Review for Biometric Authentication Method for Identification Theft

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Abstract:- Nowadays, everyone uses internet and doing online transactions in day to day life.As it is transaction process it also includes the authentication need of user . The stealer take the personl information of vicitim and pretend to be authorized user to commit fraud or other crimes. This paper reviews the study of biometric system authentication method used for preventing identification theft of user.It reviews the importance of identifying the user with his or her biometric identities such as palmprint,thumbprint,eye recognition etc.

Keyword: Authentication,Biometrics,Identity,Theft

I.INTRODUCTION

Identity theft occurs when someone uses another persons personal information such as name,social security number,derived licence number,credit number or other identifying information to take on that persons indentityin order to commit fraud or other crimes.Determining the link between data breaches and identity theft is challenging because the victim do not know how their personal imformation was steal and identity is not always detectable by the individual victims. Identity of person reffered as personal identification and it may used for recognition of a person for verification.Their are identification and verification techniques are used to recognize the identity of a person. Their are the different types of Identification theft which are sub-divided into five categories:Criminal identity theft: In criminal identity theft,the stealer is posing as another person to commit fraud.Financial identity theft:In financial identity theft,the stealer uses anothers identity to obtain credit and services.Identity cloning:In identity cloning,stealer may use anothers information to assume his or her identity in daily life.Medical identity theft:In medical identity theft,the stealer uses anothers identity to obtain medical care and drugs. In these different types of identification theft the personal information is easily stolen by the stealer.In the following graph rate is given,
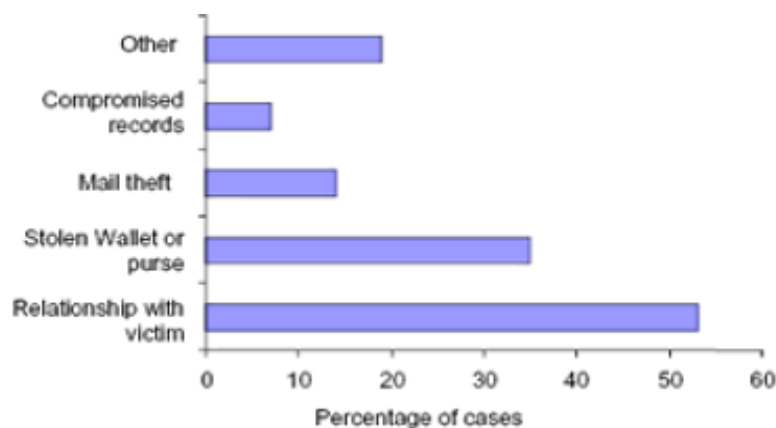

Fig1:The graph shows how personal information is obtain.[3]

1.1Biometric Authentication:

To reduce these theft the biometric authentication is useful.Biometric technology is used around the world.Barclays bank has successfully implemented biometric system to secure ATM transaction.Biometric is useful to providing confidence to the customer of ATM transaction.No single biometics is expected to effectively satisfy the needs of all identification(authentication)application.A number of biometrics have been proposed,researched and evaluated for identification(authentication) applications.Each biometric has its strength

and limitations and accordingly each biometric appeals to aparticular identification(authentication) application.The following fig. Shows the block diagram of biometric process.
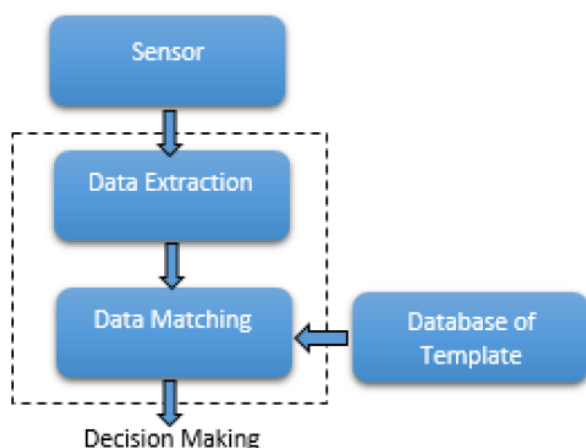

Fig2: Block Diagram of Biometric process.[1]

Biometrics based authentication provides a robust alternative to using passwords and pins.It validates user identity by managing their unique physiological and behavioural characteristics.One can choose from a large list that includes finger,face,retinal scan,iris,gait,vein,infrared thermogram,hand geometry and palm print or from a combination of all these identifiers term multimodel biometrics.Their are different recognition techniques are used to verify the identity which are shows in following figure,

1.1.1Voice: Voice is characteristics of an individual.It is not expected to be sufficiently unique to permit identification.A voice signal available for authentication voice may be the only feasible biometric.Voice is a behavioural and is affected by a persons health,emotions etc.

1.1.2Infrared facial and Hand thermograms:Identification system using facial thermogram are commercially available.Infrared sensors are prohibitively expensive which is a factor inhibiting wide spread use of thermogram.

1.1.3Fingerprints:Fingerprint is used for identification.Fingerprint are one of the most mature biometric technology used in forensic division worldwide for criminal investigation.Fingerprint image is captured in one of two ways:Scanning an inked impression of a finger Or using a live scan fingerprint scanner.

1.1.4Face: Face is one of the most acceptable biometrics because it is one of the most common method of identification which humans use in their visual interaction.

1.1.5Iris: An iris image is typically captured using a non-contact imaging process.The identification error rate using iris technology is belived to be extremely small and the constant length position invariant code permits an extremely fast method of iris recognition.

1.1.6Ear: The features of an ear are not expected to be unique to each individual.The ear recognition approaches are based on matching vectors of distances of salient points on the pinna from a landmarak location the ear.

II.CONCLUSION

This paper provides an review on biometric authentication techniques or recognition types like face,fingerprint,voice,infrared and facial and hand thermogram,iris,ear etc.The paper stated with the introduction of different physiology and behaviroual biometrics used for identification theft or security application.

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