



# SUMMER INTERNSHIP AT FOLEY DESIGNS

SUBMITTED BY

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MOBILITY AND VEHICLE DESIGN Roll No: 216390013

### **Declaration**

I declare that this written submission represents my ideas in my own words and where others' ideas or words have been included, I have adequately cited and referenced the original sources. I also declare that I have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated any idea/data/fact/source in my submission.

I understand that any violation of the above will be cause for disciplinary action by the Institute and can also evoke penal action from the sources which have thus not been properly cited of from whom proper permission has not been taken when needed.

Mohammed Jaseel Mobilty and Vehicle Design 216390013

# Acknowledgement

I would like to express my sincere gratitude to Mr. Michael Foley, Founder and Chief Designer, Foley Design Private Ltd. for providing me with these internship opprtunity and offering his valuable guidance and feedback in every stage. Also, I would like to thank Alex Varghese, Manas Bharve and Roshan Mathews and all the other staff at Foley Designs for their valuable support and reviews during the course of this project.

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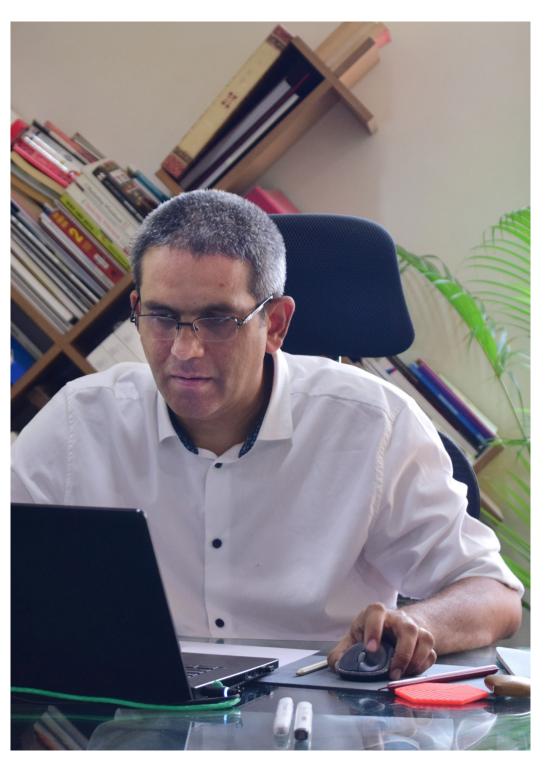


# **Foley Designs**

Foley Designs Pvt Ltd. is a Bengaluru based multidisciplinary design studio founded in 2006 by Industrial designer Michael Foley. Foley Designs is known for its innovative thinking processes, zeal for design, originality of thought and the ability to use market and consumer understanding to create new benchmarks in design. Every design at the studio revolves around a mark of inventive thinking.

Foleydesigns consistently attempts to deliver design solutions that are fresh, desirable and influential. Foleydesigns has been involved in landmark projects such as the design of the Queen's Baton for the 2010 Commonwealth Games and several world-class products for the Indian and global market.

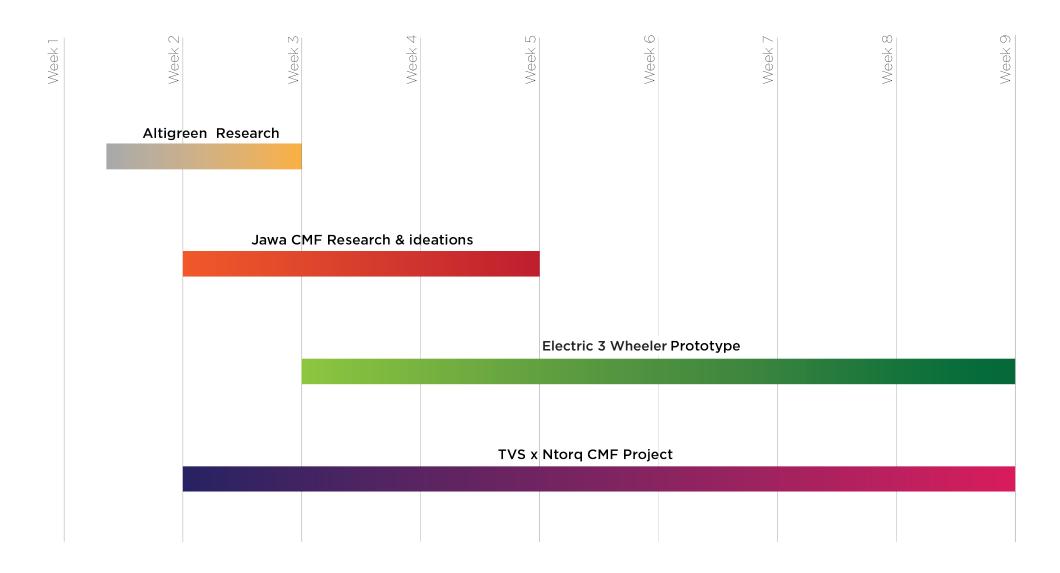




## Michael Foley

As one of India's leading product designers, Michael has won accolades and recognition internationally. After working for 14 years at Titan, he founded Foley Designs, which has become one of the leading multidisciplinary design studios in the country under his creative leadership. He is also the founder of TLV Solutions, a design execution company, with the intent of delivering simple and innovative product designs combined with world class design realisation.

