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Marketing Challenges Facing the Australian Wine Value Chain

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Abstract

The Australian wine industry faces various challenges associated with production, marketing and distribution processes, all of which are exacerbated by a changing global climate. These obstacles differ at each level of the wine value-chain. Their possible effects on the future of each process, and on the industry in its entirety, are explored within this value-chain analysis. The challenges currently influencing the Australian wine industry are predicted to lead to more creative, sustainable, integrated and thus more efficient wine production and distribution practices.

Key words: Australia, wine industry, marketing, value chain, challenges

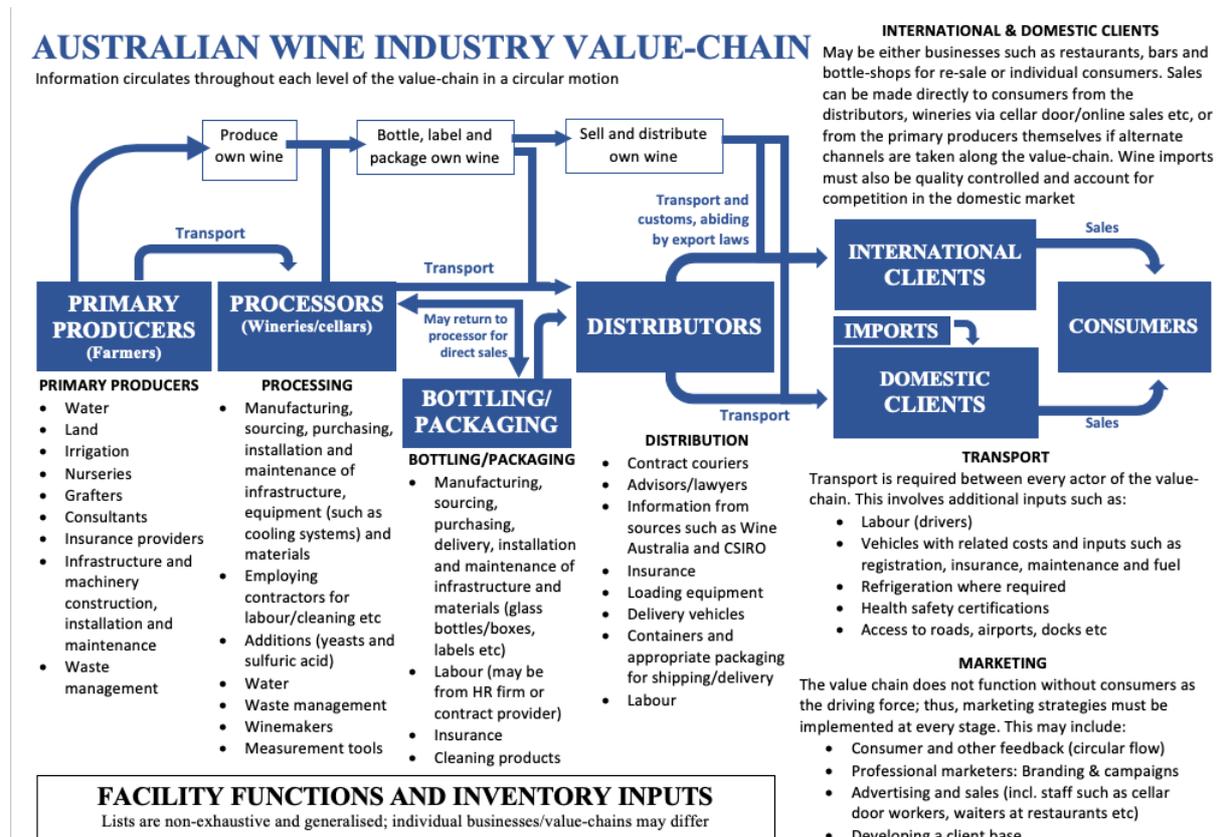
Introduction

The Australian wine industry contributes approximately \$45 billion gross value of product to the Australian economy annually, producing 1.2 billion litres of wine, from 1.73 million tonnes of wine grapes, in 2019 (Wine Australia, 2019a). Over 2018-19, the export value of wine was \$2.9 billion, with the domestic value slightly higher at \$3.5 billion despite making up only 38 per cent of the volume (Wine Australia, 2019a).

The Australian wine industry value-chain is part of a network of producers, processors, bottling/packaging and distribution as the predominant actors, with international production providing additional market competition via imports. These actors are supported by facilitating and marketing functions, an enabling environment and additional inventory inputs. A map of this value chain is shown in Figure 1.

