shooting the rarest ones. To shoot these I travel to the unexplored corners of the world which is challenging at times. Few of the challenges that I face is reaching to such a location. For example, the recently awarded Orangutan shoot













was to cross the crocodile infested river. My ongoing project in Siberia is where I stayed, with bare minimum living conditions. In this location there is a chance of temperature dropping below -40°C. If it drops then camera will not work. In Antarctica, I had walked an average of 8 hours per day in thick snow in search of a perfect frame. Likewise, there are many stories like this from different shoots.

Q: Since you are a wildlife photographer, have you ever seen a human/animal conflict?

A: Yes, that has been there always in every corner of the world.

Q: How do you prepare yourself in terms of safety when you are on a mission?

A: We cannot be fully prepared, since we don't know what is in store in each location, as we are not accustomed to it if we are travelling there for the first time. But I do a study about the area which helps to a great extent. Then I try to be with a local guide and I always carry dry fruits, cheese, my satellite phone, drinking water, torch and other essentials in my backpack in all my shoots.

Q: Are you an automobile enthusiast? What is in your garage and what is your preferred machine for your shoots?

A: Yes, I, like others, love cars and bikes. I own a custom-built Rolls Royce, G63, Tesla X & bikes. While in safari I prefer ATV's.

Q: What is your suggestions for students who are passionate and want to choose wildlife or travel photography?

A: My advice to young budding photographers is do much of the harder shoots that need hiking, climbing, divining and many more when they are still young. Easy jeep safaris could be done at any point of life. And always go for quality over quantity. Take part in competitions, it will improve your shooting style and will also give you a chance to see many other good frames.

Q: What is your future plan?

A: I want to shoot frames in such a way that it should stand out from the rest of the frames and can easily point straight to the photographer, even when the photographer's watermark is not on the picture.





oad trips in Northeast India are journeys that take you through some of India's most sublime end-of-the-world landscapes. Having only recently made its way onto Indian travel itineraries as an offbeat and budget-friendly destination, Northeast India has a rich and diverse historical, natural and cultural legacy and the best way to experience it is through a road trip. The seven sisters which make up the northeast of India is a land that has barely been explored by most Indian travellers. The logistical challenges of getting there was a deterrent for explorers. But the last couple of decades have seen significant improvement in terms of road, rail and air travel infrastructure.

Better connectivity has seen people from around the country venturing out to these seven states and returning wide-eyed with the beauty of the place. The time is now ripe for you to plan out your next long road trip to this magnificent region of the country.

You can fly to Guwahati from any part of the country and start your trip from there. Or you can drive down from wherever you are located via Siliguri and the so-called 'chicken's neck' to enter the Northeast. Here's what you can expect when visiting these beautiful lands.







Arunachal Pradesh is the largest state in the northeast and it also divides India and China with a 1,126 km Line of Actual Control (LAC). Unlike Assam, this state is still relatively underdeveloped and unexplored. You also need Inner Line Permits issued by the government to visit many parts of the state.

Arunachal is known best for its easy access to nature in its rawest form and a different culture. Of particular cultural importance is the Tawang Monastery, the largest in India and one with great significance in the Buddhist religion. One can also attend the Ziro Festival of Music, which now draws travellers from around the country for this annual affair.

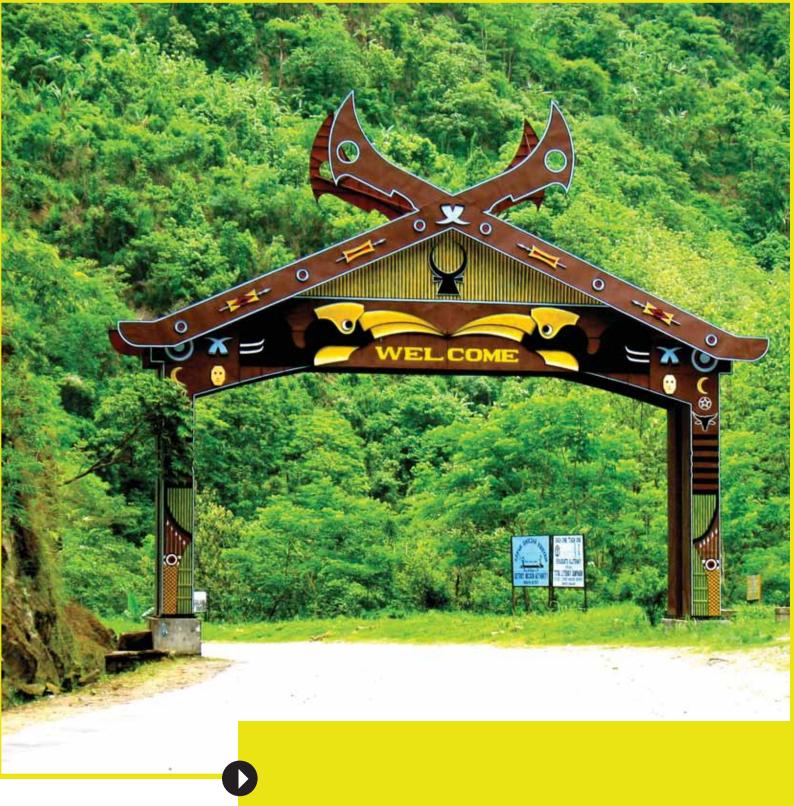
For nature lovers, there is the Pakhui Wildlife Sanctuary and Namdapha National Park. There are also numerous treks in the area, with Sela Pass being a highlight of the region.

Arguably the most scenic amongst all the states in the northeast. Meghalaya means 'Abode of the Clouds' in Sanskrit.

The road to Shillong, the capital of Meghalaya, from Assam is scenic, as you climb into the hills from the plains. And those scenes grow even more majestic by the kilometre. The state is home to Cherrapunji, which is famous for being the place in the world that receives the maximum rainfall every year. Near Cherrapunji is the double-decker living roots bridge, which is a sight to behold of the strength of nature. Another top tourist draw is the village of Mawlynnong, which has been awarded the cleanest village of India.

Another spectacular sighting for travellers is Dawki Lake, which is on the Bangladesh border. The water is so clear, that you can see the bottom of the lake from your boat. There are several waterfalls, the most famous of which is Nohkalikai and limestone caves in the state. All these together make Meghalaya a must-visit place when you plan your northeast trip.





T he most vibrant state of the northeast, Nagaland is nature enjoyed in its truest form. Most tourists visit Nagaland during the Hornbill Festival held in December, named after the bird, which adorns most tribes of the state.

Wherever you travel in the state, you will be in the lap of nature and afforded gorgeous views. But due to political problems, the state was never fully developed to its full tourism potential. As such, it is difficult to build a structured itinerary for the state, but it also provides that sense of adventure for the unknown.

Another state of the northeast hasn't been fully tapped for tourism, because of political discontent in the region. For tourists, the biggest attraction is Loktak Lake, which is 50 km from Imphal, the capital of the state. Loktak is the largest freshwater lake in the northeast. The lake has a special attraction to small floating islands, which are watery weeds and other plants combined.

Manipur is also famous for the endangered species of Brow Antlered Deer, which can be sighted in the Keibul Lamjao National Park. The state also has a plethora of natural caves and waterfalls for the ardent nature lover.





The southernmost state in the northeast, Mizoram is now quite a mainstay on the traveller's roadmap, because it is an en route for people travelling to Myanmar and beyond, by road.

A hilly state, the landscape is decorated with sharp hills and narrow rivers. The state is a nature lover's paradise, with a visit to Dampa Tiger Reserve and Murlen National Park, almost mandatory. Both filled with a rich variety of flora and fauna. It is also a birder's paradise.

