

The Cost of _____

Digital Payment Declines



Author

Arun Shetty
GTM Advisor



It's Saturday morning 11 am and I've just given up on "payment transfer" after trying four times to do a simple payment transfer through internet banking. I've repeatedly initiated the transfer, but I am just not getting the "OTP" on SMS. I've tried the option of "OTP" on email and failed. My internet connectivity is excellent, and mobile network connectivity is perfect. As a network engineer, I can rule out "user end" issues but as a customer, I am not happy with the bank - I have wasted 30 minutes of my time without succeeding with something as simple as a payment transfer.

This whole episode has gotten me curious - what are the failure rates of Digital payments in India? Time to explore the NPCI website...

Growth in India Digital Payment

The data on growth of digital payments in India is just stunning - based on the December 2020 data, the number of UPI transactions is 2.234 Billion, and the amount is 4,16,176 Cr, with year-over-year growth of more than 105% from 2,02,521 Cr in December 2019! Even the venerable IMPS shows transactions year-over-year (December 2019 to December 2020) growth to be more than 35%!

As digital payment transactions continue to grow in the coming years, end-customers expect the digital payment process to become simple, secure and faster with no failure, for which the fintech companies, banks and regulators have to ensure that the technology, processes and governance has to be scalable, effective and efficient to handle the enormous growth we will be witnessing.

IMPS	No. of Member Banks	No. of Transactions (in M)	Amount (in Cr.)
Dec-20	620	355.69	2,92,324
Dec-19	559	256.47	2,10,934
Growth %	11%	39%	35%

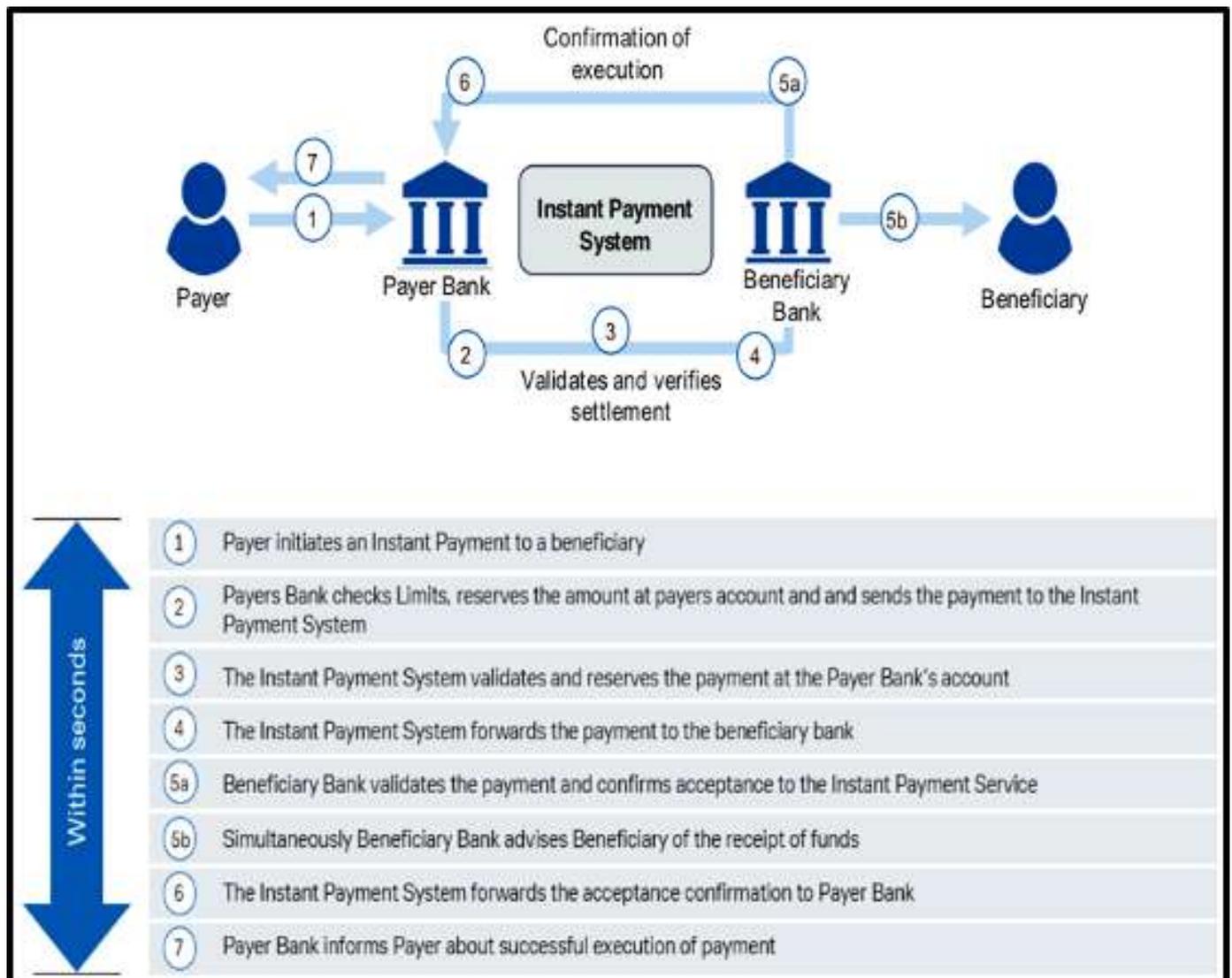
(Source:<https://www.npci.org.in/what-we-do/imps/product-statistics>)

