# Biometrics - careers, technology and contribution to business competitive advanta...

Technology, Information Technology

Biometrics - Careers, Technology and Contribution to Business Competitive Advantage

Introduction

Biometrics refers to the technology of analysing human physical and behavioural characteristics such as fingerprints and eye retinas mainly for identification, security and surveillance purposes. Technology within the biometrics has diversified to a broad array of disciplines including; fingerprint reading, voice and facial recognition, hand geometry and signature scan. Disciplines like odour, vein scan and gait recognition remain applicable to exploratory stages only (Barcode. ro, 2014). The biometric process involves different stages. The initial stage is that of enrolment that includes the collection of an individual's samples, through an acquisition device, for assessment and storage. The acquisition device extracts a feature from the provided sample to produce a reference template which would undergo matching with a match- template to generate a score (Barcode. ro, 2014). There is always a predetermined threshold based on which the score of the biometric score gets measured to reach a decision; conclusion on the degree of match.

Careers in Biometrics

Majors in the field of biometrics stand a chance of securing jobs in organizations such as police forces, government agencies and intelligence services, corporate investigation companies and forensic computing firms. Biometric specialists can be employed in these organizations for a range of job titles including cryptographers, who work towards hiding the kind of information that should be kept secret, for example, bank account PINs

(Kent. ac. uk, 2014). Another job title in this profession is a software developer whose job description is to encrypt software and offer data compression services. Network software developers play the role of designing software for media companies.

The Role of Biometrics

Biometrics as a technology is applied for different reasons that vary depending on the type of organization. The employability is however limited to verification of identification for either enterprise or document security (detection of fraud). Identification is mostly essential to address loyalty and theft in a business environment (Opara, Rob & Etnyre, 2006). It is also widely applied in forensics, for instance, prison security and criminal identification.

Contribution to Competitive Advantage of a Business

Many businesses are sluggish in the adoption of Biometric technologies into their operations. Reports show that the slow adoption is mainly attributed to the high financial costs associated with the installation and maintenance of biometric equipment. However, Biometrics is the most reliable option that any business will ever resolve to. Its adoption is associated with plenty of competitive advantages in an increasingly competitive market. Firstly, biometric technologies boost the operational efficiency of business. Operational efficiency improves when the technology acts as a resource that completely eliminates other irrelevant tasks, which were associated with the former techniques (Barcode. ro, 2014). The eliminated tasks results to an operational cost much lower than the business' competitors'.

Biometric technology also links to fast and efficient customer service which will, of course, enable the business to serve more customers. The business

will, therefore, function to its full potential and finally win customers from its competitors. As the company gets familiar to advanced technology, it is bound to improve its corporate image, by being popular in the media and customer populace. Such characteristics tend to catch the admiration, trust and loyalty of clients, hence placing the particular company at a well competitive edge. Sadly though, the benefiting business can only enjoy a competitive advantage as long as their competitors find it hard to imitate their configurations.

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