

The Hong Kong University of Science and Technology

Dept of Information Systems, Business Statistics and Operations Management

Dept of Industrial Engineering & Decision Analytics

Joint Seminar Announcement



Wine Analytics by Prof. Burak KAZAZ Syracuse University

Date : 2 February 2024 (Friday)
Time : 10:30 – 11:45 AM
Venue : Room 4047, LSK Business Building



Abstract: Wine analytics is a new field of study that develops analytical methods for enterprises in wine supply chains. In this talk, we present the state-of-the-art predictive and prescriptive analytical methods that are used at winemakers, distributors/importers, and in financial markets. Wine production is a risky business because of the long aging process (often 18 to 24 months aging in barrels for Bordeaux-style wines). Climatic conditions influence the production and quality of these wines. Consumers follow tasting reviews and scores – this information impacts the value and trade of these fine wines. Investors track a collection of this information in order to optimize their portfolios. The talk focuses on wine futures known as *en primeur* in France. Winemakers sell their wine while it is aging in barrels in the form of futures contracts in order to mitigate their risks and to recuperate their cash investment. We begin with predictive methods that estimate the value of such futures contracts in financial markets – this is coined as realistic prices by the financial exchange executives. Next, we develop portfolio optimization models for distributors/importers (buyers in the financial markets) – they are extremely beneficial for risk-averse firms with limited budgets. Then, we show prescriptive models employed by winemakers (suppliers in the financial markets) to determine the quantity of wine to be sold as futures and the price of wine futures. Finally, we present new analytical methods, e.g., robo-advising, for financial markets, investors and consumers. Foundational papers for this talk are as follows:

<https://bkazaz.expressions.syr.edu/wp-content/uploads/2020/09/wine-futures-POM-2020.pdf>

<https://bkazaz.expressions.syr.edu/wp-content/uploads/2018/01/MSOM-publication-2017-web.pdf>

<https://bkazaz.expressions.syr.edu/wp-content/uploads/2015/05/NKWmsom2015AA.pdf>

Bio: Prof. Burak Kazaz is the Steven Becker Professor of Supply Chain Management at the Whitman School of Management and the Laura J. and L. Douglas Meredith Professor for Teaching Excellence at Syracuse University. He serves as the Director of the Brethen Institute at Syracuse University, and has served as the Whitman Teaching Fellow from 2010 to 2012, the Whitman Research Fellow from 2016 to 2018, and the Executive Director of the H.H. Franklin Center for Supply Chain Management between 2013 and 2017. Prof. Kazaz's research interests include risk mitigation, supply chain finance, and socially-responsible supply chains. His publications helped many agricultural and retail firms in their global operations. He established the field of "wine analytics," and his work on the pricing of wine futures has been influential in the wine industry benefiting winemakers and distributors. His publications can be found in premier journals such as *Manufacturing & Service Operations Management*, *Management Science*, *Operations Research*, and *Production and Operations Management*. His impact is evidenced in that he is frequently featured in popular media including *The Wall Street Journal*, *Wine Advocate*, *Wine Spectator*, *RobertParker.com*, *Forbes*, *Bloomberg*, *Financial Times* and the fine wine stock market *Liv-ex*. He enjoys collaborating with industry; his work is recognized by IBM, British Petroleum, and Procter & Gamble, and is supported through grants from Staples, IBM, and APICS.

All interested are welcome!

Enquiries: Dept of ISOM