# / INTERNSHIP TIMELINE



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## **Electric 3 Wheeler Prototyping**

Founded in 2013, the company started by creating drivetrain for hybrid conversions and the company changed to full electric solutions in 2016. In 2018, they showcased their full electric three-wheeler at the AutoExpo in New Delhi. Now, they have begun series production.

Currently the company is focusing on the developing a new much larger and advanced Elelctric commercial/Passenger vehicle.



## Motor Cab/Auto Rickshaw Vehicle Paint Regulations - Statewise

# Colour of the hood of all Motorcab(AutoRickshaws) shall be painted in cream yellow and rest of of the body in Black

\*Provided that if the hood of such cab is collapsible or removable, a band of 75 millimetres wide shall be painted in cream yellow on the upper most metal part of the body.





Haryana Uttar Pradesh Punjab Telangana Andhra Pradesh Karnataka Kerala Mizoram Goa Maharashtra Gujarat Madhya Pradesh Chattisgarh Odisha Rajasthan West Bengal Jharkhand Bihar J&K Sikkim Assam Arunachal Pradesh Nagaland Manipur Uttarakhand Tripura

# Motor Cab/Auto Rickshaw Vehicle Paint Regulations



# Motor Cab/Auto Rickshaw Vehicle Paint Regulations - Statewise



Every auto-rickshaw for which a contract carriage permit is granted by the Regional Transport Authorities in the State shall be painted in yellow colour over the body.









Andhra Pradesh

Telangana

# State RTO have the authority to approve unspecified colours for Electric Autorikshaws or Auto Rickshaws driven by women.









kerala - Electric

kochi Metro Electric

Delhi - Women

Thane - Women









Commercial

Mumbai Women

Maharashtra/Kerala Electric

Bengluru Electric

# **Commercial Vehicle Paint Regulations - Statewise**

Every goods vehicle shall be painted in highway yellow colour either fully or is front and rear portion in highway yellow colour:



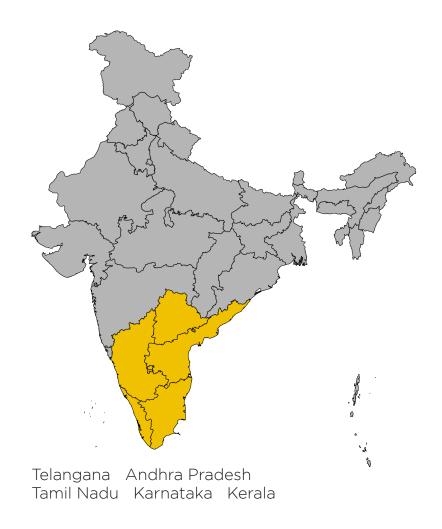
Full Body Yellow



Highway Yellow on Hood



Highway Yellow on Tail



# **Commercial Vehicle Paint Regulations - Statewise**





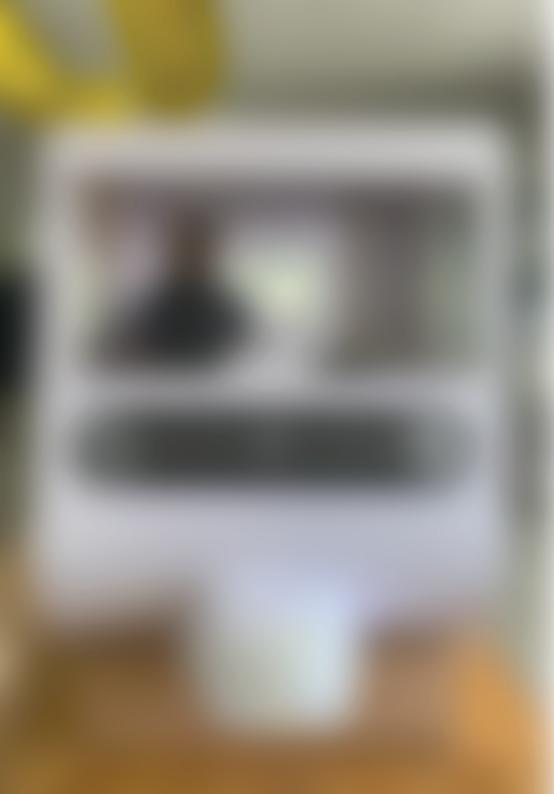




# Commercial Vehicle Paint Regulations in Rest of India. Other states does not specifiy any paint schemes for commercerial vehicles.







# / PROTOTYPE #1

### **Assignment**

Refer the 3D CAD model and build a 1:1 Interactive model of the drivers cabin in an efficient manner.

- The model should be built in manner that each part can be disassembled, transported and reassembled with ease.
- The model should be built with as less material possible to avoid wastage.
- The goal is to understand, analyze and evaluate the scale, volume, interior space, ergonomics and aesthetics of the design
- The model is be presented in front of the client to explain the design choices.
- The Model should be precise, neat and sturdy.

