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This study explores the effects of course characteristics on massive open online courses (MOOCs) evaluation, especially investigating how the linkage between MOOCs and job market demand influences consumers' satisfaction. Although MOOCs have been considered an interruptive innovation in the higher education industry, the general perceptions about the success of MOOCs are controversial due to the low completion rate. Unlike prior literature focusing on the completion rate, we propose that course evaluation is an alternative measure of MOOCs' success, which captures learners' perceptions of courses since it reflects their satisfaction with course quality to a great extent. By mapping the available information within MOOCs platform into three categories: presage, process, and product (Biggs 1993), we propose that factors related to course, instructor, platform, and learning activities influence course evaluation. We apply the embedded topic modeling (ETM), the guided LDA technique, and regression analysis to analyze data.

We found several interesting results. First, instructor rating is negatively associated with a single course rating. It means that an excellent instructor helps learners complete the course. However, there is no guarantee that the instructor meets learners' expectations. Second, neither the number of reviews nor the number of students is significant, indicating that learners value instructors' performance in courses they enrolled in and did not pay too much weight on instructors' prior experience. Third, the primary purpose of enrolling in MOOCs is to learn trending skills and technologies, not some traditional and common knowledge. Fourth, neither certification of completion nor affiliated with the university has significant impacts. One possible explanation is that almost all courses in our dataset have those two characteristics. Platform factors have a similar situation. Accessibility does not influence learning outcomes because it has become a common demand for all MOOCs. Fifth, as to learning-focused activities, learners prefer shorter videos. It indicates that creating several short videos is more effective than providing a single long video to improve learners' satisfaction. The number of assignments does not influence course rating.

This study provides meaningful insights: 1) it expands the measurement of the success of MOOCs from completion rate to course rating; 2) it explores the linkage between MOOCs and job market demand, which has rarely been discussed; 3) it provides some guidance on information management in MOOCs platform and MOOCs course design.

References

Biggs, J. B. 1993. "From Theory to Practice: A Cognitive Systems Approach. " *Higher education research and development* (12:1), pp. 73-85.

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