

D-Wine

Function:
Supply Chain

Processes:
Retail, Agriculture, Supply Chain

Industry:
Consumer & Industrial Products – Food & Beverage, C&IP – Agriculture

Business Driver

- 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
- Inability to track effectiveness of a trade promotion at the retail store
- Inability to predict customer preferences

Solutions Overview

Utilize information from sensors to optimize grape cultivation, wine fermentation, and wine transportation processes. Use sensors to track effectiveness of wine promotion at retail stores, and machine learning to predict wine flavor based on customer background. Also, the solution can 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 sensors

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 times 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

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