### **Time Duration**

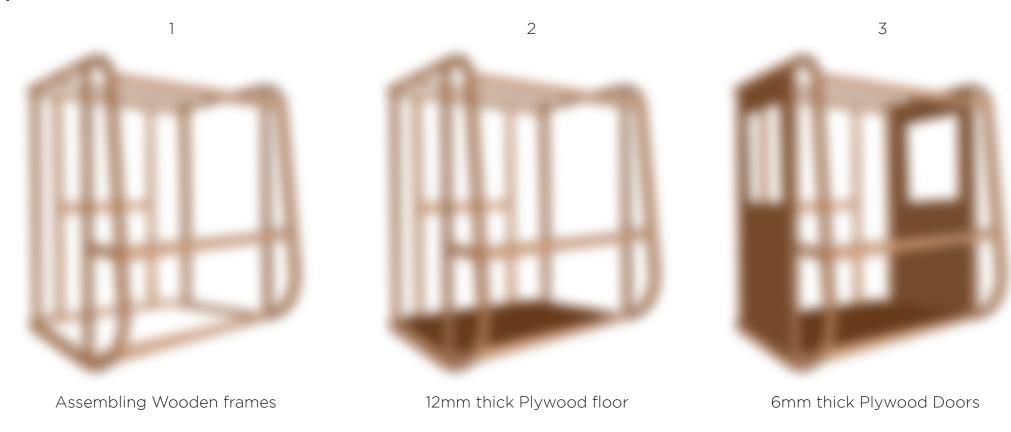
5 Weeks

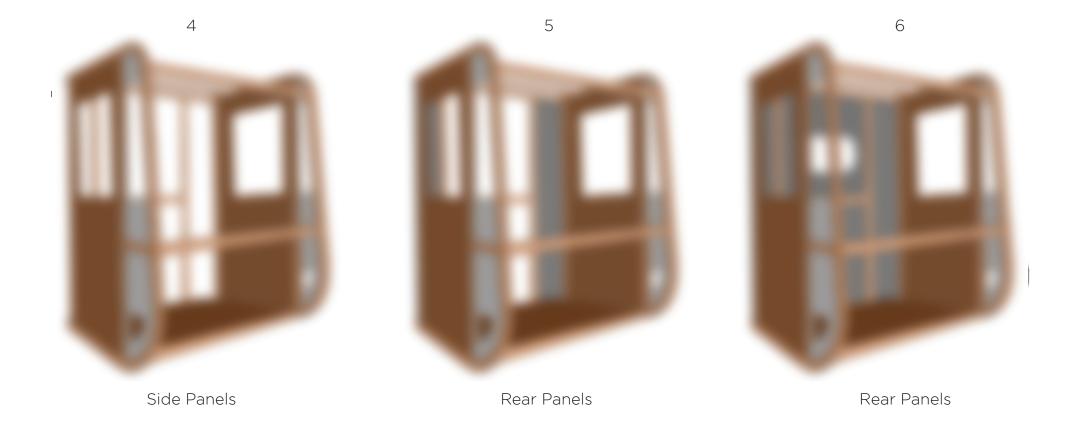
#### **Materials Used**

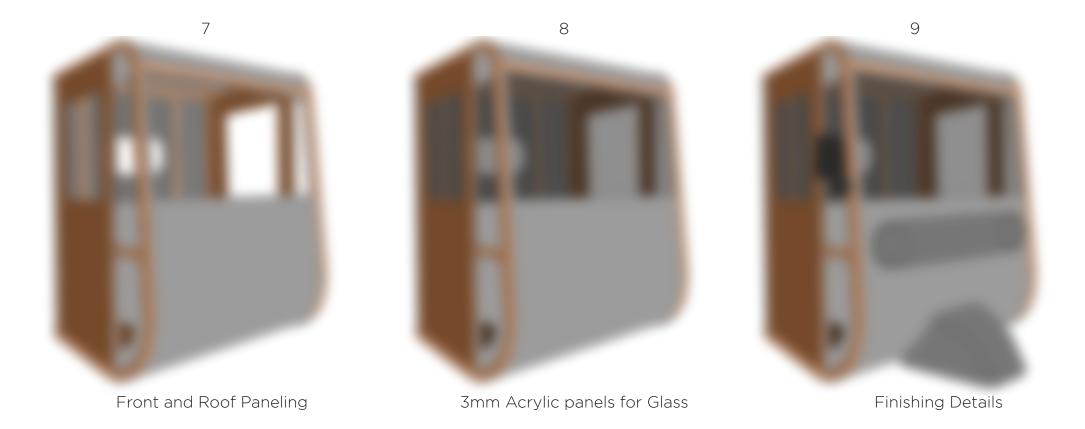
Wood, Foam Board and Acrylic

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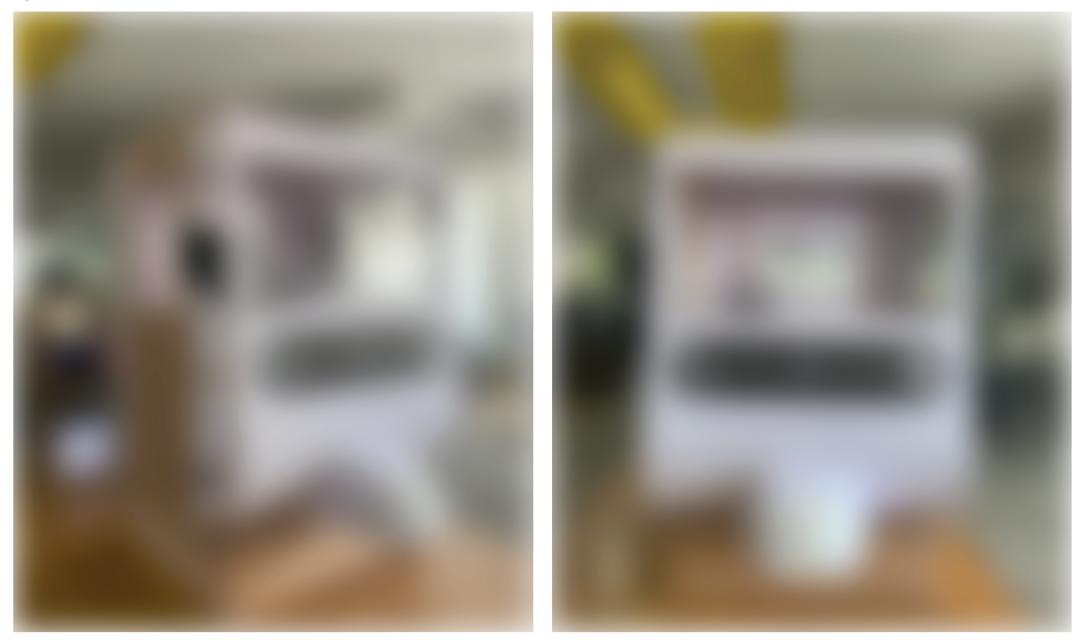
# / PROTOTYPE #1 - PROCESS