Farmgate wine grape prices peaked at \$609/t in 2019, the price rise (the largest since the 2008 vintage), driven primarily by export growth (Australian Grape and Wine Inc., 2019). This price is expected to increase to over \$650/t as a result of recent below-average wine grape production (Xia, 2020). Wine prices differ at each level of the value-chain and between modes of sales. Sales methods include direct-to-consumer sales, accounting for an average of 13 per cent of winery income (54 per cent from cellar door (Wine Australia, 2019a)), wholesale and retail sales. Market prices incorporate costs of value-adding processes such as distribution, the wine equalisation tax (WET) and other taxes such as the goods and services tax (GST). Wine prices at cellar doors are slightly higher on average than wholesale prices, with the winery receiving a greater portion of this sale. Retail prices, such as

Figure 1. An interpretation of the Australian wine industry value-chain inclusive of facility and marketing functions, additional inventory inputs and potential alternative channels



Source: author’s compilation (from Goncharuk, 2017; Hall et al., 1997)

wine sold at restaurants, is marked up 72.2 percent on average (Richardson, 2010) assisted by the retailer’s ability to charge by the glass.

In this paper, the marketing challenges faced by each actor in the chain and the implications of these challenges on the future of the industry are explored using value-chain analysis.

The Wine Industry Value Chain

Value-adding increases spatial, form and time utility, thus the role of value-adding in the wine industry is clear. The product that consumers demand is wine, not wine grapes, in an accessible location, at a suitable time. These demands are facilitated by functions of the value-chain, provided as efficiently as possible. Variable marketing margins are observed within the wine industry as value is also strongly correlated to the quality of the initial produce (Bombrun and Sumner, 2003) as well as the art of the winemaker (Puckette, 2016), rather than simply the functions along the value-chain. Wine prices are further influenced by market supply and demand, a reduced supply in recent years leading to a predicted increase in prices (Xia, 2020). Wine has been observed to be a necessity in the short-term, proving less price-sensitive than the demand for beer and spirits (Bettington and Chang, 2001), however a luxury item in the long-term. As an industry that is predicted to continue growing in value globally (Wine Australia, 2019c), many old and new challenges will become prevalent, shaping the future of the whole value-chain and the industry.

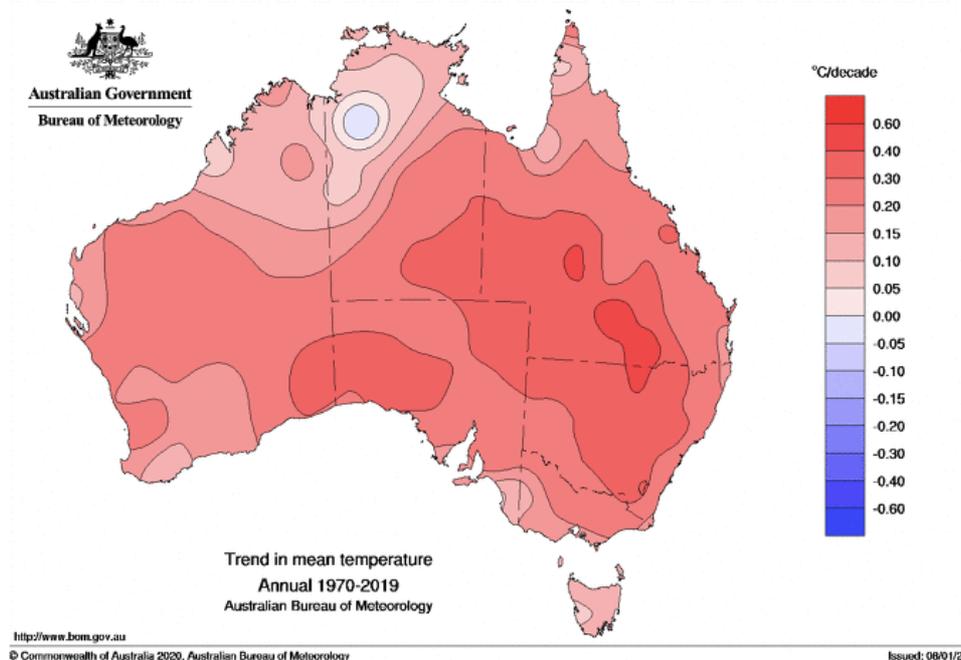
Primary Producers

The first actor in the Australian wine value-chain network is the set of grape-growers, of which there are currently 6,251 (approximately) in Australia (Wine Australia, 2019a). Their function is to produce quality grapes in the case of a high-end wine, or a high quantity of grapes for lower value wine production. This, and other production decisions, are made depending on the demands of processors, which are derived from the distributors' demands, which are derived from primary consumer demand, all of which are influenced by various additional actors within the network. Some smaller growers also undertake the functions of processing, winemaking, selling and distributing. This is not common however, as the incentive of reduced costs leads to stabilisation of volume throughput via downstream value-chain flow. The typical functions of the farmers may include, but are not limited to; grafting, nurturing vine growth and long-term health, providing inputs such as fertilisers, pesticides and water where required, harvesting, pruning, employing labour and managerial decision making.

