

# [Startup Bharat] No internet, no problem: this Hubli-based startup is enabling digital payments over voice network

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Necessity, they say, is the mother of all invention. The demonetisation of high-value currency notes in November 2016 had everyone scrambling towards digital payments. However, data or internet connectivity to complete transactions was a big hurdle.

Farhan Firaq, who hails from Tumakuru, saw a pain point here. A trip to Goa further validated his idea as Farhan saw that while most stores and shops had QR codes and were open to different payment options, these options often did not work. Reason? No internet connectivity.

And Microchip Payments was born. The Hubli-based company offers a mobile-based payment application and point-of-sale device that can be used to make payments without internet connectivity.

The fact that phone calls were unaffected formed the basis of Microchip Payments.

“Though the adoption of internet and data is faster and stronger today, there still is a problem of bandwidth. In most Tier II and III towns and in rural India, connectivity fluctuation is high. But making a call isn’t a problem,” says 26-year-old Farhan.



(R-L) Farhan Firaq and Mohammad Novman

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## How does it work

Microchip Payments’ software development kit PayEasy uses data over voice technology, which uses the voice call network to enable a transaction. How, then, is this different from ToneTag?

“ToneTag uses sound waves to enable a transaction, for which proximity is needed. We don’t need that proximity,” Farhan says.

Using PayEasy, a customer can open any other payment app, enter a beneficiary’s bank details, and enter the password to make a payment button. Using the voice network, or data over voice (DOS), a payment is processed within 20 to 25 seconds.

The platform currently works on the B2B model where banks, financial institutions, and payment apps can integrate PayEasy on their apps.

**“Everyone talks about the remaining 1.1 billion who need access to tech-driven experience and better access. For that, you need to look at solutions that work in their environments and conditions. Most of Tier II and III India needs systems that can work with and without internet and data. More so to make digital payments more adoptable,” Farhan says.**



Microchip Payments was among the startups that participated in Elevate Bangalore 2018.

## The team

Before he started Microchip Payments, Farhan ran an institute in Tumkur to train engineering students in programming languages. He roped in his younger brother, Mohammed Novman, an electrical engineer, as the Co-founder of Microchip Payments. The company today has a team of four people.

Microchip Payments is not Farhan’s first stint with innovation. In 2015, he had built a product to help the visually impaired read displays on electronic devices using Braille. **In 2016, he made it an open-source product, and focused on financial inclusion.**

The brothers’ product on financial inclusion became a part of Sandbox Hubli incubator in 2017, and they also raised undisclosed seed funding. In 2018, they participated in Elevate by the Government of Karnataka, and won a grant from the state government.

Targeting rural areas and the Middle East and North Africa region where internet penetration is low, the product has gained appreciation from Massachusetts Institute of Technology, DCB Bank, and others.



Microchip Payments along with other startups at Mumbai Fintech Hub.

## Why Hubli?

Last December, the Hubli-based startup was also a part of Mumbai Fintech Hub, where they received pilot projects from Bharat Financial Inclusion, and entered into talks with a few banks and financial institutions.

So, wouldn’t it be simpler to shift to Mumbai or a metro city? Farhan believes otherwise.

**“We are where market adoption and touching the end consumer is easier. It is in Tier II and III India that financial inclusion is really needed.”**

While building the product wasn’t difficult, Farhan feels the biggest challenge was adoption. “The industry is highly regulated, as it should be. But due diligence and getting corporates to work with you is longer and harder in the financial services world,” he says.

Being a DPIIT-registered startup, the going was a bit easier for Microchip Payments. Currently, for pilots, the team charges Rs 2 lakh to Rs 5 lakh, depending on the use case. In the near future, they intend to provide an enterprise solution model with a yet-to-be-decided price.

“We are also looking at a volume and per-transaction pricing model. Here, we intend to charge 0.5 percent per transaction,” Farhan says.

## The market and future

People are increasingly moving away from cash to digital payments. According to several industry reports, the global market for digital payments is pegged at \$2.3 trillion today. A BCG report shows India will touch \$500 billion by 2020; of that, individual-to-merchant payments are pegged at \$224 billion, merchant-to-merchant payments at \$176 billion, and person-to-person payments at \$98 billion.

Industry estimates place India’s mobile phone users at 800 million. Of these, only 200 million are smartphone users. A vast majority of the population, thus, does not have access to pre-existing digital payment systems, and few can access evolving developments that make payments easier.

Currently, the National Payments Corporation of India (NPCI) is evaluating Microchip Payments’ solution to help deploy the product on UPI.

“We are also building a closed loop payments system to allow an organisation to use its own wallet for interoffice payments, with or without data. It is primarily for schools and colleges,” Farhan says.

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