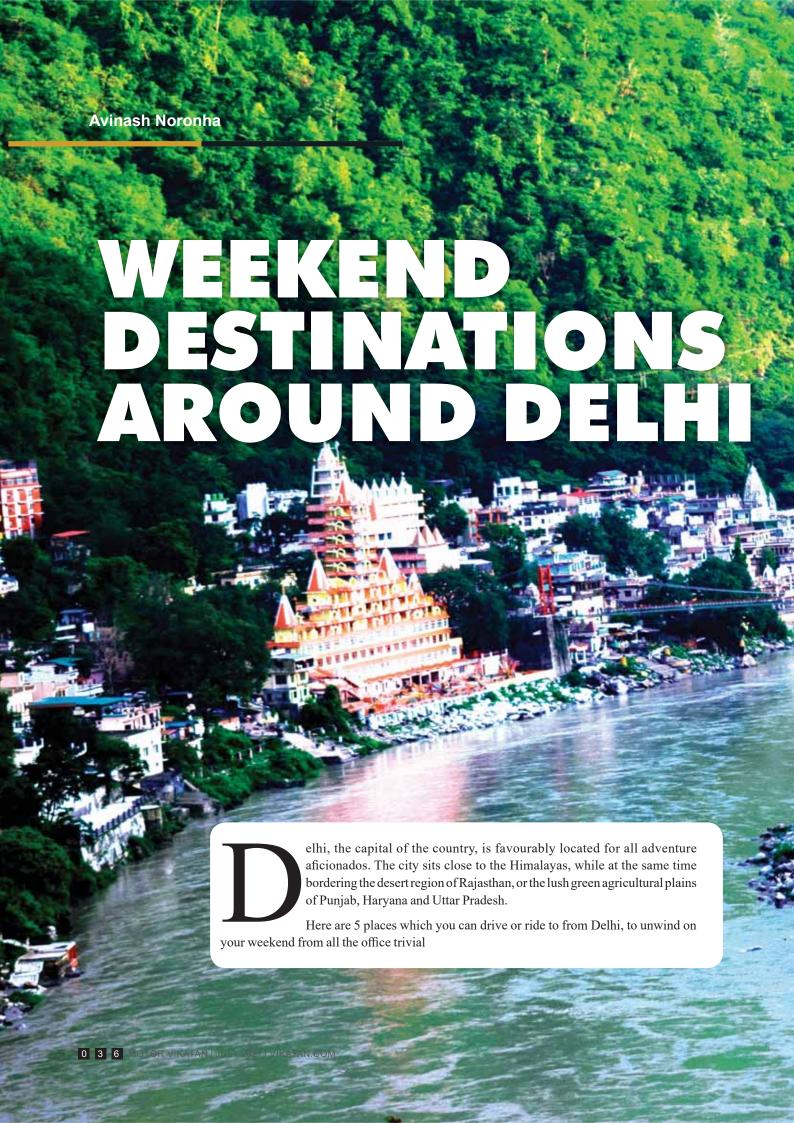
The Chapchar Kut Festival is a major draw for tourists in spring. If possible, do try to time your visit to the state around March.

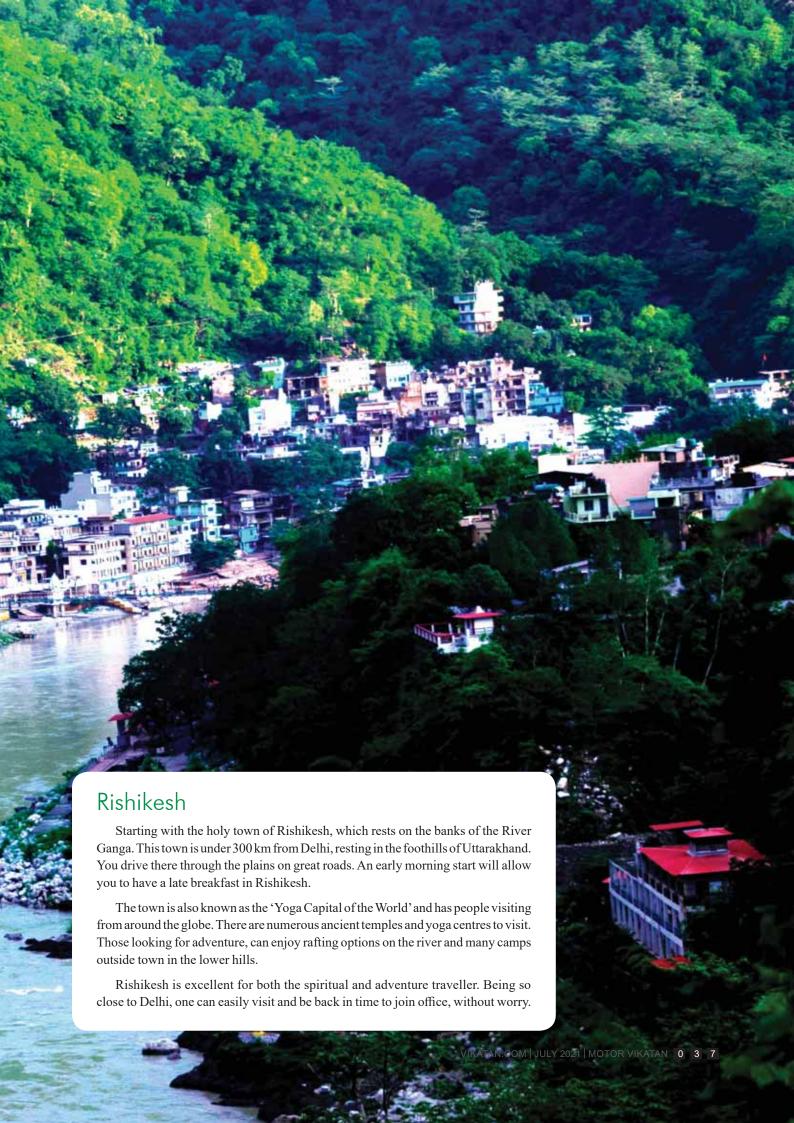
The smallest state of the northeast and one which shares a massive international border with Bangladesh. Even though the road distance from Kolkata to Agartala, the state's capital is just 350 km via Bangladesh. People need to drive 1700 km to travel between the two cities.

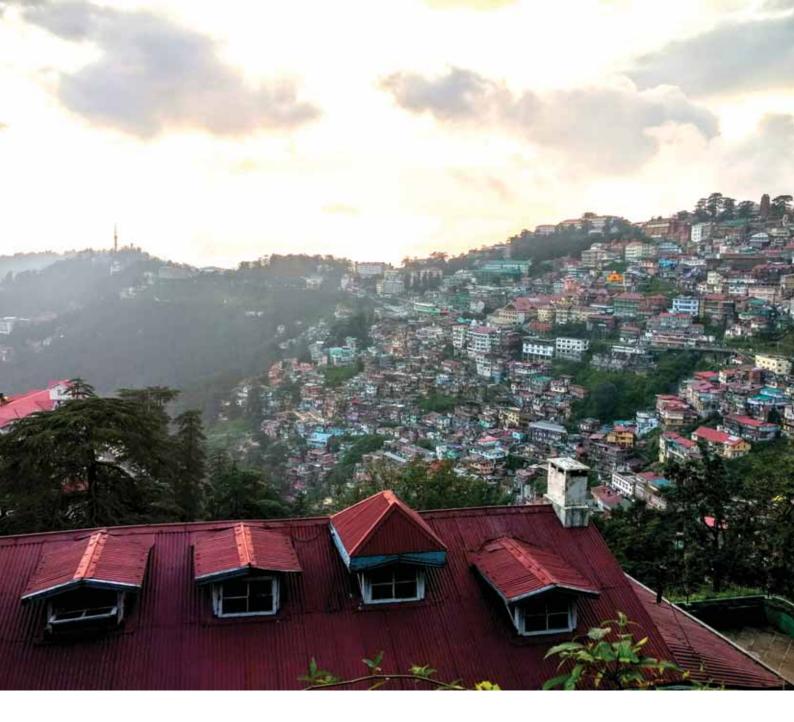
As such, Tripura is a state which is difficult to access, which makes it a rather unique place to visit. The state is known for its art and culture and is loved by history buffs. You can visit the Ujjayanta Palace, Neermahal and Tripurasundari Temple. The last is where the state is said to have got its name. For nature lovers, there is the Trishna, Gumti and Sepahijala wildlife sanctuaries.

We club the seven sisters in one big list, but it is difficult to travel through all the states in one shot. It is preferable to choose your destinations and travel through those lands at a leisurely pace. You will not be disappointed by the beauty of the seven sisters.