Challenges faced by primary producers

There are a multitude of challenges facing wine grape farmers; the most significant relating to a changing and unpredictable climate. These include increased pest and disease occurrence, increased extreme weather events such as frosts, droughts and bushfires (Diffenbaugh, 2020), inconsistent rainfall, and increased atmospheric CO₂ (Keller, 2010), most of which are amplified by the higher ambient temperatures. As seen in Figure 2, the ambient temperature from 1970-2019 has been consistently increasing and is predicted to continue doing so into the future (BoM, 2018), posing threats of heat damage, such as sunburn, to the produce.

Figure 2. Trend in mean annual temperature in Australia from 1970-2019



Source: BoM (2020)

This predicted increase in heat and aridity suggests that in the future the Tamar Valley wine region in Tasmania is likely to resemble the present Coonawarra wine region in South Australia. This predicted change in climate allows wine producers to be proactive in altering practices for the future (Adams,

2020). Regions located further north and/or inland, such as the Barossa Valley and Riverina regions, are less fortunate in that their growing conditions will become far less favourable with the changing climate.

The increased atmospheric CO₂ predicted, will also lead to lower quality fruit with undesirable fibrous qualities (Treeby, 2018; Brown, 2015), alongside negative influences on oak used for barrel maturation (Mozell and Thach, 2014). Furthermore, extreme weather events pose the risk of losing entire seasons of produce, as seen in bushfire-affected wine regions of Australia such as the Hunter Valley, over the most recent 2019-20 production season. Challenges associated with marketing, from the farmer's perspective, include producing desirable, low-cost fruit that consistently fulfils the processors' terms under current and future climatic conditions, alongside the challenge of developing reliable relationships/agreements with a processor(s).

Future of wine grape production

The changing climate will see establishment of wine regions in cooler climate areas, and research, development and extension (RD&E) into sustainable food and beverage production both nationally and globally, by institutions such as CSIRO and Wine Australia. Installation of rainwater tanks and drip irrigation systems will be required to maintain water accessibility. Drip irrigation reduces evapotranspiration, consequentially reducing water wastage, costs to the farm business and losses from frost events (Hornbuckle et al., 2008; Sippo and Smythe, 2007). Adjusting canopy and harvest management to climatic conditions, in line with the research explored above, will also be essential in the future. Furthermore, the industry will experience a significant uptake of biocontrol practices for pest and disease management, which may lead to organic certifications. Demand for organic wine is on the rise within the market (Wine Australia, 2019b) thus certification may lead to a premium price and/or increased demand as well as benefitting the brand when marketing to such demographics. All of these changes that occur at the farm level will have downstream influences on the value-chain, from winemaking techniques to marketing strategies and so on.

Processors (Wineries & Cellars)

Processors/winemakers source their grapes from the primary producers, producing a wine that meets the demands of distributors and/or consumers directly. There are currently 2,468 wineries (approximately) within Australia (Wine Australia, 2019a), whose functions include (but are not limited to): grape receipt, de-stemming/crushing, fermenting, incorporation of additions, measuring characteristics such as beaume (sugar level) and temperature and pressing the grapes, then storing and aging/maturing the wine, and undertaking clarification, blending, cold stabilization and filtration where required. Different equipment and processes are utilised between businesses and wine varieties. The predominant activity costs associated with this level of the value-chain are summarised in Figures 3 and 4.

