

PARTNERS IN INNOVATION: THE SMART SANITATION HUB BY DELHI METRO RAIL CORPORATION AND GARV TOILETS

FEATURES



Smart Toilets



Water ATM



Advertising



Bath Facilities



Launderette



Kiosk



“It takes one strong government support to back this kind of innovation. It’s not rocket science that requires a change to a whole lot of policies. Just a single government order and this kind of innovation is possible.”

Mayank Midha
Founder, Garv Toilets

AT A GLANCE

PROJECT

Smart Sanitation Hub

DESCRIPTION

One-stop shop that integrates water, sanitation, and hygiene (WASH) facilities through the provision of smart toilets, bath facilities, drinking water facility, laundry services, and a business kiosk all in one center.

PUBLIC SECTOR PARTNER

Delhi Metro Rail Corporation (DMRC)

PRIVATE SECTOR PARTNER

Garv Toilets

PROJECT COST

\$60,000 (Shared cost between Garv Toilets and DMRC)

PARTNERSHIP PERIOD

20 years

YEAR INAUGURATED

06 July 2021

STATUS

Ongoing

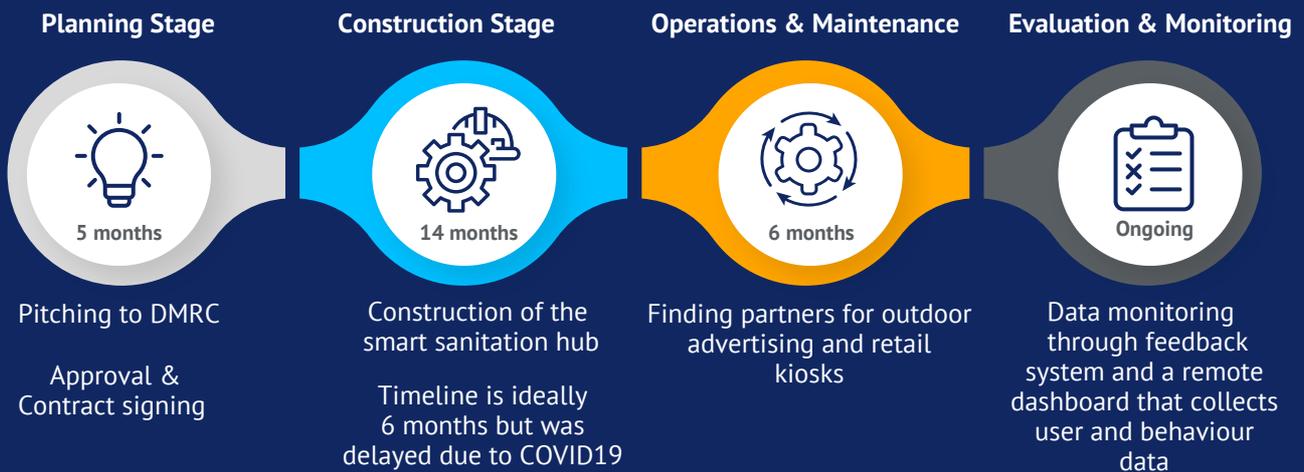
A case study of Garv Toilets - September 2022

THE PROJECT

Garv Toilets started its operations in 2015 with the development of indestructible smart steel toilets that integrate new-age technology (RFID-IoT) in their toilet designs. Garv Toilets' initial business model was to sell toilets to the government, leaving the operations and maintenance in the government's hands. However, toilets were usually handed over to local contractors who were not equipped and trained to properly maintain the toilets. Garv Toilets evolved its model and bundled the operations and maintenance with the installation of toilets. Seeing that the users need more than just toilets, it also developed the Smart Sanitation Hub, a center that provides a whole range of services to its users. The pilot project came in partnership with the Delhi Metro Rail Corporation, a public sector company that operates the largest and busiest rapid transit systems in India.

Role of DMRC	Role of Garv Toilets
<ul style="list-style-type: none">• Financing 50% of the capital expenses• Provision of land• Regular visit and check of the smart sanitation hub• Assistance in acquiring necessary permits and license	<ul style="list-style-type: none">• Financing 50% of the capital expenses• Construction and installation of smart sanitation hub• Operations and maintenance

PROJECT TIMELINE



MILESTONES

750 to 800 users a day with access to:

- Smart toilets for all genders and the differently-abled
- Baby care facilities for nursing mothers
- Hygiene products through the retail kiosks

92% approval rate based on user feedback

Projected return on investments in 3 years



"Every time the customers step out happy using the facility, it gives me immense pleasure about a job well done and I take great pride in my work."



Ritesh Kumar
Site Incharge & Manager
Garv Toilets

KEY SUCCESS FACTORS



Careful project inception is key to a successful and sustainable PPP project.

Navigating a PPP contract has proved to be a challenge initially for Garv Toilets. Creating a structure that combines its innovative technologies and solutions with the DMRC's existing structure was difficult, but it was a worthwhile experience. Garv Toilets' inclusion in the Toilet Board Coalition's 2018 Accelerator Program was very helpful. Through mentoring and brainstorming sessions, Toilet Board Coalition helped in designing Garv Toilets' business model and service structure to make it sustainable and scalable.



Force majeure events should always be considered.

One hiccup that Garv Toilets ran into was the COVID19 lockdown. It caused delays and additional costs in the project. The inclusion of provisions on force majeure in the contract is important in case any unprecedented event happens.



Sustaining long-term partnership with the government and corporates is necessary to guarantee continued service delivery.

Garv Toilets' 20-year contract with DMRC enabled a stable and reliable foundation with which it can anchor its business model. Forging partnerships with other corporates for advertisements and retail kiosks for revenue generation made it sustainable.



The Smart Sanitation Hub model combines the robustness of the Garv Smart Toilet with a bouquet of customer-centric services that deliver exceptional value towards becoming a strategic community asset.



Venugopal Gupta
Managing Director
Toilet Board Coalition



Good strategic planning, particularly location, should be aimed to maximize business growth opportunities.

The Smart Sanitation Hub is strategically located on a metro rail route where footfall is advantageously high. Only 10% to 15% of the users are regular users, while the rest are passengers, travellers, and people in transit - unlocking opportunities to expand the customer base daily.



Diverse revenue streams and profit distribution should be communicated to the public sector partner at the outset of the project.

The Hub generates revenue from multiple streams such as outdoor advertising (50%), user and subscription fees (35%), and retail kiosks (15%). Garv Toilets offered half (50%) of the profit from outdoor advertising to DMRC at the outset, making the project more attractive.

CONCLUSION

The partnership between Garv Toilets and DMRC shows with government support and the right PPP model, innovations in the water and sanitation service are possible. This also demonstrates the capacity of small-medium enterprises (SMEs) to lead both small and large scale PPPs - breaking the misconceptions on SMEs' participation in PPP projects.

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BOARD COALITION

With thanks to our leaders:

