

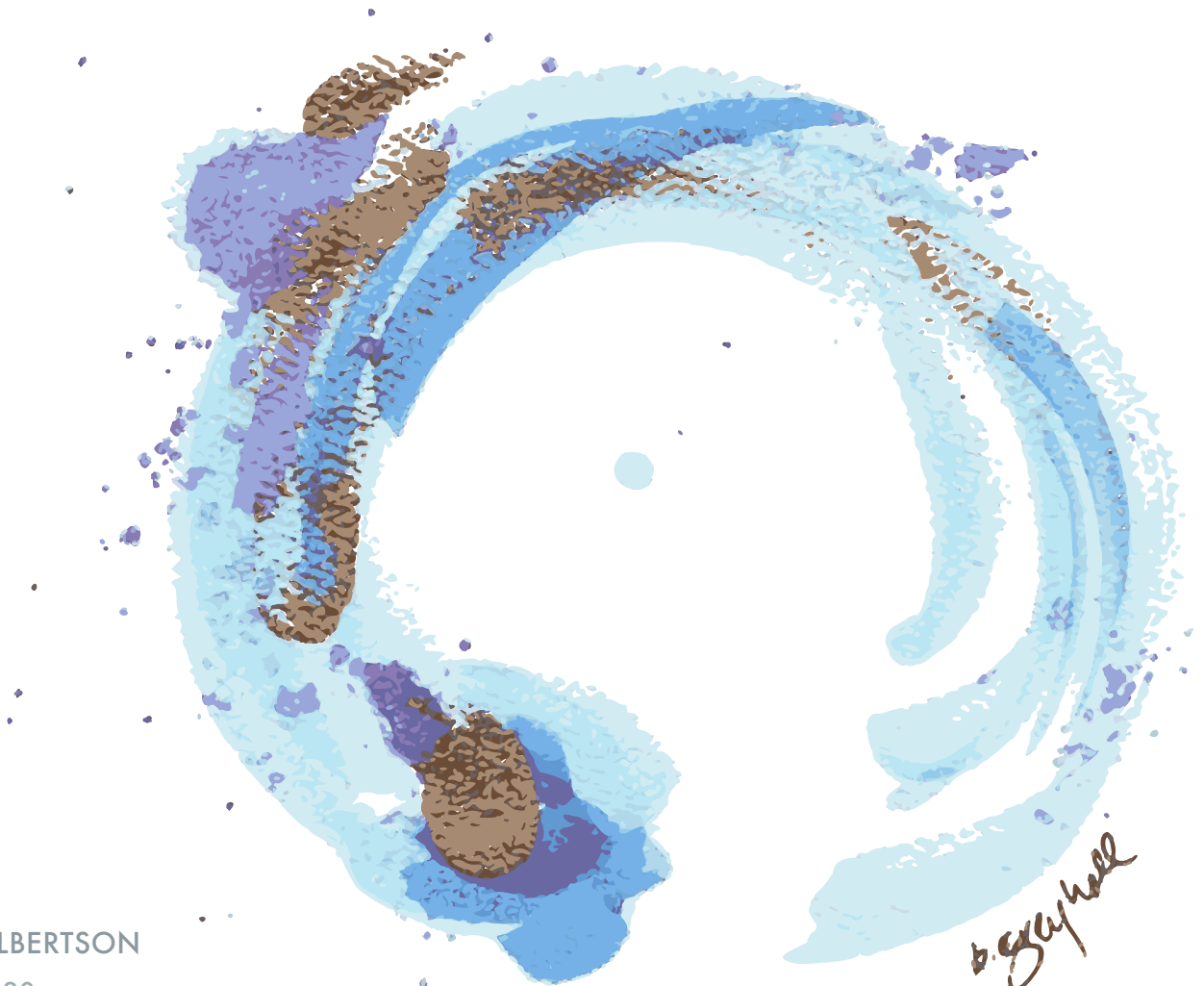


COMMUNITY FOR CHANGE



Featured Organizations: Samagra

SAMAGRA MEETS JOY



LAUREN CULBERTSON

MARCH 6, 2020

cvcommunityforchange.org

Artist: Grey Hall Borneman


Samagra Meets Joy

*The core design ideas of the Community for Change are joy, non-obligation, and passion matching.
But perhaps it all boils down to unleashing joy.*

MARCH 6, 2020

NOTES FROM MUMBAI

“Without dignity, identity is erased.” – LAURA HILLENBRAND

This CFC joy piece is centered around something I bet Brynne and Pip never really imagined we would cover when they started the Community for Change a number of years ago... .


Human waste. Poop. Crap. Sh*t. Defecation.

I imagine you are currently sitting in your office desk or maybe on your couch with your laptop after the workday and this was likely not what you thought you would be reading about when you opened this unread message... but here we are! Get comfortable.



After I visited a few startups in India last fall and Pip suggested I write on how joy is woven throughout their work, I knew the organization *Samagra*, and their SmartLOO platform was going to be a fun one to write. I'll get to more of what they do below, but in short, they are in the business of making sure every Indian has access to safe and clean toilets.

Where do we find joy in this thing that every human does – regardless of who you are or where you live – and every culture (at least in every culture I can think of) views openly discussing that act as relatively taboo? Toilet facilities have stalls and doors for a reason. One of my earliest memories of feeling embarrassed is when my kindergarten teacher accidentally opened the bathroom door when I was inside. If one has to go outside, they find a private, hidden place. Even my dog won't look at me in the eye when he is doing his business.

India is a country where 'bathroom talk' is pretty off-limits, and the dirtiest jobs in the sanitation industry are reserved for those on the lowest castes. But sanitation is one of the biggest public health and infrastructure challenges for the country... people are starting to talk about it more. According to the most recent data available (2015), **India has the highest number of people**



Featured Organizations: Samagra

without access to basic sanitation (732,000,000 people, or 56% of the total population) – i.e. toilets, whether owned by a household or by a community, that are to the WHO standard₂. People who don't have access to a toilet usually practice open defecation, or going out in the open, which leads to a variety of health complications, including making women vulnerable to violence as they often go alone at night.

From 2014 to 2019, the Indian government led a campaign called Swachh Bharat Abhiyan, or Clean India Mission, with the goal of becoming an open defecation free nation by building community- and household-owned toilets. As to how successful the campaign was, the data isn't very clear. Statistics listed on the government's official website in 2019 showed that 99.1% of the country was open defecation free and Prime Minister Modi had declared victory. But the legitimacy of that number has been questioned₃ by Indians the international community alike (although by any account, the toilet situation has improved by a good amount since the beginning of the campaign).

Still – as I would imagine any social scientist will know – you cannot measure accessibility as a proxy for usage. Those are two very different things.

Another study₄ conducted in south rural India and published by the Royal Society of Tropical Medicine and Hygiene found that 55% of that population chose to practice open defecation **despite the fact** that they had access to a toilet, citing reasons related to the personal preferences, religious beliefs, beliefs about cast “impurity” associated with emptying facilities, poor construction that makes toilets unsafe, and... **often the fact that toilets are just plain gross.** (And I can attest to this... I think I will always remember the smell of the toilets in a primary school I visited.)

During the Clean India Mission, over 10 million toilets were built or refurbished. But within six to eight months of usage, the toilets break, stop working, or are filthy to the point of people not using them. You can build all the toilets you want, but that doesn't mean people will use them.

So... what does joy have to do with this?

Our friend Joe Bruzzese leads a technology company called Sprigeo, but if asked, he says he is in the business of helping kids and teens feel safe. Samagra is a technology organization, but I really think they are in the business of creating dignity. And there is a lot of joy in that.

When I learned I would be visiting Samagra in the city of Pune, I read through the bio of their founder, Swapnil Chaturvedi, and was a bit surprised to see next to his name on his LinkedIn page “Poop Guy.” I couldn't really imagine anyone in the United States using a nickname that was similarly crude but could likely make someone of any age giggle. I didn't read into



Featured Organizations: Samagra

this as strange or immature; rather, I gained a great deal of respect for Swapnil. No matter how comfortable you are talking about sanitation issues, it's still a concern often of life or death in India – you may as well as own it is something you are passionate about it, and bring some humor to a situation that is often plagued by language around child mortality and caste discrimination. You may as well giggle a little.

Swapnil grew up in India and then moved to the United States to work as a software engineer and then go to business school at Northwestern with the plan of returning to India to do something to give back to his home country. But after learning more about sanitation systems in Chicago compared to India, he decided to go – as he says – from I.T. to S.H.I.T.

In 2011, Swapnil received a grant from the Gate's Foundation to design an energy-efficient toilet that could be built in urban slums, which he successfully did. But he and his team quickly realized it was difficult and not cost-effective to be building and running new facilities without collaboration from local municipalities, who were ultimately the ones responsible for the maintenance of the facilities.

They decided in 2014 to instead move to Pune and there they worked with the local government to fix up run-down toilet facilities with their own design and brand (see the photo I took below of one of their toilets outside a slum in Pune). They called the business Samagra, which in Hindi means “all” or “everybody.” The municipality would help with the construction and supply the water and electricity, while Samagra would employ people to run the facility – toilet operators – and cover operational costs. Soon, they were partnering with six municipalities with a \$7 million contract for each, running 200 facilities across Pune with 20,000 daily users. Samagra built a brand on reliably clean and safe toilets and because they were providing such a great service, they were able to incorporate a (very small) user fee into their model. Usage steadily went up.



A Samagra facility I got to tour outside an urban slum in Pune

As Samagra began to scale, the biggest obstacle they faced was the municipality failing to hold up their end of the bargain by making sure that each facility had adequate water and electricity by effectively managing the performance of the toilet operators. The pace of doing this could not keep up with increasing usage. Swapnil learned that 80% of the toilets did



Featured Organizations: Samagra

not have enough water, which meant the toilets were not working properly and the facilities started to smell. As issues bottlenecked with the government offices and quality of services deteriorated, so did their reputation. Samagra was also receiving monthly grants from the municipality. These were coming in increasingly late too, causing cashflow issues for the small company.

Swapnil – thinking back to his I.T. days – had an idea of how to keep the municipality workers accountable. He started taking photos of when a water tank was broken, or if the lights in the building weren't working, and sent them his government contacts. This photo evidence kicked the office into gear, and they began helping to fix the facility issues and wiring the funds more quickly.

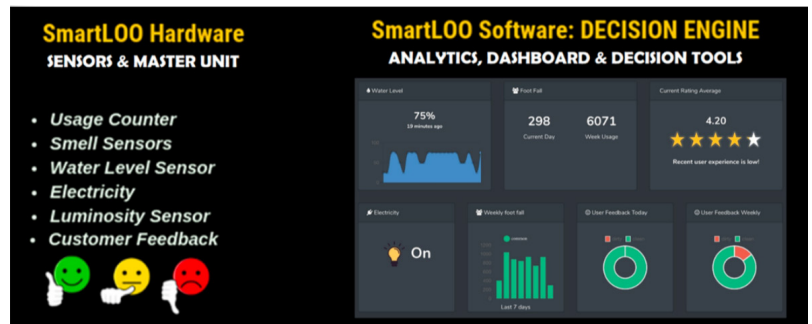
That added level of transparency...really worked. And Swapnil starting wondering if he could create more impact focusing on this rather than just building and cleaning toilet facilities.

“There is a dire need to increase the capacity of the stakeholders towards improved monitoring and management of sanitation services.”

– SAMAGRA

Today, Samagra's main product is what they call SmartLOO. The company's team of engineers has developed four different sensors that are placed inside the facilities to detect and count the following metrics: smell, water level, light, and usage (traffic in and out). At the exit of each toilet, there are dis/satisfaction buttons (like you would see after going through security sometimes) as a customer feedback mechanism that ask users simply if the toilet was clean or not.

The captured data is then sent to the SmartLOO Analytics performance monitoring platform, and insights are sent to municipality offices. They will contact the facility operators – who are now employed under management contracts, not directly through Samagra – if they notice failing metrics for maintenance and issues. The data is aggregated to create an overall rating out of 5 stars that are displayed on the facility for users to see (if you look at the photo above,



List of SmartLOO sensors and a snapshot of the SmartLOO dashboard



Featured Organizations: Samagra

you will be able to see some of the stars lit up). Samagra is also working on developing an app where smartphone users can see toilets nearby and their ratings.

Their mission is for 100 million of the urban poor in India to have access to clean sanitation facilities, and their larger mission is for the SmartLOO technology to become the default national standard for all public and school toilets. Already they predict that throughout the three cities they are operating in, resolution time for maintenance issues is down 50%, costs are down 30%, and usage has doubled.

So many interesting threads run through Samagra's model. My head was spinning as I asked some of Samagra's employees a hundred different questions when I got to visit their offices and one of their purple facilities:

- **Radical transparency as a way to hold people accountable to their job responsibilities**
- **The (seeming) feasibility for this to scale quickly once the technology is finalized, looking at Samagra as a case study of successful private-public partnerships**
- **The collection of mass amounts of data and predictive analytics that has the potential to be turned into policy that will inevitably help the people who make up the data (*I think of the organization Crisis Text Line and how they have worked with schools to predict when student's mental health will be the poorest*)**
- **And working to create dignity**

“Dignity” is a word that is used quite a bit in conversations about sanitation. To be able to feel dignity or feel dignified when using a bathroom, rather having to hide in the dark or go in the open and feel ashamed. Article 1 of the Universal Declaration of Human Rights says, “all humans are born free and equal in dignity and rights,” **which makes me think that a good definition of upholding dignity means to uphold whatever it is that makes us feel fully human.**



At the top of the doorway is one of Samagra's sensors that measures foot traffic



Featured Organizations: Samagra

A few years ago, I wrote a piece for the CFC writer's circle about how I thought [core to the definition of being human was to have agency](#), to be able to make choices for ourselves. I wrote about how one of my stories in a creative writing class got destroyed because I had an “unbelievable” character where everything happened to her, rather than her making choices for herself. I drew an analogy to my grandmother who was very sick at the time, and how when I saw her resigned to sitting in a chair by herself at a party, I thought “this was not how we were created to live.”

The areas where Samagra works are areas of extreme poverty, certainly materially, sometimes poverty in a more spiritual or holistic sense – areas where people don't have a lot of choice or even control over their day-to-lives, especially women and young girls. This is partially due to the stereotype that seems to transcend national boundaries that people in the lowest income brackets of society don't know how to make the best decisions for themselves, so others should just make them instead...whether that is certain kinds of welfare in the United States, or international organizations going into countries like India and setting up projects or programs that they believe are best for those communities. [A loss of choice seems to be correlated with a loss of dignity.](#)

Samagra is not only saying that every Indian deserves dignity in the form of having a safe, private, and clean place to go to the bathroom, rather than have to go out in the open, but also that Indians deserve to be able to make their own decisions and demand a better choice. By giving feedback to Samagra about their experience as a customer of the toilets, they are advocating for themselves and for their communities. Samagra also shares insights they collect with the communities they partner with in-person via discussion groups so they can ask questions, submit further requests, and be a part of the ongoing process of improving facilities.

This value of dignity extends to the toilet operators and municipality workers too. The day-to-day work of the toilet operators can also be seen as a sort of redemption from what sanitation jobs in India have historically looked like. In places without sanitation infrastructure, it has been the job of the people in the lowest caste who are considered “unclean” or “untouchable” to practice “manual scavenging” – this was made illegal in India's protection of Civil Rights Act of 1955, although it is still practiced, in some areas today. There is a significant difference in being responsible for managing an entire facility and all the connected relationships, versus removing human waste manually...and for having people at Samagra walk through your progress with you as a manager. Samagra creates personal dashboards for toilet operators so they can track their own personal progress over time and see how many days they can go making sure the facility they manage is clean and functioning properly. There is also joy in someone holding you accountable for something that is your responsibility or that you own the process of, because it shows that someone cares about you and your development towards future goals.



Featured Organizations: Samagra

Samagra and Swapnil have taught me that if the ability to exercise our natural agency is a privilege, then perhaps it is a human responsibility to help others regain agency who have lost it. After all, it is our choices that unite us in our universal human condition, in our consequential triumphs and failures. There is immense joy in being able to make decisions for yourself and feel a sense of agency over your work and in your life, even in the smallest, dirtiest, or smelliest of places.

— LAUREN CULBERTSON

References

- [1] <https://www.samagra.co/>
- [2] <https://washdata.org/monitoring/sanitation>
- [3] <https://blogs.lse.ac.uk/southasia/2019/05/16/has-modis-swachh-bharat-campaign-been-a-success/>
- [5] <https://academic.oup.com/trstmh/article-abstract/112/7/349/5055865>
- [6] <https://www.hrw.org/report/2014/08/25/cleaning-human-waste/manual-scavenging-caste-and-discrimination-india>