Challenges faced by processors

The major challenges at this level of the value-chain include financial constraints alongside obtaining and competing for the desired wine grapes within a potentially non-competitive market (ACCC, 2019), not only against other wine producers but also against processors of dried fruit and other products, although the use of wine grape varieties in dried fruit is declining. The climate variability not only influences the farmer, but consequentially, everyone below them in the value-chain, a reduction in supply leading to heightened produce costs. Variation in physiological attributes of the fruit, resulting from climatic change, adds the challenge of creating a desirable wine from the different, and potentially unfavourable, flavour profiles (McKee, 2014). Further challenges include storage

Figure 3. Average activity costs per kL of wine (with percentages)

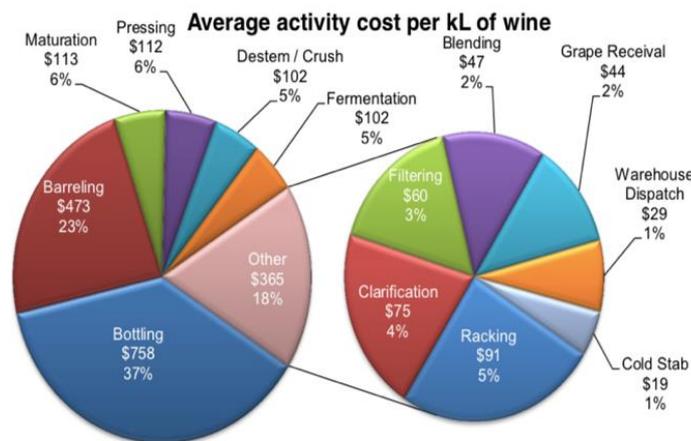
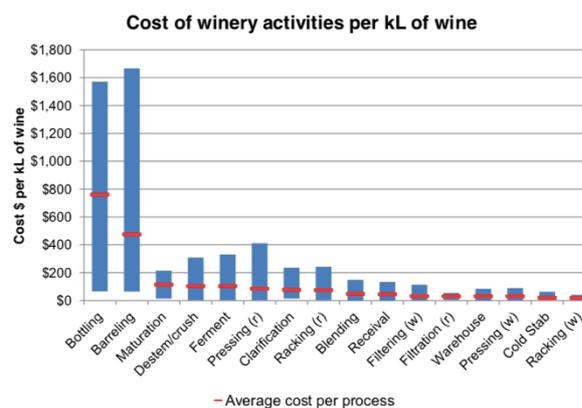


Figure 3: Average activity cost per kL of wine

Source: Palousis (2015)

Figure 4. Costs of winery activities per kL of wine, of (minimum and maximums of aggregated date from 11 wineries)



Source: Palousis (2015)

limitations and access to required facilities, infrastructure and equipment, again restricted by finances. Marketing challenges, alongside competition for produce, include accessing markets if packaging and distributing directly to consumers and/or creating reliable relationships with distributors. Another challenge, especially if the product flows further through the value-chain, is establishing systems to receive consumer feedback and reviews to direct future production.

Future of winemaking

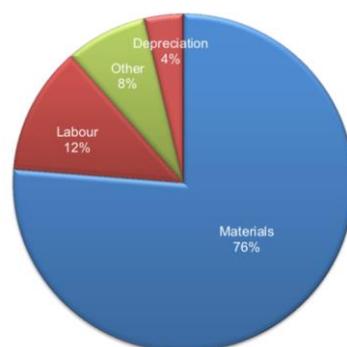
Winemakers may provide viticultural expertise to producers in order to foster a relationship in which the price uncertainty surrounding future contracts becomes secondary to their mutually beneficial affinity. Advanced computerisation in the wine industry will reduce costs and obstacles associated with obtaining access to desired markets, whether that be for direct sales and/or to receive consumer feedback. Financial constraints can be further negated by reliance on low-cost infrastructure such as stainless steel, which is easy to clean and maintain whilst allowing addition of oak characteristics such as tannins, through the use of oak staves rather than expensive oak barrels. Complementary flavour profiles to the predicted fibrous fruit characteristics can be explored, allowing for production of a desirable wine in the future that is able to present these traits as a selling point. Marketing

approaches, alongside an online presence, could include investing in wine tourism; its popularity rising with one in eight international tourists visiting wineries in 2018-19 (Tourism Research Australia, 2019). Winery visits have been correlated to the number of cellar doors within each region, thus developing a well-known brand associated cellar-door experience, investing in marketing campaigns and entering in wine competitions to improve brand credibility will lead to long-term future profits. Wine marketing may also draw upon providing a connection between the consumers and the terroir and culture of the region it was produced in, as desired by the consumer (Carter, 2019).

