Delhi PDS server hits capacity issues despite high Aadhar reliability: Study

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NEW DELHI: The Aadhaar-enabled public distribution system in Delhi ran into glitches on days with a high number of requests in the first half of the month due to capacity issues with the state PDS server, an Indian School of Business study has found.

The state server was found to be frequently inaccessible even though 97% of all successful authentication reports received a response from the unique identification authority within two seconds of their generation at electronic point of sale machines. "We found that the PDS entitlement off-take in Delhi is characterised by abrupt surge in authentications attempts in the first half of each month. Any disruption of services by PDS server during this period aggravates the inconvenience caused to beneficiaries," says the study by Siddharth Sekhar Singh and Ashwini Chhatre of ISB.

"The state PDS server throughput was observed to abruptly decrease for short durations of time during exactly the same hours of the day with high authentication attempts," the study concludes, calling for a detailed study of various components of the Aadhaar-enabled PDS including the POS machines and UID services.

The study found that the Aadhaar authentication attempts for around 1.55 million ration cards were made in Delhi's AePDS in

March 2018. Out of these, 19,482 ration cards failed authentication in Delhi AePDS. Almost 70% of all OTP-based authentications were completed in no more than 20 seconds. Only 149 authentications (out of 1.55 million) were found to take more than 60 seconds.

Failure rate for OTP-based authentication was 18% as compared to 0.5% and 2% for fingerprint and iris-based authentications respectively. The average time taken for OTP-based authentication was 16 seconds whereas for biometric-based methods, it was less than 2 seconds. The OTP failures constitute a high percentage of unsuccessful authentication attempts despite being the chosen method in only 3% of active ration cards.

The report noted that the days when authentications were high were marred by frequent disconnections between ePOS devices and state PDS server.

The state PDS server contains the repository of the digitized ration cards of all the beneficiaries and logs each transaction generated by the ePOS device present in the PDS shop.