

A Study of the Tactile Codification on the Philippine Banknote: Redesigning for the Blind

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Abstract : This study determined the usability of the Philippine banknotes. An experimental design was used in the study involving twenty (n=20) randomly selected blind participants. The three aspects of usability were measured: effectiveness, efficiency, and satisfaction. It was found out that the effectiveness rate of the current Philippine Banknotes ranges from 20 percent to 35 percent which means it is not effective basing from Cauro's threshold of average effectiveness rate which is 78 percent. Its efficiency rate is ranging from 18.06 to 26.22 seconds per denomination. The average satisfaction rate is 1.45 which means the blind are very dissatisfied. These results were used as a guide in making the proposed tactile codification using embossed dots or embossed lines. A round of simulation was conducted with the blind to assess the usability of the two proposals. Results were then statistically treated using t-test. Results show statistically significant difference between the usability of the current banknotes versus the proposed designs. Moreover, it was found out that the use of embossed dots is more effective, more efficient, and more satisfying than the embossed lines with an effectiveness rate ranging from 90 percent to 100 percent, efficiency rate ranging from 6.73 seconds to 12.99 seconds, and satisfaction rate of 3.4 which means the blind are very satisfied.

Keywords : blind, Philippine banknotes, tactile codification, usability

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