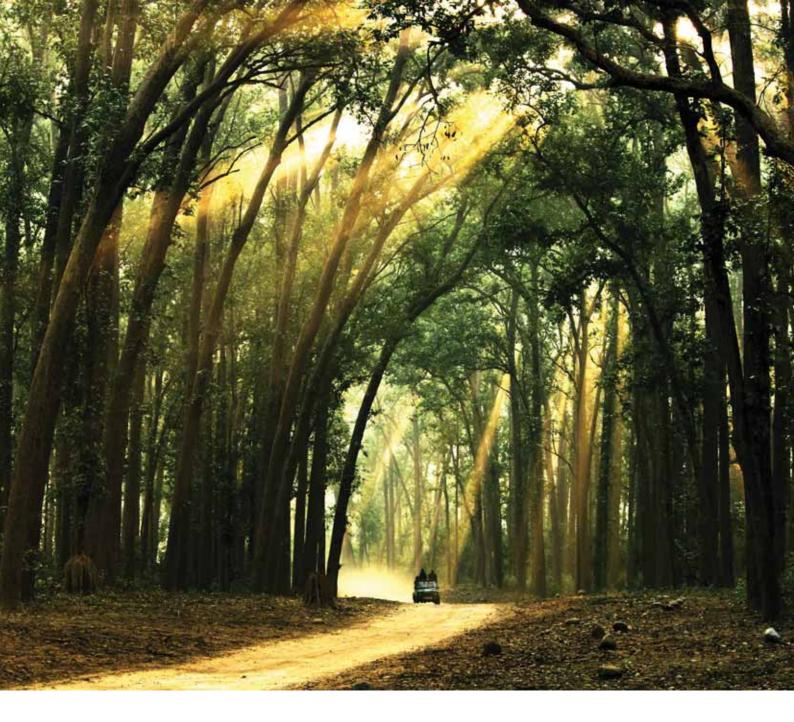


Shimla

Our next weekend destination is Shimla in the neighbouring Himalayan state of Himachal Pradesh. The capital of HP is just 350 km from the country's capital, making it an ideal weekend getaway in your car or on your motorcycle.

This hill station is a legacy of the British, who chose to make it their summer capital, because of its pleasant weather and dense vegetation. Even now, one can see a firm imprint of the British, in the architecture and influence on local culture.

Enjoy the architecture on the Mall and Ridge, the Jhaku temple which is the highest point of the city. And if you are looking for some additional adventure, you can even drive up to Kufri, Naldhera or Narkanda. Scenic villages flooded with apple orchards. You can visit these hamlets in winter for snow views.



Jim Corbett National Park

A tiger reserve named after the famous hunter turned wildlife conservationist, Jim Corbett. The oldest national park in the country is just 250 km from Delhi. It is perfect for nature and wildlife lovers.

In the park, you can enjoy elephant safaris and jeep safaris. Both of which are unique experiences to enter the jungle and feel the dense forests enveloping you. Feast yourself on the views of tigers, deer and 50 other mammal species. The sanctuary also has around 600 species of birds and a handful of reptiles as well in the marshy lands.

Book in advance in the government camps which are located inside the national park. All the private hotels are outside the borders of the national park and do not provide the same experience of staying in the lap of mother nature.



Agra

An entirely different trip as compared to the previous three destinations. Agra is a big metropolitan city in Uttar Pradesh, which is just 250 km from Delhi. Most famous for the Taj Mahal, Agra has a host of other Mughal legacies as well to visit.

The journey to Agra can be as pleasurable as getting there, as you drive on one of the finest roads of the country in the form of the Yamuna Expressway. The city itself has something special for those with a sweet tooth, the 'petha' of this place is famous, which is a kind of pumpkin preserve.

For those interested in architecture and history, there are numerous monuments to be explored. Including the World Heritage, Taj Mahal, Agra Fort, Akbar's Tomb, there are plenty of other smaller places which are equally worth a visit. If the city isn't sufficient, you also have the neighbouring holy land of Mathura, along the way. Or you can drive down to Fatehpur Sikri which is just 35 km away.

Agra is teeming with history and culture for the traveller looking for such in a big bustling city. It is not a place to visit for people looking to get out of the city and absorb nature.



Udaipur

Udaipur is the lake city of Rajasthan, which is 650 km from the national capital. As such, it is perfect to visit on a long weekend in the winter. Not quite your quick weekend dash.

The 'City of Lakes' paradoxically sits in the desert state of Rajasthan. Unlike the desert, this city is blessed with water, thanks to Aravalli Range which surrounds it and separates it from the Thar Desert.

For the traveller, you have the 5 major lakes of the city, Fateh Sagar, Pichola, Swaroop Sagar, Rangsagar and Doodh Talai. But you also have museums, forts, palaces and temples which are worth visiting. The city is steeped in Rajput culture and you can see that visible in all parts of town. At certain times of the year, you can also enjoy the spectacle of traditional village fairs on the outskirts of the city. One can also enjoy traditional Rajasthani cuisine, which is quite different from food consumed in other parts of North India. It is a gastronomic treat, whether you are vegetarian or non-vegetarian.

This oasis in the desert is well worth a visit, but one needs to go there with sufficient time in hand. Rushing through Udaipur would be a travesty of travel.



ince time immemorial, humans have had a fascination with reaching the top. Every mountain top must be climbed, every ceiling breached. It is as such no surprise, that automobile enthusiasts consider the Manali-Leh route one of their dream destinations.

This obsession with crunching our wheels over the highest passes of the world, takes an even more extreme obsession with pedal powered bicycles. For most cyclists of India, riding from Manali to Leh is a journey beyond the ordinary. This altitude attracts, to the point where, cyclists from different countries of the world, visit India, just to ride these remarkable mountains. Recently, one of the highest bicycle races of the world, La La Land Ultra, was held in this frozen desert.

Life at this altitude requires a different attitude when compared to the plains below. An attitude of overconfidence might lead to a setback down here, but it can be lethal up there. These high mountains teach us humility and the magnanimity of nature.

Preparation for this arduous route begins a solid 6 months in advance. It's not just the spirit that should be willing to undertake this journey, but the body as well! Regular bicycle rides and training, will ensure that you are well equipped to take on the daunting task at hand. You end up not just changing your physical regimen but your entire lifestyle. From eating healthy, to sleeping properly to being a part of Fit India.





Cycling to the top of the world, Khardung La

The route from Manali to Leh is roughly 475 km. If you look at this number, it doesn't seem such a daunting task. Unfortunately, for cyclists, distance is not the best parameter, we need to look at the massive elevation to be gained. Starting from Manali, we first climb Rohtang La at 3980 metres above Mean Sea Level, from a paltry 2000 metres of Manali. After descending to Tandi, we once again climb to 4890 metres of Baralacha La, before descending to Sarchu. The climb continues to Nakee La and Lachung La at 4740 metres and 5079 metres respectively. The final big pass before Leh is Tanglang La at 5328 metres. When you reach Leh, it is still not over, as you are left to climb the jewel in the crown, Khardung La. K-Top as it is known amongst enthusiasts sits pretty at 5359 metres. This is one of the highest motorable roads in the world, as the Border Roads Organisation signpost proudly states.

The route itself provides excellent vistas. From the greenery covered Himachal, where there is a tree in any direction you look. To the entire section post-Darcha, where the world is brown



Cycle: Scott Scale 940



Snow covered peaks are just a stone's throw away



The Leh monastery stands pretty overlooking the city



Leh Palace lit up at night



Himalayan Ibex, a rare sighting in Ladakh

in every direction you look. Except if it is covered with snow, then it is white in every direction. The people of the place are supremely helpful and have gentle demeanours. They are soft spoken and humble in these harsh terrains. The majority of this route is uninhabited, except in the summer months, where camps spring up to cater to travellers. Ladakh is predominantly Buddhist, and there are plenty of monasteries to visit in the region around Leh. The calming influence of these sacred places is soothing for us urban dwellers.

