

D-Wine



Function: Supply Chain

Processes: Retail, Agriculture, Supply Chain

Industry: Food & Beverage, Agriculture

For more information contact sap@deloitte.com

Business Driver

Key business drivers include:

- ✓ Inability to predict the right time to harvest grapes, resulting in poor quality of wine
- ✓ Human intervention required to track the wine fermentation process, resulting in poor quality of wine
- ✓ Supply chain inefficiency causing loss of wine quality
- ✓ Inability to track effectiveness of a trade promotion at the retail store.
- ✓ Inability to predict customer preferences

Solution Overview

Utilize information from sensors to optimize grape cultivation, wine fermentation and wine transportation process. Use sensors to track effectiveness of wine promotion at retail stores. Utilize machine learning to predict wine flavor based on customer background and implement blockchain to track the value of a wine bottle.

Features

Vineyard Tracker

- ✓ Track soil humidity content and weather to predict vineyard watering requirements and predict the right time to harvest.

Barrel Tracker

- ✓ Track the wine fermentation and production processes through liquid level, temperature and color Hume

Transportation Tracker

- ✓ Measure the tilt and temperature of a crate during the transportation of the wine bottles to the retail store.

Retail Wine Promotion Tracker

- ✓ Use motion sensors to detect the amount of time a particular wine bottle has been picked-
- ✓ Determine the effectiveness of a wine bottle position on the retail shelf.

Wine Predictor

- ✓ Predict the wine preferences of a customer using machine learning capability such as vision API.

Potential Benefits

- ✓ Improve grape harvesting process and increase the value of a grape yield.
- ✓ Increase efficiency of wine fermentation and production processes
- ✓ Maintain quality of wine throughout the supply chain process.
- ✓ Track the effectiveness of wine promotion within the retail store.
- ✓ Engage customers effectively through prediction of their wine taste



IoT

- Soil Humidity, Temperature, Accelerometer, Color Hume, Liquid Level, Motion Sensors



Core SAP

- SAP S/4HANA®
- SAP® Cloud Platform



Analytics

- Predictive Analytics



Machine Learning

- Vision API
- Ethereum Blockchain