



Tata Motors has designed a new set of Hyper Wheels that are as snazzy as alloy wheels and affordable too.

## THE CONTEXT



Customers want a smart pair of wheels — literally — today. However, as cars have become more compact, it is a challenge to design snazzy rims and covers.

Standard wheel covers look flat and thin. Coveted alloy wheels, which lend themselves to smart styling and enhance a car's visual appeal, are costly. Hence, to meet customer demands and improve its margins, Tata Motors has innovated a concept called Hyper Wheels that combines the appeal of alloy wheels with the cost of a standard rim + cover.

## THE INNOVATION



The steel rim, which provides strength to a wheel, is carefully hidden behind a plastic wheel cover in the new design. This ensures space and flexibility to sculpt wheel covers that are visually attractive. The wheel covers are also two-toned, which adds variety at no additional cost. The result is a product that looks like, if not better than, alloy wheels but carries a lower cost.

Customers can keep changing the wheel cover while retaining the same rim. The rim can also be made modular to suit different specifications. The new wheels thus give customers the flexibility of changing their car's look at a low cost while reducing the company's investment outlay and development time.

## KEY CHALLENGES



**TO DEVELOP THIN AND STRONG STEEL SPOKES THAT CAN BE HIDDEN BEHIND THE WHEEL COVER AND PROVIDE FREEDOM TO DESIGN WHEEL COVERS THAT LOOK AND PERFORM LIKE ALLOY WHEELS**

Tata Motors met this challenge through multiple design iterations and finite element analysis to get the thinnest spokes.

**TO GET A TWO-TONE EFFECT ON THE WHEEL COVERS**

The company managed this by working closely with the OEM and designing several prototypes.



## THE IMPACT



The 14-inch Hyper Wheels for the Tiago and Tiago NRG have resulted in annualised savings of

**₹21 CR**

Moreover, their success has prompted the company's other product lines to develop 15, 16 and 17-inch Hyper Wheels.