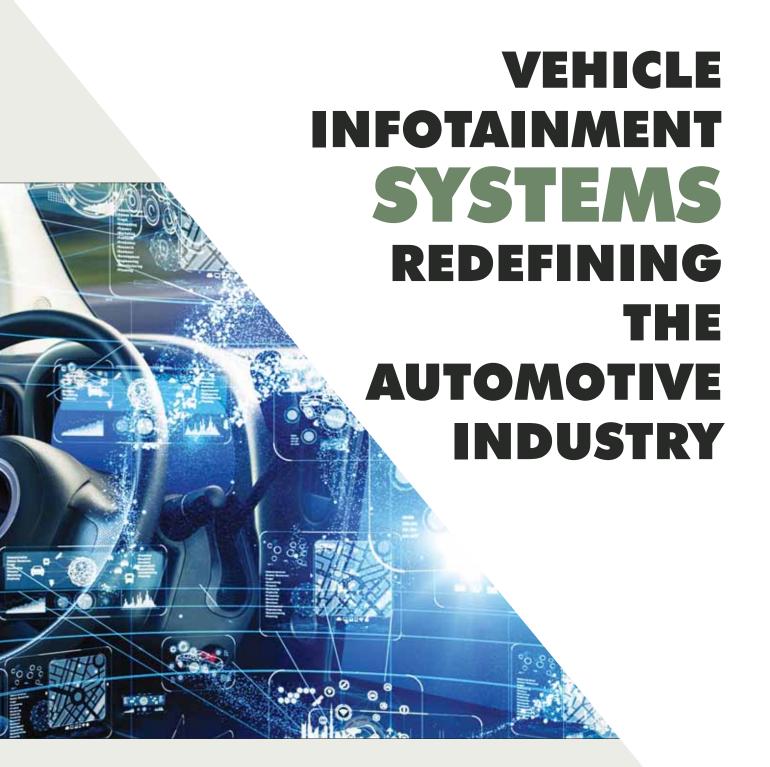
For the adventurer, the road varies drastically. From billiard table smooth asphalt to non-existent roads to tumultuous water crossings. Every time you think you have experienced it all, the land throws up another curve ball. The flat for miles More Plains, is a sight worth beholding as it sits in the bowl of high mountains. The ruggedness of Baralacha La and the campsite of Bharatpur can make or break the spirit of a rider. You are tested with every pedal stroke of the way and rewarded with views that you will never forget for the rest of your life.

There is a reason that Ladakh is popular the world over. Because nothing else on earth can match up to the splendour of what this place has to offer. Stop wondering what the world above all else looks like, and start planning a journey of a lifetime today.



ehicles are becoming our second home nowadays. The time spent especially in passenger cars has also increased considerably. Therefore the customer expectations have increased exponentially when it comes to In-Vehicle Infotainment (IVI) Systems. In the early 1980s, FM/AM was only used in cars to listen to music. Later the IVI saw a huge evolution started with CD drives or the Compact Discs to the current Android Auto and Apple CarPlay.

A vehicle infotainment system is a combination of hardware and software that delivers information and entertainment to a car's driver and passengers. It does so via audio/ video (A/V) interfaces and control elements, like touch screen displays,



button panels and voice commands, etc. Advanced infotainment systems enable Bluetooth and Wi-Fi connectivity, live media streaming and smart technology for mobile integration. Components and functionality vary, depending on specification.

Why this has evolved in a big way?

There's been a paradigm shift in car manufacture; from mechanical

ingenuity to software quality, execution and integration. Demand for systems that offer in-car comfort, entertainment and convenience—such as on-demand music, smart navigation and hands-free call options—has risen sharply in the past few years. And it's no coincidence that this shift coincides with the meteoric rise of the smartphone and all the services we've become accustomed to accessing at the tap of a screen.





If a car or a model is getting upgraded, the vehicle manufacturers try to tweak the exterior part and some internal features. The advanced IVI helps the manufacturers to redesign the dashboard of the car with less investment and at the time by giving a fresh look comparing to its predecessor.

With so many advancements in technology, infotainment systems in cars nowadays have become advanced. With connected car techs like geofencing, smart navigation systems, voice-activated commands, Over-The-Air (OTA) updates and much more, infotainment systems are now more focused to make the drives secure as well as pleasurable. Touch screens in cars are ubiquitous today, although the beginnings were quite difficult and coarse. Now 7" to 12" touchscreens have become common in most cars nowadays. Android Auto and Apple CarPlay are also seen in most of the systems.

In-car streaming

This evolution means in-car streaming is on the rise, with individuals connecting to streaming services via their smartphones, through their smartphone network or the car's eSIM or WiFi hotspot. Now there are a lot

of developments are underway, for an instance, globally the telecom majors are developing solutions to roll out in-car video streaming. This may distract the drivers and raise concerns about safety, but at the same time, the connected car sensor technology will be able to detect distracted drivers and pedestrians and will also be able to connect with other vehicles on the road through vehicleto-vehicle communication to improve levels of safety.

Carmanufacturers are also providing their artificial intelligence (AI) software as part of an in-vehicle infotainment system. This can serve as a virtual personal assistant and can respond to voice commands and proactively guide drivers in collaborating with its navigation system to their desired destination. Also, like Alexa and Google Home, you can even control your vehicle from your home or restaurant or office, unlocking car doors, starting the engine, and adjusting the temperature and making the car ready for your next journey.

Another recent development in the infotainment system is the SmartLink+ by Skoda. This system enables connection between the car and the mobile device. In this way, information



from the phone screen can be displayed on the in-car infotainment monitor. This enables comfortable use of mobile applications, phone navigation or Internet radio playback while driving.

In addition, SmartLink+ is compatible with the Apple Car Play interface, Google Android Auto and MirorLink. SmartLink+ allows you to easily control your smartphone's functions via the Infotainment system's screen. The solution is very helpful e.g. for music lovers because it allows enjoying wide access to music in the so-called streaming apps like Saavan and Spotify. Connecting a smartphone is very easy. This is made possible by two USB ports, so the SmartLink+ function can also be used by a passenger.

SmartLink + also includes the SmartGate function. It allows you to connect your smartphone to your car via Wi-Fi to access various data such as fuel consumption monitoring, driving dynamics or service information.

Enhancing the safety

Infotainment systems, therefore, allow you to control not only entertainment functions but are also

"management centres" for the whole car. A few systems that are already available in the market and few are under development are paired with the central helpline centre, which allows you to call for help (manually or automatically) in an emergency. Thus, the user can feel extremely safe in the vehicle, all the time being able to call for help.

Before I end, I would like to say, with the speed and the direction that the IVI is moving indicates that in the nearest future there may be a lot of changes in the scope of infotainment systems. At the same time, more sophistication and overloading the interior with touch screens and the level of commitment required to operate them can distract the driver too much, which can pose a potential danger on the road. Before integrating many systems into the touch systems vehicle manufacturers should think about how touch screen operation affects the safety and comfort of driving.

The intention is not to remove touchscreens but to retrofit them with physical buttons that will be used to control e.g. air conditioning or driving characteristics of the car. The ability to handle many of the vehicle's functions by voice would be a great solution to the current problems with touch screens that distract the driver while driving. Instead of looking for switches in the system menu, the driver would simply say: 'Increase the temperature of the air conditioning by 2 degrees and increase the airflow' - instead of breaking away from driving and causing potential danger in traffic. To design a future-proof IVI system, OEMs need to understand what type of technology is coming to the fore and how customer demands are changing. There is no end to innovation and we are sure that in the coming years we are going to witness unimaginable innovations that will be rolled out. The innovative IVI systems are going to be the key differentiator in the B and C segment cars.





SCARCITY OF IC CHIPS - HOW INDIA CAN TACKLE THE GROWING DEMAND?

SAE INDIA CONFERENCE ON AUTO ELECTRONICS 2021

ne of the panel discussions i n S A E India's "Auto Electronics 2021" virtual conference held on April 30th was on the topic "Scarcity of IC chips-How India can tackle the growing demand?" Dr Shankar Venugopal, VP Mahindra & Mahindra moderated the panel. The other panellists were Prof RK Amit (IIT Madras), Dr Anuradda Ganesh (Cummins India), Kaushik Madhavan (Frost & Sullivan), S Ramachandran (Infosys) and Dr Karthik Sundarraj (Hexagon).

The discussion started with setting the context on why there is such an



acute shortage of chips globally. It did not happen overnight. It started with the sanction imposed by the U.S.A. on China for semiconductors, during President Trump's era. The lockdown due to the COVID-19 pandemic in early 2020 made chip makers shift focus to other profitable sectors like consumer electronics, which witnessed a huge demand, with many working from home. When the auto industry quickly bounced back during the latter part of the year, the chip makers were not ready to resume supply. Untoward incidents like a fire accident in Renesas factory in Japan and the Texas snowstorm caused further damage in 2021.

