

Group 2
Bacchus Winery Case Study

Business Rules

1. 1 to 1
 - Employee - time sheet
2. 1 to many (throwing out ideas)
 - Owner (co-owners) - Employees
 - Wine - distributors
 - Suppliers - Delivery Metrics
 - Wine - types
 - Employee - duties/jobs/responsibilities
3. Many to many
 - Employees - duties/jobs/responsibilities

Initial ERD:

Stan and Davis need to know three things:

1. Current state of inventory(supplies)
 - a. Are supplies delivering on time?
 - b. Is there a large gap between expected delivery and actual delivery?
 - c. A month by month report should show problem areas
2. Information on distribution
 - a. Are all wines selling as they thought
 - b. Is one wine not selling?
 - c. Which distributor carries which wine
3. Information on employees
 - a. During the last four quarters how many hours did each employee work

Suppliers (There are 3 suppliers)	Delivery_Metrics
supplier_name	delivery_id
supplier_id	expected_deliverytime
	actual_deliverytime
	delivery_gap
	month
	supplier_id

Employees	Time_sheets
first_name	time_worked
last_name	quarter
job_title	employee_id
employee_id	

Wine	Distributor
Name	distributor_name
UPC	distributor_id
	pickup_time
	units
	order_id
	UPC

Potential Tables
Plus assumptions made for each

Employees

- Stan Bacchus - Co-Owner & keep track of supply inventory
- Davis Bacchus - Co-Owner & keep track of supply inventory
- Janet Collins - Finances and Payroll
- Roz Murphy - Marketing Department
 - Bob Ulrich - Marketing Department (Roz's assistant)
- Henry Doyle - Production Line
 - 20 Employees
 - I **assumed** they worked under
 - Henry Doyle and Production Line, but maybe some work for the other departments to fill out the tables?
- Maria Costanza - Distribution

Time Sheet

- Stan Bacchus
 - Hours worked weekly: 45
 - OT worked weekly: 5
 - Last four quarters: 2,340
 - Employee id: 1
- Davis Bacchus
 - Hours worked weekly: 50
 - OT worked weekly: 10
 - Last four quarters: 2,600
 - Employee id: 2
- Janet Collins
 - Hours worked weekly: 32
 - OT worked weekly: 0
 - Last four quarters: 1,664
 - Employee id: 3
- Roz Murphy
 - Hours worked weekly: 45
 - OT worked weekly: 5
 - Last four quarters: 2,340
 - Employee id: 4
- Henry Doyle
 - Hours worked weekly: 60
 - OT worked weekly: 20
 - Last four quarters: 3,120
 - Employee id: 5
- Maria Costanza
 - Hours worked weekly: 40
 - OT worked weekly: 0
 - Last four quarters: 2,080
 - Employee id: 6
- 20 employees
 - Hours worked weekly: 900
 - OT worked weekly: 100
 - Last four quarters: 46,800
 - Employee id: ...
 - ...

Wines

- Merlot
 - 50 cases/month
- Cabernet
 - 40 cases/month
- Chablis
 - 60 cases/month

- Chardonnay
 - 30 cases/month

Supplies

- Supplier #1 (The New Corker)
 - Bottles
 - Corks
- Supplier #2 (Boxes n Stuff)
 - Labels
 - Boxes
- Supplier #3 (Wine Supply)
 - Vats
 - Tubing

Suppliers

- Supplier #1 (The New Corker)
- Supplier #2 (Boxes n Stuff)
- Supplier #3 (Wine Supply)

Deliveries (monthly)

- January
 - <Supplier>
 - <Items delivered>
 - <Expected Delivery Date>
 - <Actual Delivery Date>
- February
- March
- April
- May
- June
- July
- August
- September
- October
- November
- December

Orders

- Merlot
 - Order id: 1
 - Cases sold: 10
- Cabernet
 - Order id: 2
 - Cases sold: 15
- Chablis
 - Order id: 3
 - Cases sold: 12
- Chardonnay
 - Order id: 4
 - Cases sold: 10

Distributors

- **Wines to Go (ID: 1)**
 - Merlot
 - Cabernet
 - Chablis
 - Chardonnay
- **Partners in Wine (ID: 2)**
 - Merlot
 - Cabernet
 - Chardonnay
- **Sip Happens Co. (ID: 3)**
 - Merlot
 - Cabernet
 - Chardonnay

Potential Reports

- One report technically needed for deliveries

- One that shows (each of the 12 months) the suppliers name, what was delivered , expected delivery date that month, the actual date of delivery and what the gap was between the two
- Two reports for wine
 - One that displays which distributor carries which wine
 - One that shows how many cases of each wine was sold over a year. Maybe sort it by least cases sold to most?? Or least sales amount in dollars to most?
- One report for employees
 - Employee hours worked (quarterly - “Last four quarters”)