Biometric centralisation vs biometric balkanization: which is better

Technology, Information Technology



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Biometric Centralization vs Biometric Balkanization: which is better? By: Computer sciences and Information technology of The Institution 1. Biometric Centralization vs Biometric Balkanization In the study of the various methods of applying biometric methods in authentication, it is better to apply Biometric Balkanization. In biometric centralization, only a single biometric method is applied in authentication, while in biometric balkanization, more than one biometric method is applied. It is an application of diversification of biometrics in authentication and

identification as applied in multiple applications (Crawford 2002, p. 54).

2. Advantages of Balkanization Against Centralization

2. 1. Flexibility

Biometric Balkanization provides maximum flexibility to the users a system. The users can customize some of the biometric programs to meet their specific preferences, considering limited resource availability (Farokhi et al 2014, p. 31). Again, it is easier for a user to decide on the most appropriate methods to use in the authentication and identification. For a user who receives telephone instructions for a transaction will prefer to use voice verification (Brunelli & Poggio 1993, p. 52). On the other hand, Centralization has fixed choice or choices of biometric methods to apply for all situations.

2. 2. Synergy

Biometric Balkanization provides synergy to the interests of the users of the system. When many biometric technologies are applied, individuals do not need to identify themselves everywhere since there are many ways to identify them (Kimmel & Sapiro 2003, p. 34). At the same time, individual citizens acquire safety for their private information. In centralization, a single biometric technology is used for all purposes, some of which may not require them.

2. 3. Privacy Enhancement

Biometric balkanization operates as multiple identities for a single individual, each method being different from the other, and with different relevance. It therefore offers better governance on security and privacy. On the other hand, centralization has limited capacity to provide privacy in dynamic authentication systems.

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