

International Conference on Artificial Intelligence and Cloud Computing (ICAICC-2025)

Conference Proceedings

May 10, 2025 (Virtual)

Personalization Models for Email Subject Lines and Send Times

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Email campaign success through obtaining high engagement numbers has become harder for platforms with diverse user bases who operate at large scale. Traditional standardized email methods to deliver marketing content fall short because there are too many messages combined with brief viewer attention. Joint usage of personalized subject lines with optimized send timing functions as primary methods to gain user engagement thus leading to better open rates and substantive user interactions. The study establishes a complete data-based system which employs behavioral analytics, machine learning models together with A/B testing for dynamic personalization of subject lines and customized send schedules on an individual basis. The proposed system does that by utilizing historical user data, engagement patterns and contextual signals to send highly targeted, timely email contents to dramatically improve user engagement, increases the click through rates and conversion rate from email. Instead of having to sit down and think of a project strategy, the way this approach works is that personalization can be automated at scale as well as through continuous learning and optimization using real-time feedback loops and adaptive algorithms to provide a scalable solution for today's modern email marketing challenges.

Keywords: Personalization, Email Marketing, Subject Line Optimization, Prediction, Machine Learning, Behavioral Analytics, A/B Testing, Engagement Modeling