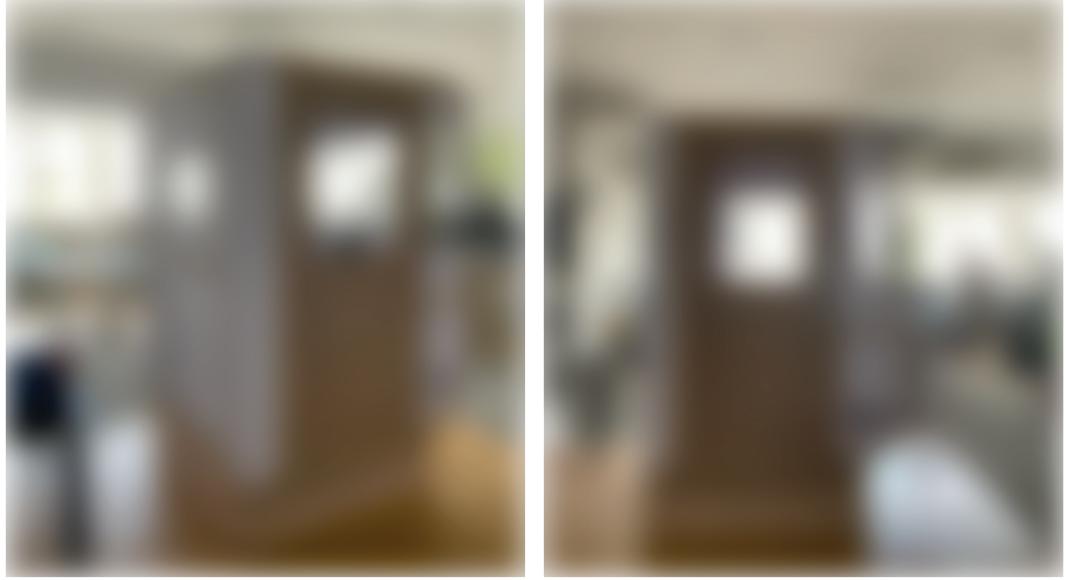




# / PROTOTYPE #1 - COMPLETED MODEL

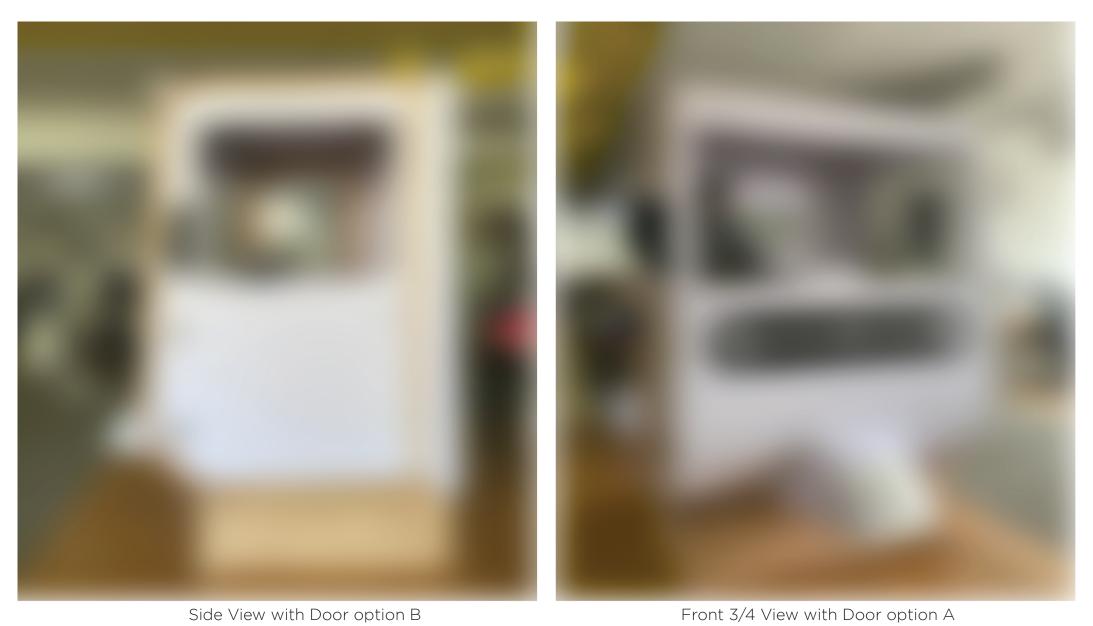


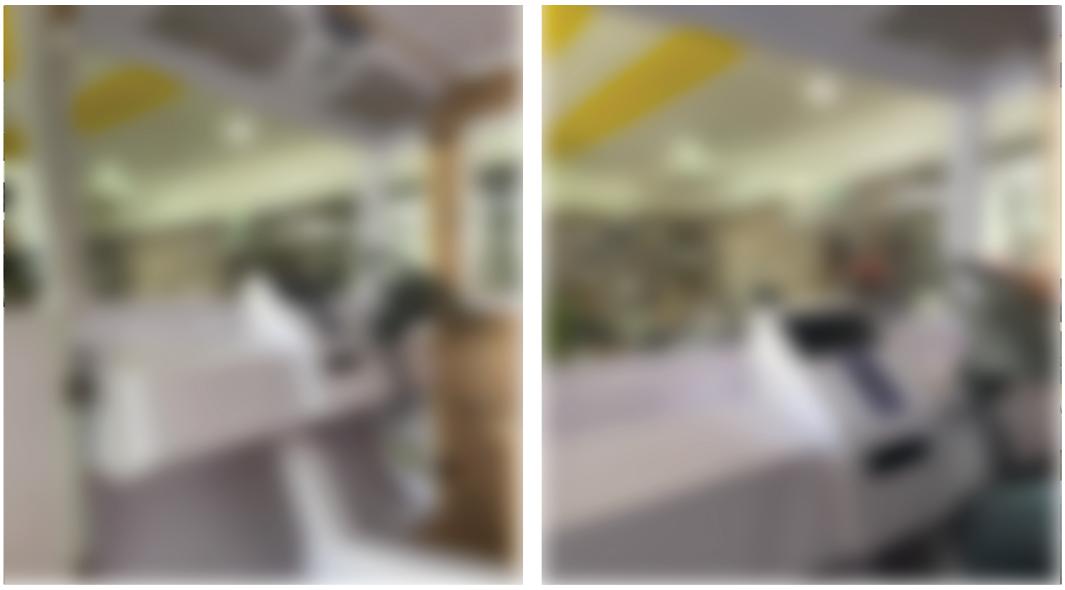
# / PROTOTYPE #1 - COMPLETED MODEL



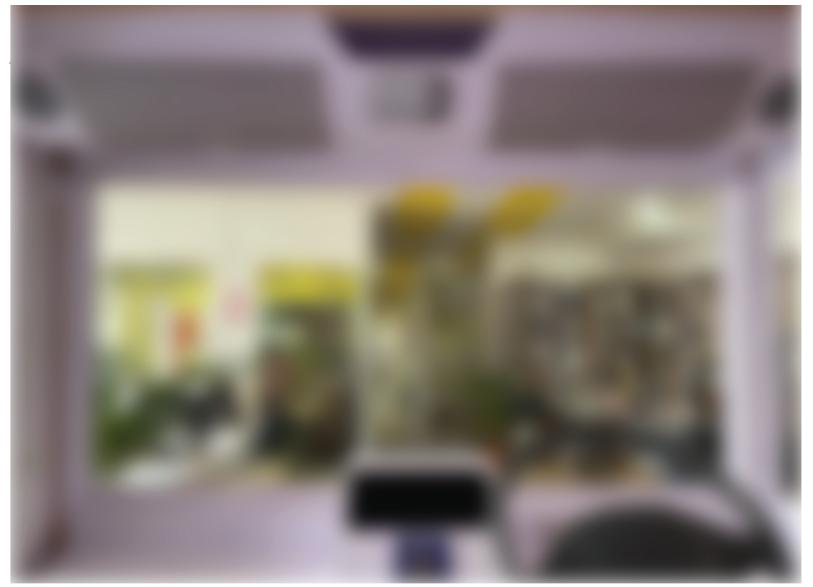
Rear 3/4 View with Door option A

Side View with Door option A





Interior Option A Interior Option A



Interior Option A



/ Design Colour, Material and Finish for a Limited/Special Edition of an existing vehicle in a relevent context.

