



Individual Coursework Submission Form

Specialist Masters Programme

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Module Code: SMM641	
Module Title: Revenue Management & Pricing	
Lecturer: Dr Oben Ceryan	Submission Date: 11/04/2023
<p>Declaration:</p> <p>By submitting this work, I declare that this work is entirely my own except those parts duly identified and referenced in my submission. It complies with any specified word limits and the requirements and regulations detailed in the coursework instructions and any other relevant programme and module documentation. In submitting this work, I acknowledge that I have read and understood the regulations and code regarding academic misconduct, including that relating to plagiarism, as specified in the Programme Handbook. I also acknowledge that this work will be subject to a variety of checks for academic misconduct.</p> <p>We acknowledge that work submitted late without a granted extension will be subject to penalties, as outlined in the Programme Handbook. Penalties will be applied for a maximum of five days lateness, after which a mark of zero will be awarded.</p>	
Marker's Comments (if not being marked on-line):	

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1. In your own words, please provide a brief, one paragraph summary of your group project and what were the main takeaways for you from this project.

Our group project sought to investigate the potential applications of revenue management in the food service industry through AI-driven approaches. We investigated revenue management strategies and their current implementation in the food service industry through an in-depth literature review and analysis of case studies and examples. This project taught us that revenue management techniques like dynamic pricing, demand forecasting, and inventory optimization could be used effectively in the food service industry to optimize pricing, maximize revenue, and improve operational efficiency. Furthermore, we discovered that combining AI and machine learning algorithms can improve the accuracy and effectiveness of revenue management strategies in this industry.

2. Please provide one direction in which you think the project can be extended. Please describe clearly how you would work on that extension. For example, what methodologies would you apply and how, what type of information/data would you need, etc. You are not asked to formally work on this extension or provide any results.

One possible extension of our project would be creating a predictive analytics model that uses machine learning algorithms to forecast demand in the food service industry. This extension would use supervised machine learning, time-series analysis, and predictive modeling methods. To train and validate the predictive analytics model, historical sales data, customer data, and other relevant information, such as weather data and promotions, would be required. The resulting model could forecast demand over various time horizons, allowing for more informed pricing, inventory management, and resource allocation decisions.

3. Lastly, please briefly comment on which topics you found most interesting in this module and which topics you would like to learn more about.

The dynamic and strategic nature of network revenue management with bid pricing piqued my interest in the module. Integrating pricing, demand forecasting, and bidding mechanisms presents a unique and complex challenge in a networked business environment. To adjust prices dynamically based on market conditions, customer preferences, and competitor pricing, sophisticated algorithms, and decision-making processes are required. Furthermore, the competitive bidding environment created by bid pricing adds an element of customer engagement and an incentive for higher bids, resulting in a dynamic and ever-changing revenue optimization strategy. The possibility of maximizing revenue while satisfying customer preferences makes network revenue management with bid pricing an intriguing topic to investigate.

Additionally, we are keen to explore AI's ethical considerations and implications in revenue management, such as fairness, bias, and transparency. As AI continues to play an increasingly significant role in revenue management and other aspects of business, it is crucial to understand the potential ethical concerns and ensure that decision-making processes are fair and transparent.