**Interim report**

Project Title: **Arterra Wines: Project Rebound**

Project Managers: Joel McInnis and Lorraine Feng Project Sponsor: Sasha Teska (Arterra)

Key Stakeholders: Michelle Noseworthy (Arterra), Caroline Bourke (Arterra), Harshdeep Singh (Queen’s)

Project Start Date: November 1st, 2020 Project End Date: March 2020

**Status of the project**: Green

To date, we are on track with our agreed upon deliverables for the project. In our project plan, we broke down the deliverables into six individual sprints which keep us and our partners at Arterra accountable for specific tasks. As of this report, we have completed our first sprint around the alignment of the data sources and a comprehensive exploratory data analysis of the provided data and are in the middle of our second sprint which consists of conducting a time series model for the top five fastest growing VQA wine segments (varietals) in British Columbia and Ontario. With the holidays in the middle of our second sprint, we are on track to complete the modelling on the agreed upon date of January 7th, 2021.

**Milestones**

Since we are still in the early phase of our project, our main milestones primarily focus on the project planning, resources alignment and the availability and interpretability of the data. At the onset of the project, there were some ambiguous expectations that were presented that were not feasible within the confines of the Capstone project. In addition, we were having a hard time connecting with our contacts at Arterra to discuss our project, as well as we unable to get access to their data until the end of November. However, to increase accountability for everyone, we were able to schedule reoccurring meetings which improved our communication with our key stakeholders and allowed us to have meaningful brainstorming meetings to narrow the scope of our project and create realistic expectations based on the timeframe and the data sources provided. As a result, we were quickly able to gain access to the applicable data sources via their PowerBI platform and begin exploring the data. We are now comfortable with the layout and terminology of both the Ontario and the British Columbia markets. After conducting EDA on this data, we have been able to identify the top trends to forecast through time series modeling for their VQA varietals.

* Rose – Rapid growth with a 154% increase during COVID.
* Cabernet Sauvignon – Rapid growth with a 42% increase during COVID.
* Red Blend - Rapid growth with a 39% increase during COVID.
* Shiraz - Rapid growth with a 38% increase during COVID.
* Gewurztraminer - Rapid growth with a 23% increase during COVID.

**Difficulties**

Aside from the resource constraints (i.e.: Arterra availability and data accessibility) at the beginning of the project, the other difficulties that remain are around uncategorized data, market discrepancy for updated sales figures, and rolling sales figures that limit the historical data points. Even though Arterra’s data is very clean, two varietals labelled “Unassigned” and “Other” in the VQA category experienced reasonable growth that we do not have granular details on. These labels are used to house lesser-known varietals, however for the sake of our project to identify new trends that have emerged through COVID, it would be nice to gain more insights into these varietals to helps identify what are the brands that are responsible for the growth and possibly makes recommendations on them.

Another difficulty we are encountering is the inconsistent updates of sales data between British Columbia and Ontario. Ontario’s sales data is updated monthly to allow for more relevant analysis around the trends we are seeing throughout the pandemic, whereas British Columbia’s data is updated with a one month lag. This inconsistency can impact our time series model results because the more recent sales figures from Ontario over the holidays can provide a more accurate view of consumers' behaviour during COVID compared to prior years. Without having the data in time to complete our time series model for British Columbia, we can only use the information that is available to date.

Lastly, it should be worth noting that we are limited to the historical data provided. Arterra’s PowerBI platform leverages a rolling 36-month timeframe. That is when new data is added, the oldest data falls off. This limits our ability to utilize multiple years of historical sales figure to identify seasonality or sales trends, rather we are just able to make inferences off the last 36 months.

**Deviations from the plan**

There are no deviations to our plan.