### **Objectives**

- Get familiar with the CMF design process and strategies
- Learn 3D Modeling and Visualization (Blender)

**ANNIVERSARIES** 

HISTORIC EVENTS / ACHIEVEMENTS

**CO-BRANDING** 

NATURAL INSPIRATIONS

POPULAR PERSONALITES

ARTISTS COLLABORATIONS

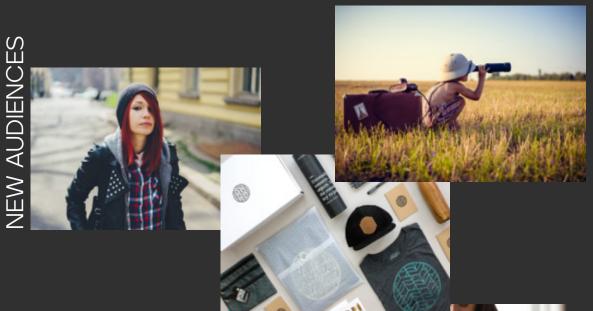
NATIONAL / CULTURAL ELEMENTS

Limited editions are small runs of items that are intended to create a sense of exclusivity.

Limited-time product releases work well for large retailers because they can quickly gain traction and sell a large quantity of products to their already established customer base. Large companies have more marketing power than smaller retailers — the key to a successful limited-time product.



# **NEW OPPORTUNITES**



NEW LINE OF PRODUCTS



KEEPING IT FRESH

INCREASE CUSTOMER BASE

# CASE STUDIES







The New Kaziranga Edition from Tata Motors is inspired by India's rich geography and bio diversity.

Pays homage to India's great national parks & their rich heritage. With the symbol of Kaziranga-The Great Indian One horned Rhino, known worldwid for their agility and power, this range reinforces the "Go-Anywhere" DNA of thier SUVs









## Royal Enfield 120th Year Edition Twins Nov 2021

A limited edition run of only 480 motorcycles, distributed as 120 units each for India, Europe, Americas and South-East Asia. The 120 units for each region split as 60 Continental GT 650 and 60 Interceptor INT 650.

New Models commommerate 120 years of brands eistance.













Triumph Tiger 900 Bond Edition
Land Rover Defender V8 Bond Edition







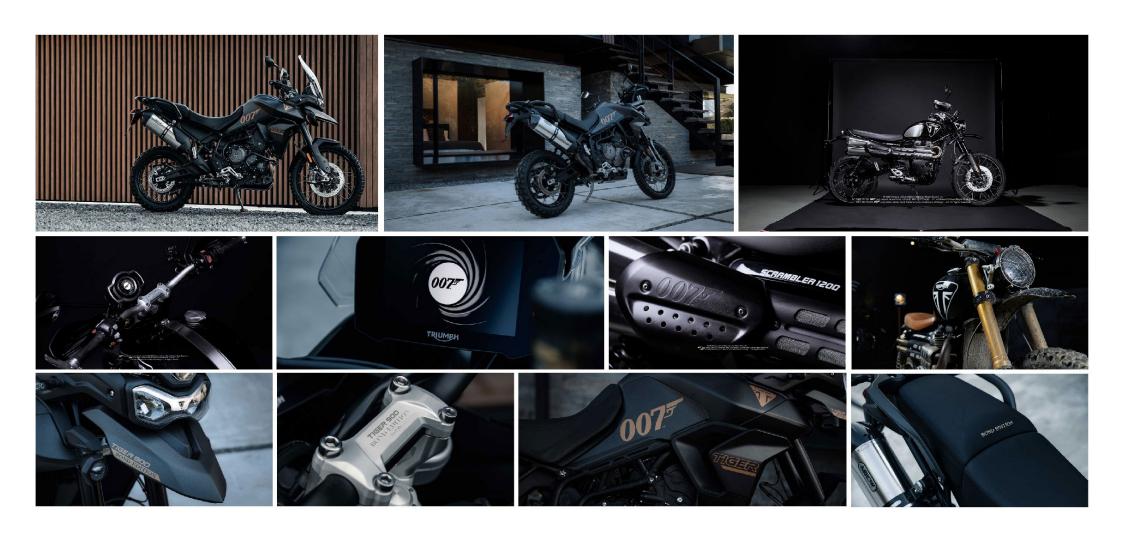


















Engine Type	249.6cc liquid-cooled 4-stroke DOHC single cylinder
Bore & Stroke	76 x 55mm
Compression Ratio	10.7:1
Carburation	Programmed fuel injection system (PGM-FI)
Ignition	Computer controlled digital transistorised with electronic advance
Starter	Electric
Transmission	6-speed
Dimensions	2030mm x 720mm x 11:27mm
Wheel Base	1369mm
Seat Height	784mmi
Ground Clearance	145mm
Fuel Capacity	13 litres (including LCD indicator reserve)
Front Tyre	110/70 - 17 inch
Rear Tyre	140/70 - 17 inch
Front Suspension	37mm telescopic fork, 118mm stroke
Rear Suspension	Pro-Link Monoshock damper, 104mm travel
Front Brake	296mm x 4.5mm disc with dual-piston hydraulic calliper and sintered metal pads
Rear Brake	220mm x 5mm disc with single-piston hydraulic caliper and sintered metal pads
Kerb Weight	161kg 165kg ABS
Warranty Period	24 months
Combined	Available in ARS

















