Abstract and executive summary

Alastair Reed attended the 7th Annual American Association of Wine Economists Conference in Mendoza, Argentina, in May 2015. The conference featured over 130 presentations from wine economists from around the world, including three from Australia. Alastair presented on the use of large transactional datasets – "Big Data" – to extract insights into the buying habits of Australian wine consumers. The presentation went on to be co-awarded the Christophe Baron Award for Best Presentation. Other conference presentations showed a clear pattern in the global wine economy research portfolio, namely the utilisation of large datasets to explain current and future wine trends. Attendance at the conference has resulted in two articles currently under review, an international research collaboration between Melbourne Polytechnic, RMIT and Stockton University, as well as a fantastic networking and educational opportunity for Australian wine and vine undergraduate students.

Final report

Alastair Reed attended and presented at the 9th Annual Conference of the American Association of Wine Economists between the 27th and 31st of May 2015, in Mendoza, Argentina. This conference offers a broad scope for presentations, ranging from regional economic overviews, historical vignettes, through to intricate data-driven modelling of buying and production trends. Rather than dilute the power of the conference, this inclusivity provides for a remarkably collaborative environment, aided in no small way by a busy social schedule. Attendance at this conference provided a range of benefits to the wine industry from interesting global insights, fruitful networking leading to downstream collaboration, as well as opportunities for Australian winemaking and viticulture students. These benefits are summarised in the following brief.

Alastair's presentation was titled "The use of big data to develop an understanding of the link between consumer preference, climate and demography." It uses massive datasets (millions of transactions) from two of Australia's largest retail chains to better understand the drivers of consumer choice. The work was roughly divided into two parts. The first was a proof-of-concept phase which sought to prove the benefits of huge datasets to constrain variance by confirming a dogmatic tenament of the wine industry; people drink more white on hot days, and more red on cold days. This was remarkably successful, showing among many other things, that over 25% of Shiraz sales are dictated by temperature. Surprisingly however, this relationship is strongly dependent on the mean income of the catchment area for a retail outlet, which led to the second component of the study; is varietal preference linked to geography on a city level? Using transactional data from across Melbourne it was shown that there are clear patterns in the preference for such bedrock varieties as Sauvignon Blanc, Chardonnay, and Riesling. In the case of Chardonnay, buying habits very much contradict traditionally held views of this varieties core demographic. This presentation was one of three recipients of the Christophe Baron Award for Best Presentation and can be viewed in full at http://www.wine-economics.org/2015-mendoza/mendoza-2015-presentations/.

The conference featured a diverse array of over 130 presentations, including three from Australia, with a clear central theme; buying and production trends follow patterns which can be elucidated with careful analysis. The homepage for the American Association of Wine Economists provides a complete program of the conference, including many abstracts, powerpoints and videos of the presentations (see http://www.wine-economics.org/2015-mendoza/program/). Particular highlights included:

Kym Anderson (University of Adelaide), who presented on the use of historical production and sales data as a method for predicting the next boom in the Australian wine sector. He predicts a recovery over the next deade but also shows that other countries are repeating the mistakes of the Australian wine industry, namely regulatory conditions that are conducive the oversupply.

Boris Bravo-Ureta (University of Conneticut) who provided an interesting review on techniques for measuring productivity, actual costs and profit metrics, a critical step for fundamental operational viability analysis.

Karl Storchmann (New York University) who analysed price trends in cold and warm years and found that retailers gained from global warming because margins increased, conversely there was no net benefit for producers.

Neal Hulkower (McMinnville) who provided an impressive review of the benefits of Minimum Percent Error – Zero Percent Bias Regression as the most appropriate methodology for the derivation of trends from large datasets.

Jean-Marie Cardebat (University of Bordeaux) who provided one of the best examples of intuitive data analysis to solve particular problems, in this case does competition lead to conformity of restaurant mark-ups. The video is available for this presentation and is well worth watching.

Following an introduction at the conference, the students of the Viticulture and Winemaking major of the Bachelor of Agriculture and Technology at Melbourne Polytehni visited the Clare Valley, SA, as guests of Treasury Wine Estates and one of their key growers, Geoff Lewis. This trip, only made possible by the conference, provided the wine industries future innovators the opportunity to learn the fundamental requirements of achieving a high-level of success in the industry.

The conference was a fantastic opportunity for me, Melbourne Polytechnic and the Australian wine industry. New research projects sparked at the conference will provide valuable information for our continued path to economic and environmental sustainability, including one between Stockton University (US), RMIT, Melbourne Polytechnic and the private sector. Two papers, based on information in my presentation, are currently under review and should be published in early 2016. Please feel free to contact me directly (alastairreed@melbournepolytehnic.edu.au) for any further information.