Bottling, Labelling and Packaging

Bottling, labelling and packaging may occur as a stand-alone actor within the value chain or onsite at the processing facility. Packaging may occur in the form of glass bottling or cask wine packaging, the latter proving far cheaper due to the lower costs of materials and lower value of wine associated with it. Selection of packaging options is highly dependent on the relevant and appropriate strategic fit and strategic scope of each individual value-chain. The main incentive of this actor is to efficiently bottle/package and label products that may be sourced from one, or multiple wineries. The functions include labelling, filling and sealing the bottles/casks, packaging them in cardboard boxes/cases and into crates for delivery to distributors, back to the wineries, or directly to consumers, ensuring quality at every stage of the production line. The process is usually mechanised in an automated conveyer belt system with labour required at various steps throughout the process. This level of the value-chain is considered the highest cost, as seen in Figure 3, contributing an average of 37 per cent, thus financial constraints may pose a significant challenge, as explored below. Figure 5 below outlines the major costs at this level of production.

Figure 5. Resource percentage cost of bottling (average of 11 surveyed wineries)



Source: Palousis (2015)

Bottling, labelling and packaging challenges

The major challenges are accessibility to the limited yet reliable, low-cost resources, ensuring health and food safety requirements are met and maintained and coping with ongoing financial constraints. Financial constraints exist in the form of electricity costs required to run machinery (eg. conveyor-systems), labour costs and receiving certification for health and food safety requirements (eg. HACCP) (Sai Global, 2020). Marketing challenges include market competition and ensuring costs remain low to provide incentive to businesses that contract other firms to do this process rather than investing in the infrastructure within their winery. Generating a client base of wineries willing to pay a contract of all-inclusive costs for this process poses a challenge in itself.

Future of bottling, labelling and packaging

Reducing costs and increasing efficiency by creating a rarely idle, large-scale bottling facility that provides a higher rate of return on the purchase of capital equipment (i.e. depreciation cost per kL of wine) will prove beneficial, with smaller bottling facilities unlikely to survive within the market in the future (Wine Australia, 2015). Sourcing more sustainable materials, such as recycled glass for bottles, provides a lower-cost alternative, as well as appealing to the increasingly environmentally conscious consumer (Young, 2018). Increased automation and computerised quality assurance would further lower costs and labour requirements.

Distribution

Distributors are generally responsible for selling and transporting the finished product to businesses (such as restaurants) for re-sale or alternatively, direct to individual consumers. Distribution may occur from a warehouse on the processors' site, at a bottling facility or as a stand-alone actor within the value chain. The distribution and marketing functions involve creating a client base, creating a brand for their products and services, receiving orders either from consumers, downstream businesses or upstream producers that are paying them for their services, and managing delivery and distribution of orders. Warehouse dispatch, as seen in Figure 3, contributes to 1 per cent of the average proportion of costs in winemaking.

Challenges of distribution

Given the large share of wine production that is exported, international trade policies and export laws may create challenges in market accessibility and responsiveness to market demands. Many domestic marketing challenges are faced at this level of the value-chain such as online sales restrictions associated with Responsible Service of Alcohol, with the risk of underage consumers accessing alcohol when purchasing online (Williams and Ribisl, 2020). Further marketing challenges include domestic and international competition (Silverman et al., 2001), developing a client base and fulfilling the demands of the desired demographic.

Future of wine distribution

Distributors may look to employ specialist advisors to ensure all export, health and distribution laws are met, protecting distributors from incarceration and upholding their brand. The current COVID-19 situation has led to distributors, processors and producers alike, turning to virtual sales which could potentially expedite the transition to sales on-line in the long-term. Sales on-line provide a low-cost alternative to cellar door and other labour-intensive sales processes and is further stimulated by the current 'on demand economy', observed in the rapid rise of delivery services such as 'Uber Eats' in recent years (Colby and Bell, 2016). Developing marketing campaigns with specific aims, with professionals responsible for building a brand, a client base and an online presence that is consistent with demands of the targeted demographic, will be required to combat domestic and international competition. Wine will continue changing to meet consumer demands into the future, with recent demands for a fruit-forward, light-bodied wine that upholds consumer health, sustainability and/or organic production values (Graybill, 2020). Continuous information flows will be a necessity in the future wine market, inclusive of distributors relaying consumer and personal feedback on quality, flexibility and responsiveness upwards within the chain, and requesting/receiving feedback in response. Finally, the future market will see a rise in the prevalence of free trade. For example, The China-Australia Free-Trade Agreement, alongside other market accessibility initiatives, increased Australian exports to China by 25 per cent in 2018 (Wine Australia, 2017).

Conclusion

The future of the Australian wine industry will see innovations in marketing at every level of the value-chain. It will see increased accessibility to domestic and international markets driven by enhanced competition, forcing greater efficiency. Further accessibility improvements will be seen with product, consumer feedback as well as climate and production information, facilitated by technological developments in online marketing, sales and computerisation of production processes.

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