

Seat No. _____

University of Pune
Department of Management Sciences (PUMBA)
Executive MBA
2nd Year (Semester – III) External Exam Nov. 2013
304(E)- Business Applications of IT

Time: 2hrs.

Marks: 50

Read the news report below and answer **any two** questions that follow.
Each question has 25 marks.

Aadhaar de-duplication myth busted.

MONEYLIFE DIGITAL TEAM | 15/10/2013 05:52 PM |

One person from Kerala enrolled and successfully received two Aadhaar numbers. This raises serious question over the de-duplication theory and practices of UIDAI

Aadhaar or the unique identification (UID) number is being enforced by the governments and the de-facto tagging institution, the Unique Identification Authority of India (UIDAI) by claiming uniqueness of the number. However, one person from Kerala has busted the myth created by UIDAI and its chairman Nandan Nilekani.

According to a report in Matrubhoomi, a Kerala-based newspaper, PV Narayanan, a resident of Panatthadipanchayat received two Aadhaar numbers: 548780623023 and 356459270677. The names on both these letters issued by UIDAI are same, with slight different photos. Narayanan probably may have registered at two places or centres. But, surprisingly, his fingerprints seem to have passed the so-called 'robust' de-duplication test of UIDAI. Since Aadhaar includes an iris scan, this too seems to have been missed.

As Moneylife has pointed out, both the union government and UIDAI were in such a hurry that they neglected the basic principle of pilot testing and size of sample. For over 1.2 billion UID numbers, they have used data from just 20,000 people, in pairs, as the sample and on the basis of the results, gone ahead with the UID number through the 'Aadhaar' project.

The case of Narayanan also mocks the false positive identification rate (FIPR) theory of UIDAI. Earlier, speaking about the FIPR, the UIDAI had said, "We will look at the point where the FIPR (i.e. the possibility that a person is mistaken to be a different person) is 0.0025%". This means, for every 1 lakh comparisons, there would be two and a half false positives. On a large scale, it means for a population of over 120 crore, there would be 18 lakh crore false positives, or, for every single Indian resident there would be 15,000 false positives!

The International Biometric Group (IBG) testing also shows that performance can vary drastically within technologies-some fingerprint solutions, for example, had next to no errors during testing, while others rejected nearly 1/3rd of enrolled users. "Most interestingly, the testing shows that over time, many

biometric systems are prone to incorrectly rejecting a substantial percentage of users. Verifying a user immediately after enrolment is not highly challenging to biometric systems. However, after six weeks, testing shows that some systems' error rates increase ten-fold," said the research, consulting and integration firm, which works closely with the biometric industry. The report is titled "Real-World Performance Testing".

Maybe the UIDAI and its registrar have thought the second enrolment of Narayanan from Kerala as false positive and issued another Aadhaar number. Hope the UIDAI chairman would be able to find out 'original and true' Narayanan from these two biometric-based Aadhaar numbers!

1. Answer the following:
 - a. What is the business problem that the Aadhaar is trying to solve?
 - b. What is the value claimed to be delivered by Aadhaar? Does it deliver that value?
 - c. From the above news does the Aadhaar have the requisite variety to *uniquely* identify 1.4 billion individuals?
2. Describe any 5 mistakes that are not cited here that make the UID ineffective solution for businesses. Suggest a design based on the principles of design of business applications to deliver the value proposition of identifying customers.
3. From the above, explain with reasons why you think the Aadhaar experts are designing systems that lack the requisite variety to address the business need.
4. Explain with reasons how response and respite time will be affected of any business that used Aadhaar. Justify in one paragraph why that may or may not make effective identification systems.