Universiti Teknologi MARA

AUTOMATED TELLER MACHINE (ATM) ERGONOMICS DESIGN FOR BLIND PEOPLE IN MALAYSIA

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ABSTRACT

Automated Teller Machines (ATMs) are becoming increasing popular day by day. The current ATM interface is only designed for sighted people without concern the people who are disabilities especially blind people. Thus, the purpose of this study is to improve the ATM ergonomics design towards the ease of the blind needs. This research consists of two objectives. The first objective is to identify user's requirements of ATM for blind people and the second objective is to design the ATM ergonomics that is suitable for blind people. This research focused on the blind people in Malaysia and the design components of ATM interface such as; card reader slot, cash dispenser, receipt dispenser, keypad, screen buttons and display screen. However, this research benefits to the blind communities in Malaysia, the banking institution and the developer or manufacturer besides enhancing awareness among the people. Furthermore, this research used the universal design principles and ergonomics approach in order to design the ATM interface. This ATM is designed based on an existing cash dispenser, receipt dispenser and common shape of card reader slot. This design of ATM also includes natural speech output, touch screen, different function menus and different buttons arrangement.