

## Digital Citizen Participation Platform for Disaster Management: A User Evaluation from a Developing Economy

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This study examines the efficacy and impact of the BosesKo, a Digital Citizen Participation (DCP) platform designed to foster dynamic communication between Philippine citizens and their government, addressing issues in disaster management. Developed through a value-sensitive design approach, the platform was rigorously evaluated employing the Framework for Evaluation in Design Science Research (FEDS). A comprehensive survey, grounded in User Experience Design (UEQ) principles, was administered to 584 citizens, supplemented by open-ended questions probing the integration of human values into the platform design. To deepen the evaluation, interviews were conducted with 16 government officials following a live demonstration of the BosesKo platform. The findings reveal that the platform offers users a compelling mix of practical utility and positive emotional engagement. Moreover, as confirmed by citizen and government respondents, the platform successfully encapsulates the human values intended in its design. These promising outcomes pave the way for further refinements to the BosesKo platform, optimizing its functionality for citizens and governmental agencies in disaster-related scenarios.

# Predictive Modeling in University Admissions: A Case Study at a Private University in the Philippines

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Universities traditionally use high school grades and entrance exam scores for their student admissions. However, in response to the evolving landscape of student admissions, universities are increasingly turning to data science to enhance their selection process. This study investigates the development of data-driven methodologies in the admissions process of a private university in the Philippines. Using the admissions data from entry batches 2018 to 2020, different regression models were built to predict the general weighted average (GWA) of these students during their first year in the university. Notably, models such as Extreme Gradient Boosting, Gradient Boosting, and Linear Regression had the best predictive capabilities, with Extreme Gradient Boosting achieving an RMSE of 0.3435. Furthermore, the models were able to identify key factors influencing first-year GWA, providing valuable insights for admissions decision-making. By incorporating these findings into the selection process, the university admissions office can identify prospective students more accurately thereby enhancing students' overall success.

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## DATA-DRIVEN CURRICULUM ANALYSIS: INFORMING UNIVERSITY POLICY WITH CURRICULUM POSITION MATRIX

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Understanding curriculum market positioning is crucial for strategic decision-making in higher education, particularly undergraduate programs. This study employs a data-driven approach to analyze curriculums at Chiang Mai University, integrating internal and external data. The analysis examines curriculum from two key perspectives: the number of admission students and the tuition fees. The sources of data are determined and transformed using various tools, subsequently are integrated before the analysis. By linking these factors, the analyzing aims to offer valuable insights by revealing popularity, perceived value, and the competitive positioning of programs within the groups of specific universities in Thailand. The resulting “Curriculum Position Matrix (CPM)” categorizes curriculums across a variety of 10 positions, ranging from high perceived value and popularity to curriculums requiring significant improvement. Our university analysis using the CPM reveals a well-positioned curriculum profile. Notably, roughly 64% of curriculums fall into standard or higher positions, with approximately 39% categorized as “Beyond Standard”, followed by 28% as “Standard”, and 17% achieving the “Top in Class”. By leveraging the results, we gain insights into competitiveness, guiding and supporting curriculum development and strategic decision-making for university administrators.