Impact of Payment declines



Internet banking and mobile applications have simplified the digital payment transaction for the end-user. But the simplicity of the end-user interface hides a ton of complexity - network, multi-tiered applications, compute, and storage, databases, payment gateways, Payment Settlement Systems (like NPCI), security and with a whole lot of complex

integrations, the process involved at the back-end has many variables and multiple steps (as depicted in the below diagram) applied for each transaction; all these systems and processes have to work smoothly and seamlessly for every transaction to be successful.



It's not all hunky-dory though - at times the systems can be slow due to high number transactions, some transactions may fail due to Network or Server or Applications' performance issues. All these will have an impact on Customer Experience and business.

To assess and understand the impact of the payment failures, let's look at December 2020 data published by NPCI, "Technical Declines" concerning IMPS transactions.

"**Top 10 beneficiary banks**" constitutes 72% of total IMPS transactions, of which 7% of transactions are "**Technical Declines**" which means 7% transactions have failed due to technical reasons (Technical Decline (TD) - Transaction decline due to technical reasons, such as unavailability of systems and network issues on bank or NPCI side).

Top 10 beneficiary bank IMPS data

IMPS	No. of Transactions (in M)	Amount (in Cr)	No. of "Technical Decline" (in M)	"Technical Decline" Amount (in Cr)
Dec-20	254.91	2,09,498	17.27M	14,664

(Source: <https://www.npci.org.in/what-we-do/imps/imps-bank-performance>)

In summary,

17.27M transactions failed

due to technical reasons, which amounts to **14,664 Cr !**

The consequence of a "Technical Decline" are manifold - it affects customer experience, "Remitter bank" loses transaction fees, "Beneficiary bank" loses deposits, beneficiary does not receive the money in time.



Technical Declines have a significant impact on customer experience, business growth financial companies and businesses and of course on our overall economy.

Solution

Unified Visibility and Insights into all Digital transactions

Digital Business transformation is critical for banks, fintech companies and payment settlement companies to deliver business and operational efficiencies into all-digital payment transactions.

A solid solution would require:

- End to end visibility into all payment transactions
- Ability to do in-depth analysis and alert correlation
- Fault prediction and alerts so that administrators can take proactive steps to reduce incidents

In this world, where payment experience is a corner stone for Banks and Payment Gateways as a differentiator for business and a must from regulatory, its highly critical that Banks relook at their transaction monitoring infrastructure ground up.

Interestingly, companies like Vunet Systems provide AI/ML-powered transaction based performance monitoring solution across all digital payment services by providing “Unified visibility” and “Proactive Insights” into all digital transactions at scale. Since in a digital world, every transaction counts, such ground up build big data/ML solutions are transforming traditional monitoring into a hyper personalised monitoring, ensuring that technical declines are ever decreasing, improving every transaction experience and driving more financial inclusion across the country.





www.vunetsystems.com

VuNet Systems is an AI & Big Data analytics company revolutionizing digital transactions. vuSmartMaps™ is next generation full stack observability solution built using big data and machine learning in innovative ways to monitor business journeys and improve user experience. Monitoring more than 2.5+ billion transactions per month, the AIOps platform is improving digital payment experience, driving more financial inclusion across the country for several Banks and Payment Gateways.