Consumer preferences and

regulatory compliance have increased the usage of chips in cars - for infotainment, emission control, safety, crashworthiness, and vehicle health monitoring. Cars are becoming smart mobile devices enabled by connectivity. With more than a trillion digital transactions in India in 2020, cars are set to become a mode of payment. In such a situation, the lack of readiness in terms of skill sets, technology, research, infrastructure and a proactive approach for auto chips have hurt India. Afterall, it is not a tortoise vs a hare race anymore. If chip manufacturing is considered as the hare, the automotive industry and its demands are galloping like a stag. During the last tsunami in Japan, vehicle makers realized that they



Dr Shankar Venugopal

If electric vehicles are the way forward for the automotive industry, the types of chips that would be required would definitely come down. As such, chip shortage may not be a huge challenge in the medium term.





Ramachandran S

could not go beyond 2 to 3 levels of their suppliers for tracing the origin of their parts. Such a lack of transparency along the Indian supplier ecosystem is also a reason for the shortage.

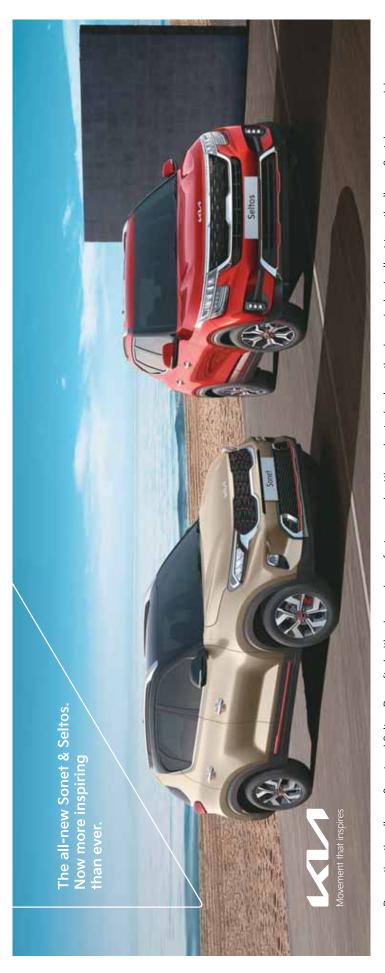
According to several experts, half the cost of making an internal combustion engine vehicle would go towards electronic components by 2030. What can Indian auto makers do to address this scarcity? Vertical integration, which was popular in the traditional auto industry could be one way. Local consortiums can be formed to manufacture critical components and chips, with continuous innovation and sector-wise collaboration. The consortium should be a tripartite collaboration between the industry, the Government and the academia. Car makers need co-creation of new products along with chip makers, starting from the early design stage and all the way to development, manufacture, testing and service. We can standardize and modularize the vehicle platforms wherever possible and scale up the level of operations.

The panel discussion concluded with a big, audacious goal from each participant. If electric vehicles are the way forward for the automotive industry, the types of chips that would be required would definitely come down. As such, chip shortage may not be a huge challenge in the medium

term. Elon Musk brought the three components required for an automobile ecosystem together for Tesla to be successful. In the traditional internal combustion engine driven vehicle market, oil refineries, fuel stations and the vehicle are the three components for generation, delivery and consumption of energy. Similarly for electric cars, India should think of factories, charging stations and electric cars in a non-linear fashion to be successful. We are used to linear thinking, extrapolating what is available today.

The goal of car manufacturing should be to make vehicles faster, cheaper, better and also sustainable. The gap between classroom education and industry requirements should be plugged. We need to progress from linear thinking to exponential thinking. If the software industry is our strength, we should leverage it for accelerated product development. We need a systems-thinking approach for the automotive supply chain and model it to foresee the future. Our supply chains need to become resilient to shocks, with redundancy and flexibility built in, and the final product assembly postponed as much as possible.

India can become the global hub for sustainable mobility if we bring in all these ideas together as a self-reliant and resilient strategy for Aatma Nirbhar Bharat.



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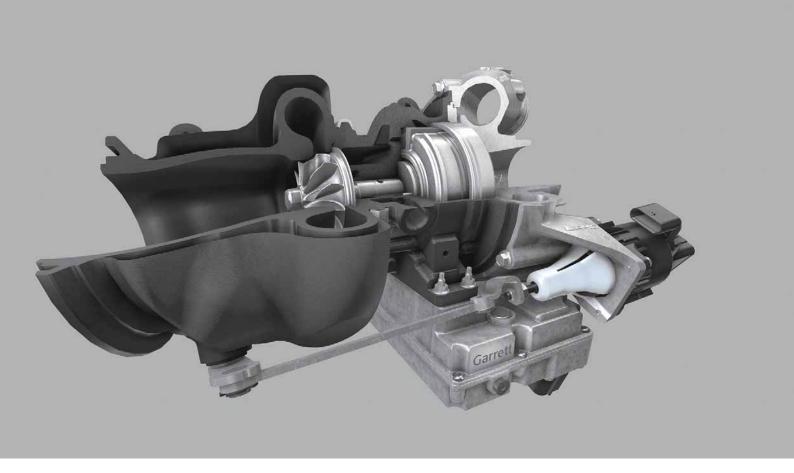


The future of turbo chargers

s the world's governments continue to crackdown on fuel economy and emissions regulations, small-displacement turbocharged engines have started to become commonplace. Smaller displacement turbocharged engines can return excellent fuel economy if driven carefully but practically not producing a lot of power. For this reason, automakers have begun to use them in order to meet these increasingly strict emissions standards and deliver customers the same levels of engine power as before or sometimes even higher.

Indian auto emission standards are becoming more stringent now in the BS6 era. On the other side, Indian consumers are beginning to mature to more efficient, clean and powerful vehicles packaged in compact sizes available at affordable prices. This has led to the rise of automakers in India to explore a new type of downsized turbocharged petrol engines that are efficient but also pack a mean punch.

Under Rs 20 lakh price bracket in India, there are many options available for Indian consumers for a powerful turbo petrol vehicles like Hyundai Venue, Tata Nexon, Mahindra XUV300, Kia Sonet, Hyundai



Creta, Nissan Kicks, Kia Seltos GT-Line and the upcoming Nissan Magnite. This long list tells you the need for high powered engines from the customers.

So, what is next? The answer is E-Turbo. Yes, in the near future, some of that extra power will come from electric turbos. It wasn't long ago that the idea of the electric turbocharger was more of a joke, which was before the adoption of the 48-volt electrical system by automakers. However, this has changed the amount of power that automotive systems have to use, quadrupling the wattage while maintaining the same wire size and current.

If you look at the auto industry, it has been working towards 48-volt electrical systems for a number of years, as engineers foresaw that mainstream 12-volt technology would soon be overwhelmed by the increasing power demands of modern cars. Audi and Mercedes-Benz already have 48-volt systems in production, allowing them, among other things, to use advanced mild-hybrid drivetrains to give you a serious electric performance boost.

Turbocharger manufacturers are working on to launch the first electric turbocharger for production vehicles in 2021. This new E-Turbo is yet another way to help boost the efficiency of the internal combustion engine. The turbocharger specialists want to take advantage of 48-volt technology with

a forthcoming product called E-Turbo, which places an electric motor between the turbo's intakes and exhaust turbines. Like a conventional turbocharger, it has a turbine wheel in the exhaust that spins a compressor wheel in the intake, using waste exhaust heat to force more air into the engine. The turbo will still be powered by the engine's exhaust, but the electric motor will eliminate turbo lag and improve engine responsiveness. Manufacturers say the E-Turbo will help an engine reach its peak power output in less time to provide better acceleration, and can also help reduce your car's fuel consumption and exhaust emissions.

