

# EVALUATING IN-CAR DESIGN USING A NOVEL UPGRADEABLE

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## **Abstract**

In this work, a novel test is implemented to evaluate in-car design and to differentiate between cars of similar classes. This test is based on a new taxonomy and simple methodological approach that considers three major criteria that integrates most of the human demands from car interior in one test, based on three main weighting factors used for modeling the investigation process namely, ergonomic, economic and technical factors. These later form a set of questions that enable relative and fine comparisons between competitor cars leading to a normalized index that judges the reliability of such plans. The number of questions can be tolerated upon demand and so that their weight such that the resulting grade of the test is a fraction (less than one) termed normalized three weight (NTW) index.

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