

# MAGIC GENIE: MAGICAL TOILET, A2Z

## • Background

India is facing a sanitation crisis, which is coupled and supported by water scarcity. According to UNICEF, around 595 million people defecate in the open in India, which is more than half the population of the country, leading to health and environment hazards.

India faces an acute shortage and mismanagement of public toilets. Realising this grave crisis, A2Z group started to innovate and find a way to solve India's sanitation problem, given the water and sewage conditions as is. After years of research and practice, the company launched the Magic Genie EcoTech Toilets.

The toilet is a true 21st century innovation that has a full app backup, which not only tells you about the closest toilet location, but also gives you 24-hour support.

## • Location, Date

Delhi, Indore, Jammu, Greater Noida, Faridabad; 2015

## • Areas

Urban and semi urban areas

## • Stage/Scale

Though currently at a beta stage, with this patented technology of Magic Genie, they seek to revolutionize the sanitation methods across India.

## • Objective of the assignment

Magic Genie Eco toilets aims to answer all of India's sanitation problems

## • What was done

- After years of research and practice, the company launched the Magic Genie EcoTech Toilets. This exceptional portable toilet does not need any running water. Not only does it not require water, but it also does not need any sewer lines or septic tanks. The toilet magically cleans itself after every use, hence guaranteeing hygiene.
- Compared to a conventional toilet, which is made out of bricks, the Magic toilet is made out of stainless steel, making it more potent, sturdy and also portable available in three designs namely, Bus Shelter, Single Unit Toilet and Double Unit Toilet.

## • Impact

- Reduction in Water demand as Magic Genie toilet does not require any running water.
- The Magic Genie Toilet results in massive savings of precious, scarce water, as it generates its own water
- It does not require a sewage connection- or soak pit or septic tank, thus saving on costs, apart from operating ease.
- Solid waste gets composted. So, the Magic Genie Toilet preserve and enhances our fragile environment in totality.
- It does not have any limitation on frequency of usage.

- Because the Magic Genie Toilet is such a pleasure to use, it encourages repeat usage.
- This alters toilet usage patterns for the better, as people are more likely to use a clean, hygienic, advanced toilet than the ones currently seen in public places
- It has created employment for many economically weaker persons.

## • Challenges and Issues

- To convince people for giving up the brick and water use toilet for technological toilet was a challenge.
- Guiding people to get used to such waterless toilet is another challenge.
- Though the units are portable, still need area for setup of eco toilets in semi urban areas.

## • Innovation

- REQUIRES NO EXTERNAL WATER- Does not require any water connection : it generates its own water
- NO SEWAGE CONNECTION REQUIRED- Requires no sewer lines, no soak pits, no septic tanks
- RE-LOCATABLE / MOVABLE- Easily re-locatable and movable
- IT ENABLED SMART TOILET- All parameters are remotely monitored via sophisticated Black Box.
- AUTO FLUSHING & AUTOMATED FLOOR CLEANING- Self cleans, self sanitizes after every use.
- GRANTED INTERNATIONAL PATENT- It has been granted International Patent



## • Lessons learnt

The condition of Indian public toilets is not hidden from anybody. They are in such filthy conditions that people normally don't dare to use it. And whoever would use it in any emergency may end up with some serious infection or disease. These toilets need to be monitored to be kept clean; and due to this reason, they usually end up in the horrendous condition that they are in today. Thus, the eco-tech smart green toilets, which are designed in such a way that they require minimum manual interference, are the need of time.

- **Financials**

The company has been working for execution of its programme with local government bodies.

- **Economic sustainability/Revenue Model**

It is fully IT enabled, thus, needs no manual maintenance. Thus, it is self sustainable.

- **Implementer Contact Persons**

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- **Sources and References**

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