

Printed from

THE ECONOMIC TIMES

Indian wheel likely to power Copenhagen's carbon-neutral dream

30 Jan 2010, 0110 hrs IST, Mahima Puri, ET Bureau

NEW DELHI: Reinventing the wheel was not exactly what Myshkin Ingawale had in mind when he set out from NIT-Bhopal towards MIT-Massachusetts, with a stop-over at IIM Calcutta. The 27-year-old's Copenhagen Wheel, named after the Danish capital after it was unveiled during last month's climate summit, could be about to do just that.

A smart disc that can be retrofitted on any bicycle, the device can boost the cycle's power and can also keep track of friends, fitness, smog and traffic. And if someone tries to steal the bike while its owner happens to be away, the device will send out an alert via a text message.

The Danish capital is set to embrace it wholeheartedly in its attempt to become the world's first carbon-neutral capital city by 2025. According to Claus Juhl, CEO of Copenhagen, the city might place the first order and use bicycles fitted with the wheel as a substitute for cars being used by its employees.

And Ingawale, now a PhD scholar at IIM Calcutta, is talking to some industry players to bring the concept to India. The Kolhapur, Maharashtra, native began working on the device in 2003, when he started fitting bicycles with electric motors. An early version of the device was made during his time at the National Institute of Technology campus in Bhopal, where he studied for a BTech in electrical engineering.

Later, at IIM-C, Ingawale found the contextual framework for the device while taking a hard look at commuting problems in India, aggravated each year by new and new cheap cars jostling for space on old congested roads. "The state of Indian cities is already such that they cannot afford any more cars and buses. A viable, economical, eco-friendly and comfortable option such an electric bike would be a great way to make sure Indian cities remain navigable and liveable," says Ingawale.

The big leap for the device and Ingawale came about when he got in touch with a team from the prestigious Massachusetts Institute of Technology (MIT) in the US, which was working on ways to make bikes efficient and green.

From his IIM abode, Ingawale exchanged emails with the team at MIT's SENSEable City Laboratory. Impressed, they invited him over to the US and there he became part of the four core-member team that conceptualised, designed and built the Copenhagen Wheel.

"From the days of the horse-drawn carriage, all we have done is replaced the horse with a beast of a different kind. Can we be creative, can we make something that radically improves things for the better? This was the motivation and thought process of the team," he says.

For Copenhagen, a city where 40% of the population uses bikes to commute to office, the Wheel could just be the answer. Ingawale, who is talking to some industry players to bring the concept to India, says the device will help both health and the earth. "For anyone who is not able to cycle, there's always the electric motor in the Copenhagen Wheel."

One of the applications that the MIT team had discussed with the City of Copenhagen was that of an incentive scheme whereby citizens collect Green Miles. "This would be similar to frequent flyer miles, but good for the environment," says Christine Outram, who led the team of MIT researchers, on the institute's website.

As for Ingawale, he hasn't decided on an MIT invite to join them as a research scientist. "I have to think of my own venture Biosense Technologies as well," says Ingawale.

A socio-technical venture, Biosense was first formed as an initiative called AnaemiaMedia in 2008. The firm intends to help in eradicating maternal and infant mortality that arises due to anaemia, which accounts for almost 40% of all mortality.

This is done through a portable and easy-to-use device, developed by Biosense, that is provided to the accredited social health activists in Indian villages, who map the anaemia levels in pregnant women at various stages instead of letting it reach a fatal level.

Powered by Indiatimes

[About Us](#) | [Advertise with Us](#) | [Terms of Use](#) | [Privacy Policy](#) | [Feedback](#) | [Sitemap](#) | [Code of Ethics](#)

Copyright © 2010 Bennett Coleman & Co. Ltd. All rights reserved. For reprint rights: [Times Syndication Service](#)

This site is best viewed with Internet Explorer 6.0 or higher; Firefox 2.0 or higher at a minimum screen resolution of 1024x768