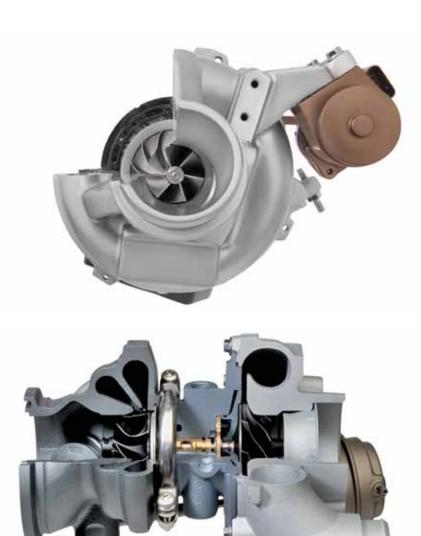
In this new technology a small

electric motor on the shaft runs between the two halves of the turbocharger. That allows for the electric motor to spin up the turbo more quickly, adding boost immediately from idle and both eliminating turbo lag and freeing automakers from the restraint of sizing the turbo for off-idle acceleration, which lets the engine use a turbo that's more efficient at normal operating speeds. The other benefit is that the E-Turbo can actually recover energy from the engine when more boost isn't needed by allowing the turbo to be used to help recharge the mild-hybrid battery. However, even non-hybrids that use the E-Turbo will be able to boast better performance for your next car.

Electric superchargers aren't new, Audi uses one to jump-start the turbos on many of its 48V cars, but this E-Turbo saves the automaker from adding a separate component and system into the intake and exhaust paths. The E-Turbo that is under testing could get the engine to target torque in 1 second vs 4.5 seconds for a conventional turbo and that it could increase power and torque while reducing emissions. The technology seems like it could be a fit for any automakers working on 48V and soon available for other cars.

As the turbocharger enables a small engine to produce more power, manufacturers can downsize their engine displacement. A smaller engine is typically a bit better on gas than a larger one, which contributes toward some fuel savings. Turbocharged engines also utilize the engine's hot, expelled air to spin a compressor wheel and draw in outside air, reducing the amount of waste produced. For these reasons, a turbocharged engine can be more efficient than a naturally aspirated one when driven carefully.









Yaman Ciplans to open 100 Blue Square outlets by end of 2021



mobility options as people prioritise social distancing and personal hygiene. Also, the industry has adopted digital and internet-based activities to reach out to the customers. Now, customers have the option to book the vehicles online, pay online, test ride the product at their doorstep and have it delivered at home as per their convenience.

In 2020, Yamaha too announced various online activities and initiatives to provide customers an enhanced buying experience and personalized customer services (One to one service). The first initiative was the introduction of the user-friendly website with online sales facility called Virtual Store. The Virtual Store is equipped with features like 360-degree view of the products along with the specification comparison between Yamaha Products bundled under the Buyers Guide option on the website. We also made available the Yamaha merchandise on Amazon so as to help customers buy their attractive riding apparels and accessories easily.

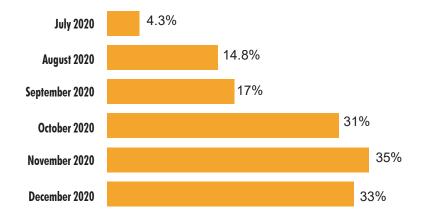
The Yamaha dealerships also provided their support in promoting the contactless delivery and used digital communication tools like WhatsApp etc. for communication with the customers during pandemic, which helped us remain connected with our customers.

How has been the performance of Yamaha in the past months and plans for 2021?

Yamaha witnessed strong sales in the 2nd half of 2020. Yamaha began



with a 4 percent year-on-year growth in July 2020 and reported positive sales growth for six consecutive months. It helped us register a total-sales of 5.04 lakh units in 2020.



We would like to continue with the same momentum and strategy to achieve our annual domestic target of 7.80 lakh units in 2021. We will emphasize more on the digital medium to promote our brand in the Indian market especially in 7 metro cities and the surrounding districts. We will also continue to organize the on-ground activities which will provide an opportunity for the customers to test ride our products and be more aware about its features.

In December last year, we launched the Test Ride My Yamaha which aims to create awareness on the Yamaha's stylish scooters and sporty motorcycles. Through this campaign, we want to reach out to every potential customer who wishes to ride a Yamaha product and experience its latest technologies and features.

We are also working aggressively to open more Blue Square outlets in the country to provide our customers an enhanced buying experience at our dealerships. Till 2020, we have already opened 20 outlets and by end of this year, we will take this figure to 100.

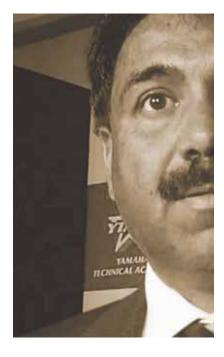
Our focus is to strengthen our position in the premium segment through a strong product portfolio of 150cc & 250cc motorcycles and 125cc scooters. We have also introduced "another exciting chapter" of style and excitement in India with the "colour order system". This is a unique initiative wherein patterns can be created with existing colour combinations for vehicle body and wheel that will help develop an entirely new look and appeal of the same two-wheeler. The "Customise Your Warrior (CYW)" campaign launched in 2020 for MT-15 is the first part of the colour order system. We will continue to drive the "strategic effort" with other products in 2021.

What products, segments are driving growth and Yamaha's focus to strengthen position in the segment?

We hold a strong presence in the premium space and one of our strengths is the strategically planned product portfolio that consists of twowheelers for all riding possibilities — new riders, experienced riders, riders seeking the finest technologies or advanced controls and adequate safety features. Our focus for the year continues to provide best experience to the consumers through our exciting, stylish, and sporty products. Yamaha will continue with "The Call of the Blue" strategy that embodies the global spirit of motorcycling culture.

We will adopt and introduce the latest technologies and advanced features in our existing models but at the same also work towards launching new models which fits the customer's riding preferences, and which adds value to their lives.

How important is South India market particularly Tamil Nadu state for Yamaha? Plans for the market.



South Zone which includes states like Tamilnadu, Karnataka, AP, Telangana, and Kerala contributes to almost 45 to 50 percent of total Yamaha sales.

In 2020, we had sold a total of 5.04 lakh units out of which 1.14 lakh units were sold in Tamilnadu. Tamil Nadu contributes to almost 20 to 25 percent of the total Yamaha sales.

Tamilnadu has been a very important market for us as it offers a huge opportunity for us to grow and further strengthen our position in the 150cc segment for motorcycles and 125cc segment in scooters.

We are planning a series of internetbased engagement activities as well as the on-ground activities like COTB Fiesta, Test Ride My Yamaha activity, Fascino 125 FI Cavalcade etc. to expand our reach in this region. Though due to pandemic, we have postponed our on-ground activities now and are completely engaged in promoting our products and campaign digitally. In addition to this, we are also planning to create awareness and visibility about our brand and its global racing image through uniquely designed showrooms - Blue Squares.

What kind of products sell in these states and why?

Though both our scooter and motorcycle models are quite popular in South India, but our scooter models have slight edge in terms of sales. Last year, we sold 54 percent scooters and 37 percent motorcycles in the South region. Our 125cc scooter models - Fascino 125 FI, Ray ZR 125 Fi and Street Rally are equipped with advanced features and latest technologies like Side Stand engine cut-off, the Stop & Smart system and UBS technology etc. Be it in terms of performance, mileage, safety or



utility, Yamaha scooters have emerged as one of the top choices among the customers.

Similarly, Yamaha's motorcycle models have a cult following since many decades. Currently the sporty commuters like the FZ FI and FZS FI, streetfighters like MT-15, race machines YZF-R15 Version 3.0 and refined quarter liter class like FZ 25 and FZS 25 are well equipped to meet the aspirations of India youth who are passionate about riding, touring and adventure.

What is the concept of Blue Square? How many stores do you have in India and plans for next 2-3 years?

Blue Square is a unique conceptdriven showroom that institutes Yamaha's racing DNA of excitement, sport & style. The concept is focused towards revving up customer experiences in the company showrooms through vivid aesthetics, inspiring propriety created out of Yamaha two-wheeler line ups and engaging offerings. "Blue Square" is coined to fit into the legacy of Yamaha's role in global motorsports with "blue" characterizing the brand's racing DNA and "square" defining a one-stop buying junction. It serves as a communication spot for customers in accessing various information along with exploring the accessories and apparels, thus fulfilling every requirement of a motorcycling life.

Currently, we are having 20 such outlets across the country and by end of 2021 we want to have 100 such outlets pan India. In next 2-3 years, we plan to open 300 Blue Square shops across India.

How many Blue Squares have you opened in Chennai and what is the target by end of 2021 for both Chennai and Tamil Nadu?

We have opened 3 Blue Square shops in Chennai and 6 overall in Tamil Nadu. By end of this year, we plan to have atleast 26 Blue Square shops in Tamil Nadu out of which 12 will be opened in Chennai.

