

# IDCUBE Looks at Biometrics to Usher the Required Changes in Security and Convenience of the Consumers

*Biometrics is the measurement and statistical analysis of people's physical and behavioral characteristics through various algorithms and patterns. The technology is primarily used for the purpose of identification and access control.*

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Being one of the most complex and fastest growing industries in India, it is essential for the biometric companies to provide better security and customer service, as an effort to gain their hold and perform consistently well in the market. IDCUBE looks at Biometrics to usher the required changes in security and convenience of the consumers which may also help the retailers in retaining the clients and help them with more focused marketing and better ROI.

Before we move forward let us take a look at the type of Biometrics which can be brought in use in retail effectively.

A. Physical Biometrics are the ones which can directly read the bodily attributes of a person, such as Finger Scanners, Iris scan, Palm, Finger Veins, and Facial recognition

B. Behavioral Biometrics recognize various dynamics involving person's voice, facial impressions, walking style, and signature identification.

Physical and Behavioral biometrics have already been in use across the world in the financial sector and are getting tested in retail considering various threat perceptions. Apple Touch ID (A finger based Biometric Identification) which is already in use for Apple pay and integrated or associated with multiple bank cards, we consider it safe and easy to protect as it is only being used in Apple's proprietary environment. On the other hand, retail segment operates in a more open environment for multiple devices

to communicate and use the consumer information, which makes users question the safety of this technology. According to Acuity Market Intelligence report mobile biometrics will be used to authenticate almost 65% of commercial transactions contributing approximately \$34.6 Billion by 2020.

In the retail industry, the POS manufacturers have started offering the terminals with Biometric sensors which could be further connected to a payment gateway. This would completely eliminate the need of carrying a credit card. On the contrary, credit card companies themselves are testing the Biometrics on credit cards to eliminate the need of a PIN.

One big advantage with the Indian retailers and technology providers is the verified data availability with UIDAI, making it easier and faster for the software engines like IDCUBE to process the data much faster for payment processing and authentication. At the same time credit card machine manufacturer's and card companies may store the Biometric template in advance on their respective platforms and may go for dual authentication in the combination of finger Biometrics and Face or IRIS recognition to make it more secure and quick in order to search the identity in an ocean of data.

The following are the key areas where the retailers can implement biometric technology to improve the whole business process and user experience:



1. Payments: Retailers are already using various Face, Finger and IRIS Biometrics in back offices for access control and time attendance of their vendors and large employee pools. However, to use the same technology in payments which is still a white elephant in the block and may be tried only by the giants in the industry. Mobile payments would still rule the world as multiple banks have been trying to integrate the phone Biometrics. In the year of 2015, Wells Fargo bank launched a program of speech pro's biometrics technology which enables its customers to use their bank accounts using the phone cameras for Face ID, and microphones for Voice Identification.

2. Increasing efficiency of the system: Retail stores can create a series of biometrics in their supply chain to make it more secure and process oriented by associating their vendors to the particular trucks, security of the trailer carrying goods, trailers to be opened and inspected by specific authorities etc. Although there are existing RFID based locks requiring specific RFID key to unlock, but at the same time one has to courier the key from Point A to Point B. On the other hand, Biometric Template can easily be transferred into the biometrics online, which is quicker and more secure, also eliminates the dependency on the person carrying the vehicle.

3. Prevention of fraudulent activities: Logical Access can be put in use at POS and machines to control pilferages. The launch of POS

terminals had the retail managers influenced by its futuristic appearance believing in its capability of curbing pilferage and providing better customer experience as pins and barcoded cards to the employees. However, the system failed as the supervisors would get another Pin- Card solution to override the junior's identity. The identities can be passed on to multiple colleagues, leaving a big space for security breach, employee identity theft and other fraudulent activities. In many of the Indian super markets there would be more than two people standing at each counter to service the customer which further leaves a bigger threat with manager shifting from desk to desk depending on the staff need. To combat the same when we use a point of sale terminal with a Biometric to authenticate an employee, even employee gets more careful as every transaction happening from logging into the machine to the payments confirmation is associated with their physical identity.

While we enter in the smart world which is faster, dynamic and complex as compared to the traditional world, the physical attributes would be more commonly used in association and creating identities which would definitely integrate the world into one. Who knows the malls and the global brands start identifying and welcoming you in different countries, restaurants start offering you food and deducting money by just having you over the counter without a single plastic or paper money in your pocket, radio cab companies like Uber welcome you in their cabs and gives you rides by scanning your eyes.

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