# **Mugen Edition**

Mugen is a Japanese tuning and parts manufacturer founded by Soichiro Honda's son, Hirotoshi. It was founded in 1973, It operates independently, tuning and racing Honda vehicles as well as selling aftermarket parts and, occasionally complete vehicles









## **Moriwaki Edition**

Moriwaki Engineering is a Japanese manufacturer of speciality high performance products and motorcycle accessories.







#### **Repsol Edition**

Repsol Honda is the official factory team of the Honda Racing Corporation in the MotoGP World Championship, backed by principal sponsor Repsol.





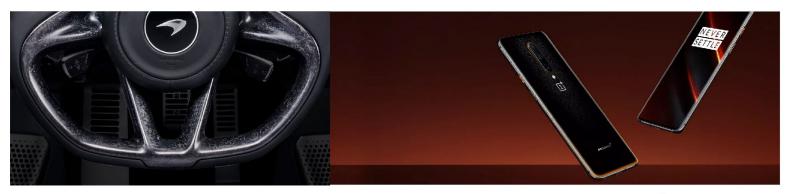




#### **RE Classic 500 Pegasus**

#### 2018

The motorcycle commemorates Royal Enfield's respected credentials of providing vehicles for use by armed forces since the first ever World War.











#### MOTO GUZZI V7, V9 and V85 TT SPECIAL 100 YEARS EDITIONS - 2021







#### **BMW Jeff Koons Edition - Feb 2022**

BMW has collaborated with American artist Jeff Koons for the creation of a custom version of its 8-series Gran Coupe - the 8 X Jeff Koons. A limited number of only 99 units of the custom creation will be available worldwide







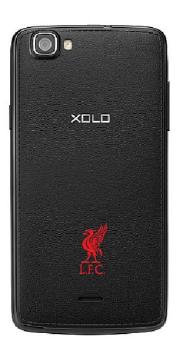
# Khadi by Titan - Special Edition Watch for Men with strap and dial woven in Khadi - 2021



#### **XOLO one Liverpool FC Limited Edition - 2015**









# /CO-BRANDING

Co-branding enables businesses to build or enhance their brand by partnering with another respected business. Two brands coming together establishes credibility because each company is able to highlight and reflect each other's assets and thus strengthen their position in a given market.



## / TVS NTORQ

Following the likes performance scooters like Aprilia SR150 TVS launched Ntorq in February 2018 claiming several firsts for the Ntorq 125 in the Indian scooter market, including Bluetooth connected speedometer (with navigation assistant, caller ID, top-speed recorder,in-built lap-timer and service reminder), engine kill switch, stealth inspired styling etc.

STEALTH DESIGN

STEALTH DESIGN

SPORTY

CONNECTED AGGRESSIVE



### / ASUS ROG

ROG (Republic of Gamers) is a subsidiary brand of ASUS that focuses on High performance gaming products with a strong stealth design language.

Since its founding, ROG has set new industry standards creating innovative, hardcore gaming gear that empowers gamers and enthusiasts everywhere.

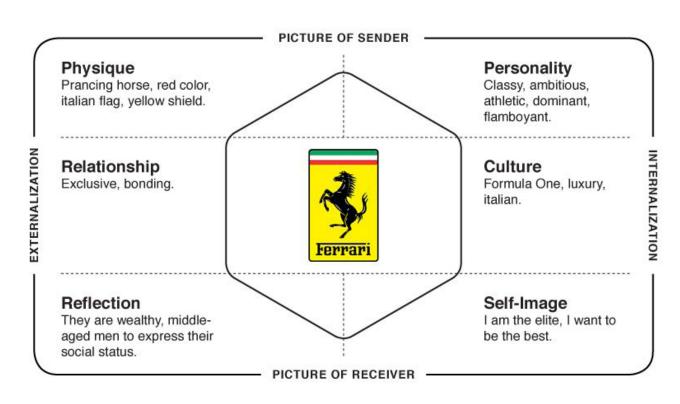


- Both Ntorq and ROG share stealth inspired design language
- ROG products have a lot of interesting and innovative CMF which can be applied to automotive industry as well.
- Both are well established and popular brands operating in different segments, a TVS X ROG co branding will help both brands to diversify into each other's audience.
- Both brands aspire to create meaningful and affordable performance oriented products in their respective domains.
- Owning an ROG device is also a statement now, the same appeal can also be brought in a nTorq Scooter through a partnership with rog.