What is overall footprint of Yamaha on pan India basis in terms of dealership and customer touchpoints? Can you share details of South India and Tamil Nadu? How you plan to strengthen?

We have a very strong network of 1900 customer touch points across India which includes 281 in Tamilnadu. In

Chennai, we have close to 50 customer touch points.

As I told you, our complete focus is to provide the customers with premium experience right from the moment they enter our showroom. Blue Square outlets are going to play an important role in transforming the customer experiences in Yamaha showrooms and establish a strong connect with the new lifestyle of the motorcycle and scooter audience of the country.

South India is a very important market for us and we plan to expand our network with more touch points in this region so that our products, accessories and apparels are available to more and more customers. Right now, we have to close to 700 customer touch points, and we plan to increase it to 800 by end of this year. Also, we will be opening 50 additional Blue Square outlets in South India offering an enriching experience to our customers and fulfilling their every requirement of motorcycling.

What are the new demands & trends that you are witnessing in customer buying behaviour?

The pandemic has brought about a drastic shift in consumer buying habits and behaviours. In the last one year, we have witnessed that increased preference for personal mobility over shared and public transportation. Due to social distancing and personal hygiene, many customers who were not thinking of owning a vehicle are now considering buying vehicle and are now one of the most potential buyers due the necessity that the pandemic has posed. Similarly, many customers have increasing preference of engaging on online platforms for vehicle purchase and servicing and to know about various added features of the product.

We will continue to reach out to our new customers under "The Call of the Blue" brand direction. We will emphasize

more on the digital medium to promote our brand in the Indian market especially in 7 metro cities and the surrounding districts. We also started this year by organizing the on-ground activities like COTB FIESTA, TEST RIDE MY YAMAHA CAMPAIGN, FASCINO 125 FI CAVALCADE in order to provide an opportunity to the new customers to test ride our products and be more aware about its features but due to the ongoing pandemic situation we have postponed these activities for now.

The Test Ride My Yamaha campaign aims to create awareness on the Yamaha's stylish scooters and sporty motorcycles. Through this campaign, we want to reach out to every potential customer who wishes to ride a Yamaha product and experience its latest technologies and features. We are also organising Fascino 125FI Cavalcade activity in metro cities and through we want to increase visibility of Fascino and create awareness about the product features and utility for customers.

Our focus is to strengthen our position in the premium segment through a strong product portfolio of 150cc & 250cc motorcycles and 125cc scooters. We have also introduced "another exciting chapter" of style and excitement in India with the "colour order system". This is a unique initiative wherein patterns can be created with existing colour combinations for vehicle body and wheel that will help develop an entirely new look and appeal of the same two-wheeler. The "Customise Your Warrior (CYW)" campaign launched in 2020 for MT-15 is the first part of the colour order system. We will continue to drive the "strategic effort" with other products in 2021.

In addition to this, the Virtual Store and availability of Yamaha apparels and accessories on Amazon will also support in acquiring new customers.

> Any plans for EV, **New Products this** year.



Undoubtedly, Electric Vehicles is the future of automobile sector and has a very high potential in long term. However, its success will solely depend on the available infrastructure, affordability, and acceptability by the customers. India can achieve success only through a clear roadmap, stable policy, and proper planning. Currently, there are bigger challenges related to investments in infrastructure, charging stations, battery production and swapping infrastructure for electric vehicles.

We already have a dedicated team at our Headquarters in Japan who are working on an all-new electric vehicle platform for India and other global markets. We already have been manufacturing EV models in Taiwan since last two years in association with Gogoro. So, having said this, I want to tell you that we have the technology and the expertise to develop and manufacture EV models. But at the same time, we also need to consider many factors like pricing, performance, and infrastructure before we roll out any products for the Indian market. We want to be sure that once the customer's buys a Yamaha EV product, he should not face any issues related to charging, battery swapping or service.

We are contemplating on all these factors now. Once, we have worked on all these areas, we may introduce EV models for the Indian customers.

Regarding launch of any new products we will let you know at an appropriate time. M



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stringent government policies, the demand is set to increase in the market. We believe that market opportunity is substantial and the government's new policy on banning non-ISI certified helmets will give organized players in the helmet industry, a big boost by driving demand.

We are already the largest twowheeler helmet manufacturers in the world, however, looking at the current requirements in the market and the growing consumer demand, we decided to increase our capacity in 2020 and inaugurated two manufacturing units in Faridabad, Haryana. With the inauguration of new manufacturing facilities, we were able to double the production capacity of STUDDS to 14 million helmet units per annum, which was 7 million units earlier.

On DOT (America), Snell and ECE (Europe) certified helmets.

With the recent Motor Vehicle Bill conclusively inculcating the need for ISI certified helmets on the roads, we are confident that our helmets will come to the greatest utility to the Indian consumer. Since there is neither a need nor a requirement for foreign certifications in Helmets across the board, we are confident that our ISI certificated products will happily consume a large chunk of the demand for helmets in the country.

On 'bone conduction headphones' installed in Studds helmets

We are focusing on a new version of the helmet which also comes with a bluetooth incorporated camera and bone-conduction technologies. In this technology, music may be heard by bone-conduction without the aid of microphones. Bone-conduction sound systems create sensations which are conveyed across the bones to the senses. We are in the initial stage of production of the helmet however and it is a little difficult at the moment to give a timeline to the product's introduction.

On bringing smart technology into 'affordable helmet'



We are at a stage of rampant innovation at Studds Accessories Ltd. With a novella of future ready developments such as bone conduction $audio\,systems\,and\,Blue to oth\,ing rained$ camera systems, we are preparing for the next line of rider safety accessories. However, we are a very competitive and pragmatic business organization, which will ensure that our line of products will be priced competitively as well. Our offerings are categorized as 'having optimal value' and we will ensure that the value for money and unparalleled utility is maintained throughout our line of offerings.

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How to choose a best Smart TV?

t's been 2021, are you still using normal TV? Then this is the right time for an upgrade. Smart TVs are not as costly as you think. Nowadays there are so many budget-friendly options to choose from after the arrival of smartphone players like Realme and One plus brands in smart TV production. Those budget-friendly smart TVs are good enough to satisfy our needs.

Do you need a smart TV now?

The answer to the question lies in how much are you going to utilize the services it held within. If you are going to watch the content only from an HDTV antenna or cable, then you don't need a smart TV now. you can go for high resolution display models at the same price as buying a smart TV. If you have a subscription to many online streaming services like Netflix, Amazon Prime, or Hotstar, then you can buy one. These days you can use your smart TV for video gaming or an alternate or secondary display for your laptop too. Choose according to your usage.

Budget friendly smart TV:

What's the price range for the best budget smart TVs? well, there are quite a few options you can choose from Rs.12,000 to 25,000. These budget friendly options gave us what we need. Those who want outstanding television experience can go for high-end models which costs half a lakh or over a lakh.

What are things you must check before buying a smart TV?

screen size:

Screen size is one of the important factors you must consider before buying a TV. Choose the screen size of your TV according to the size of the room where you like to place the TV. 32 Inch, 43 Inch, And 55 Inch are the common sizes available in most TV brands. There are a lot of options to consider in 32 and 43-inch sizes.

Display Type:

Another important factor to consider before buying a TV is the type of display it has. There are different types of displays used in different types of TVs according to price range. QLED, OLED, LED and LCD are commonly used display types. OLED is the most expensive one and also it's worth its price range. But the availability of OLED in India is average. The Most preferred display type among Indian users is LED. It provides a great viewing experience and also budget friendly.

Screen resolution:

Higher the resolution of a TV, the better the outcome. HD, Full HD, Ultra HD (4k), and 8k are the resolution types used in smart TVs. Most smart TVs had Full HD resolution only. Those who want a better experience can opt for 4k or 8k. It also costs more.

Sound:

Audio quality is also necessary for a better experience. The number of wattage increases, the louder the sound of the TV. To choose the sound option also you must consider your room size. The spacious your room, the higher the number of wattage you need to buy.

Here are some of the recommen dations for you between Rs.12,000 to Rs.25,000.



