

## How do consumers shop wine online? An application of the Dirichlet model

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*Purpose* – The purpose of this research is to analyse how consumer buy online and if wine consumers' online shopping behaviour follows the same patterns as offline in traditional sales channels. This is conducted by testing if the Dirichlet model holds for online transaction data.

*Design/methodology/approach* – The model is for the first time applied to online wine sales data. Sales records from a large German online shop with about 25,000 customers and 45,000 transactions were analysed for two years 2014 and 2015. Market shares and loyalty were examined for five wine attributes (price, country of origin, producer, grape variety and region of origin). The polarisation index  $\phi$  (phi) was used as a measure of loyalty.

*Findings* – The Dirichlet model fits sales data from a German online data suggesting that wine purchases online follow the same double jeopardy behaviour as offline. Consumers show the highest loyalty to country of origin followed by price, producer and grape variety. All loyalty measures  $\phi$  lie well above comparable values from offline studies.

*Practical implications* – Wine purchase behaviour offline follows similar patterns as online. Purchase frequency is strongly related to market share and double jeopardy largely holds. The descriptive analysis of online wine purchases shows that most consumers only rarely buy wine online, mostly once a year with close to one and a half dozen of bottles. It is likely that these rare online purchases are responsible for the higher than expected loyalty measures.

**Key words:** online sales, purchase behaviour, market share, Dirichlet, Germany.

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