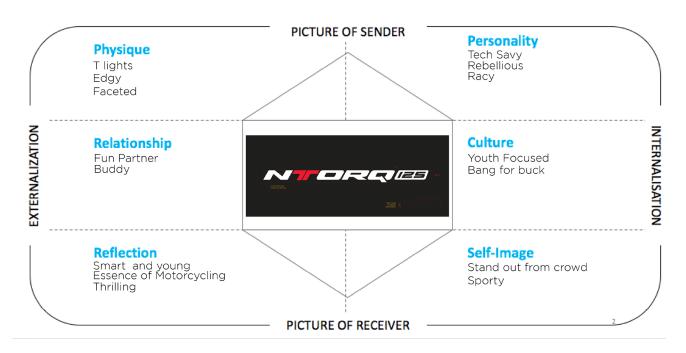


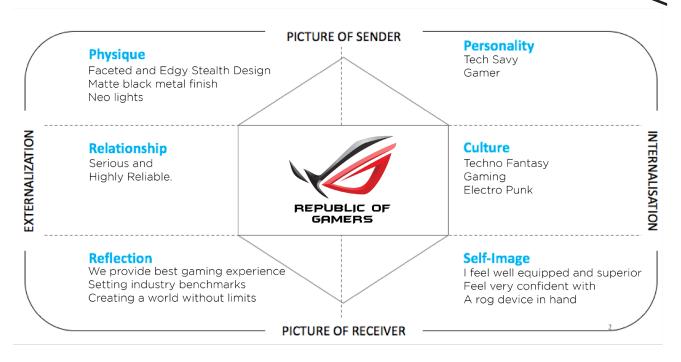
### / BRAND PRISM

The Brand Identity Prism, developed by Jean-Noel Kapferer, is a framework for defining a company's brand identity that includes six elements: physique, personality, culture, relationship, reflection, and self-image. Expressing the brand consistently across all six elements creates brand coherence, which strengthens the connection between the brand and the consumer.



Brand Prism of Ferrari

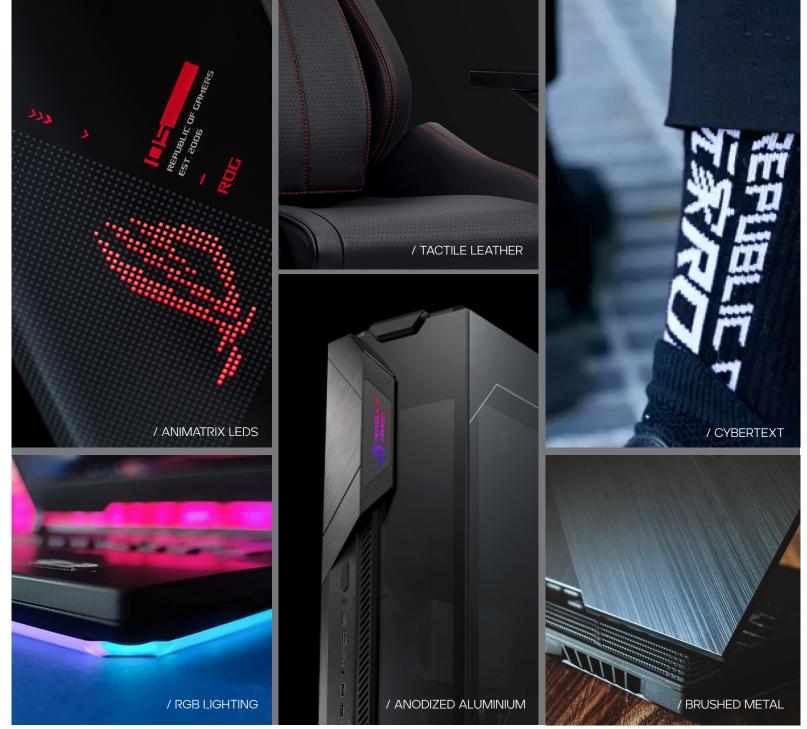






# / MOOD BOARD





# / COLOUR / FINISH / MATERIAL STEALTH **BRUSHED GREY** METAL. **ANODIZED ALUMINIUM NEON BLUE TACTILE NEON PINK LEATHER NEON RED**

**ENGRAVED** 

**CYBERTEXT** 

ANIMATRIX

**LED** 

RGB

LIGHTING



# INETE A 加入 **QEPLIBLIC**SPEED

HYBRID

FOR THOSE WHO DARE

15215H14B114127 NEBNTHPIN NPBNTHPIN NPBNTHPIN













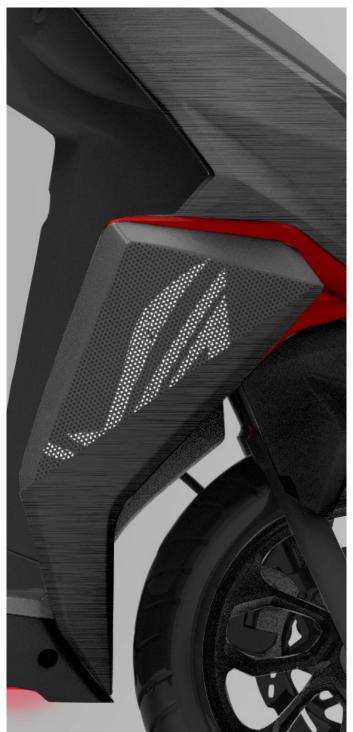




/ DESIGN























# **Thank You**