Realme Smart TV



Features:

- Android OS
- 1366 x 768 pixels resolution (32 inch)
- 1920 x 1080 pixels resolution (43 inch)
- Sound 24 W
- Wi-Fi

Price:

- 32 inch ₹ 14,999
- 43 inch ₹23,999

Mi 4A Pro Smart TV



Features:

- Android OS
- 1366 x 768 pixels resolution (32 inch)
- 1920 x 1080 pixels resolution (40, 43 inch)
- Sound 20 W
- Wi-Fi

Price:

- 32 inch ₹14,999
- 40 inch ₹19,999
- 43 inch ₹24,999

OnePlus Y Series Smart TV



Features:

- Android OS
- 1366 x 768 pixels resolution (32 inch)
- 1920 x 1080 pixels resolution (43 inch)
- Sound 20 W
- Wi-Fi

Price:

- 32 inch ₹15,499
- 43 inch ₹24,999

Samsung Smart TV



Features:

- Tizen Os
- 1366 x 768 pixels resolution
- Sound 20 W
- Wi-Fi

Price:

• 32 inch - ₹16,999



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Price:

6 GB RAM + 64 GB storage ₹10,999 6 GB RAM + 128 GB storage ₹11,999

Features:

- 6.53 inch Full HD+ display
- Qualcomm Snapdragon 662 processor
- 6 GB RAM + 128 GB Storage
- 48 MP + 2 MP + 2 MP rear camera
- 8 MP selfie camera
- 6000 mAh battery
- Android 10

Plus:

- Performance
- Loud speakers

Minus:

- Bit heavy
- Camera could be a little better

One line review:

Good mobile to buy under ₹12,000. Poco M3 is a good choice while comparing with the other mobiles like Redmi 9 Power or Moto G9 Power in the same segment.

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Features:

- 6.5 inch Full HD + display
- MediaTek Dimensity 800U processor
- 6 GB RAM + 64 GB storage
- 48 MP + 8 MP + 2 MP rearcamera
- 16 MP selfie camera
- 5000 mAh battery
- Android 10

Positives:

- Battery backup
- Great overall performance
- Quick charging

Negatives:

- Design
- Low light camera performance

One line review:

This is a low-cost mobile that has 5G network support. The base variant of this model is good for its features in its price range.

Price:

- \Box 6 GB RAM + 64 GB storage ₹ 16,999
- Φ 6 GB RAM + 128 GB storage ₹19,999 α



Price:

- 6 GB RAM + 128 GB storage ₹23,999
- 8 GB RAM + 128 GB storage ₹ 25,999

Features:

- 6.7 inch Super AMOLED display
- Exynos 9825 processor
- 6 GB RAM + 128 GB storage
- 64 MP + 12 MP + 5 MP + 5MP rear camera
- 32 MP selfie camera
- 7000 mAh battery
- Android 11

Positives:

- Long life of the battery
- Amoled display

Negatives:

- Slow charging
- Low light camera performance

One line review:

Those who prefer battery backup over other options can go for it blindly. Those who want better overall performance can consider other options like Realme X7 5G or OnePlus Nord also.

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Price:

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 4 GB RAM + 64 GB storage ₹11,999

Features:

- 6.39 inch HD+ display
- Qualcomm Snapdragon 460 processor
- 4 GB RAM + 64 GB storage
- 13 MP + 5 MP + 2 MP rear camera
- 8 MP selfie camera
- 4000 mAh battery
- Android 10

Positives:

Good build quality

Negatives:

- Camera performance
- Battery

One line review:

Not the best choice. There are better models available in the market even at a lower cost than this.

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Price: Φ

6 GB RAM + 128 GB storage

Never Settle

₹ 22,999

8 GB RAM + 128 GB storage

₹ 24,999

12 GB RAM + 256 GB storage

₹ 27,999

Features:

- 6.43 inch AMOLED display
- Qualcomm Snapdragon 750G processor
- 6 GB RAM + 128 GB storage
- 64 MP + 8 MP + 2 MP rear camera
- 16 MP front camera
- 4500 mAh battery
- Android 11

Plus:

- **Build** quality
- Good battery life
- Fast charging

Minus:

Low-light camera performance

One-line review:

• There is no reason to exclude this Oneplus Nord CE from our wishlist. All-rounder performance of this Nord CE is satisfactory.





Price:

8 GB Ram + 128 GB Storage - ₹ 64,999 12 GB Ram + 256 GB Storage - ₹ 69,999

Features:

- 6.7 inch fluid AMOLED display
- Qualcomm Snapdragon 888 Processor
- 8 GB Ram + 128 GB Storage
- 48 MP + 50 MP + 8 MP + 2MP Rear Camera
- 16 MP Selfie Camera
- 4500 mAh Battery
- Android 11

Plus:

- 50W Wireless Charging
- Camera
- Good Performance

Minus:

Selfie camera could be a little more better

One line review:

We can say that Oneplus 9 pro is an evolutionary model of Oneplus 8 pro. Those who prefer wireless charging and 8k video recording can go for it.

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Features:

- 6.78 inch Super AMOLED display
- Qualcomm Snapdragon 888
 Processor
- 12 GB Ram + 256 GB Storage
- 64 MP + 13 MP + 5 MP Rear camera
- 24 MP Selfie camera
- 6000 mAh battery
- Android 11

Plus:

- Good gaming performance
- Cooling system
- Battery

Minus:

- Camera could be a little more better
- Little bit heavy

One line review:

 Mobile gaming lovers can go for it blindly. Those who prefer mobile for day-to-day usage can go for other brands' flagship models.

Price:

- 8 GB Ram + 128 GB Storage ₹ 49,999
- 12 GB Ram + 256 GB Storage ₹ 57,999

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Price:

- 6 GB Ram + 128 GB Storage ₹ 19,999
- 8 GB Ram + 128 GB Storage
 ₹ 21,999

Features:

- 6.67 inch Super AMOLED display
- Qualcomm Snapdragon 732G
 Processor
- 6 GB Ram + 128 GB Storage
- 16 MP Selfie camera
- 5020 mAh battery
- Android 11

Plus:

- Performance
- Great display

Minus:

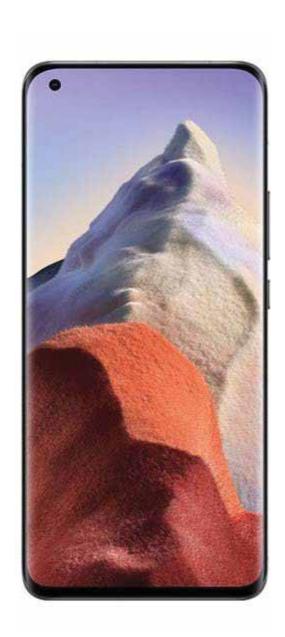
Just a copy of Redmi note 10 pro

One line review:

 Redmi note 10 pro max is the best phone in all aspects. But, it's just another copy of Redmi note 10 pro. And the pro version is a little bit less expensive than the max version.







Price:

12 GB Ram + 256 GB Storage - ₹69,999

Features:

- 6.81 inch AMOLED display Qualcomm Snapdragon 888 Processor
- 12 GB Ram + 256 GB Storage
- 50 MP + 48 MP + 48 MP
 Rear camera
- 20 MP Selfie camera
- 5000 mAh battery
- Android 11

Plus:

- Good built quality
- Good battery
- Great camera performance

Minus:

 Finger print sensor is a bit unstable

One line review:

This is Mi's flagship mobile. This
one is designed to compete with
the premium brands such as
Oneplus and Samsung, and is a
good competitor too. Those who
are bored using flagships of Onplus and Samsung can buy this
one.





Features:

- 6.4 inch Super AMOLED display
- Qualcomm Snapdragon 720G Processor
- 6 GB Ram + 128 GB Storage
- 108 MP + 8 MP + 2 MP + 2 MPRear camera
- 16 MP Selfie camera
- 4500 mAh battery
- Android 11

Plus:

- Good battery life
- Fast charging
- Super Amoled display

Minus:

- Camera performance is low
- Many features missing which are in Realme 7 pro

One line review:

Realme 8 pro is a good mobile. But not as good as Realme 7 pro. This one is not an upgrade for Realme 7 pro. When comparing both Realme 7 pro seems to be a better choice.

Price:

6 GB Ram + 128 GB Storage - ₹ 17,999 8 GB Ram + 128 GB Storage - ₹ 19,999



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