

Usability Analysis of the Ronnie Baugh (Oggun ii) Tractor Using the Single Usability Metric

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Abstract

Mechanization of the agricultural sector in the Philippines is one of the policies created by the state to improve the systemic problems it experiences. In the largest crop-growing provinces, low utilization of four-wheeled tractors was observed due to their high cost and required expertise that the average Filipino farm worker struggles with. In 2020, a local company was licensed to manufacture the US-designed Ronnie Baugh Tractor (RBT) which aims to empower smaller-scale production with its low-cost and customizable features. However, its recency observed a lack of baseline benchmarking and analysis of the design, especially if its integration is fit for Filipino farm workers. Evaluating its usability using the Single Usability Metric, the design scored 64.69%, indicating marginal acceptability and an “OK” overall experience. However, the metric failed to show the abysmal dissatisfaction of the subjects and the unreliability of the error metric. Nevertheless, the design was deemed accessible to any level of operator experience and can be familiarized faster by more seasoned users. Further investigation into the fitting and ergonomics of the controls, dimensions, etc., may explain and solve user dissatisfaction.