



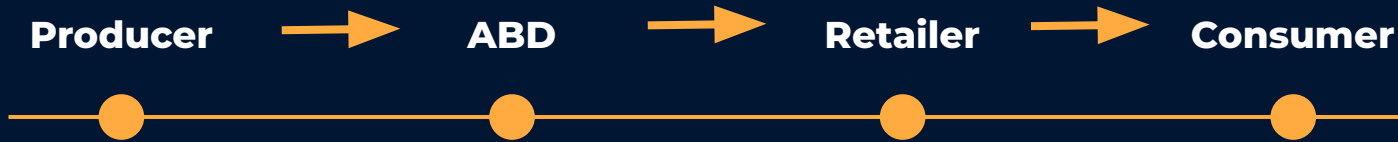
THE LIQUOR PREDICTOR

IOWA VODKA SALES

Created by Leah Nagy

Iowa - a Liquor Control State

- The Alcoholic Beverages Division (ABD) controls the sale distribution of alcohol.
- ABD purchases liquor from the manufacturer and sells it to the retailer.





PROJECT GOAL

Create a web & mobile application
to analyze past Vodka sales in
Iowa and forecast future sales
predictions

PROJECT GOAL

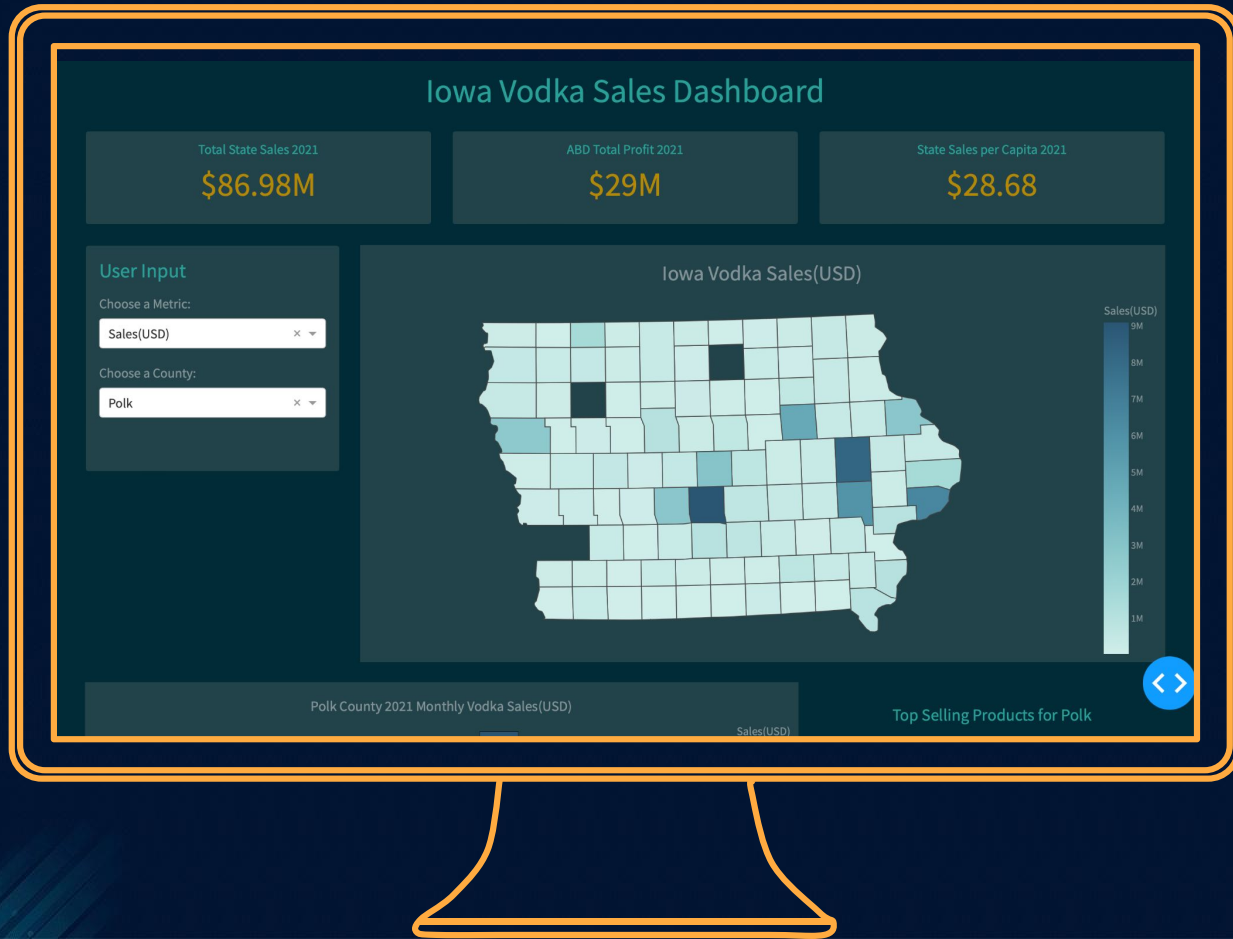
Transform this
raw data



1	S12000300003	06-14	4270	Wj's Liquor	ST	LAKE MILLS	50450	Winnebago	1002300.0	RUM	...	12	1000
2	S17184100003	2014-02-03	3700	Avoca Liquor	158 SOUTH ELM	AVOCA	51521	Pottawattamie	1011300.0	TENNESSEE WHISKIES	...	12	1000
3	S29002600016	2015-11-11	3894	Smokin' Joe's #6 Tobacco and Liquor	1404 1ST AVE NE	CEDAR RAPIDS	52402	Linn	1081600.0	WHISKEY LIQUEUR	...	24	375
4	S25312900004	2015-04-28	3742	Wal-Mart 1625 / Lemars	1111 HOLTON DR	LEMARS	51031	Plymouth	1081600.0	WHISKEY LIQUEUR	...	12	750
5	S10040300190	2013-01-15	2616	Hy-Vee Food and Drug / Clinton	901 SOUTH 4TH ST	CLINTON	52732	Clinton	1081340.0	ROOT BEER SCHNAPPS	...	12	750
6	S26086200016	2015-06-09	4559	Osage Payless Foods	633, CHASE ST	OSAGE	50461	Mitchell	1081330.0	PEACH SCHNAPPS	...	12	750
7	S06200700032	2012-06-21	2568	Hy-Vee Food Store #4 / Cedar Rapids	1556 FIRST AVENUE NE	CEDAR RAPIDS	52402	Linn	1011100.0	BLENDED WHISKIES	...	12	750
8	S28164600008	2015-09-29	4732	Walgreens #07967 / Clive	15601 HICKMAN RD	CLIVE	50325	Polk	1032200.0	IMPORTED VODKA - MISC	...	12	750
9	S10306000026	2013-01-29	3962	Durant Street Country Stop	618 DURANT ST	HARLAN	51537	Shelby	1081390.0	IMPORTED SCHNAPPS	...	12	500
10	S26589700062	2015-07-06	2549	Hy-Vee Food Store / Indianola	910 N JEFFERSON	INDIANOLA	50125	Warren	1031080.0	VODKA 80 PROOF	...	6	1750
11	S12106600050	2013-05-08	2661	Hy-Vee Food Store / Sheldon	1989 PARK ST	SHELDON	51201	O'Brien	1081390.0	IMPORTED SCHNAPPS	...	12	750

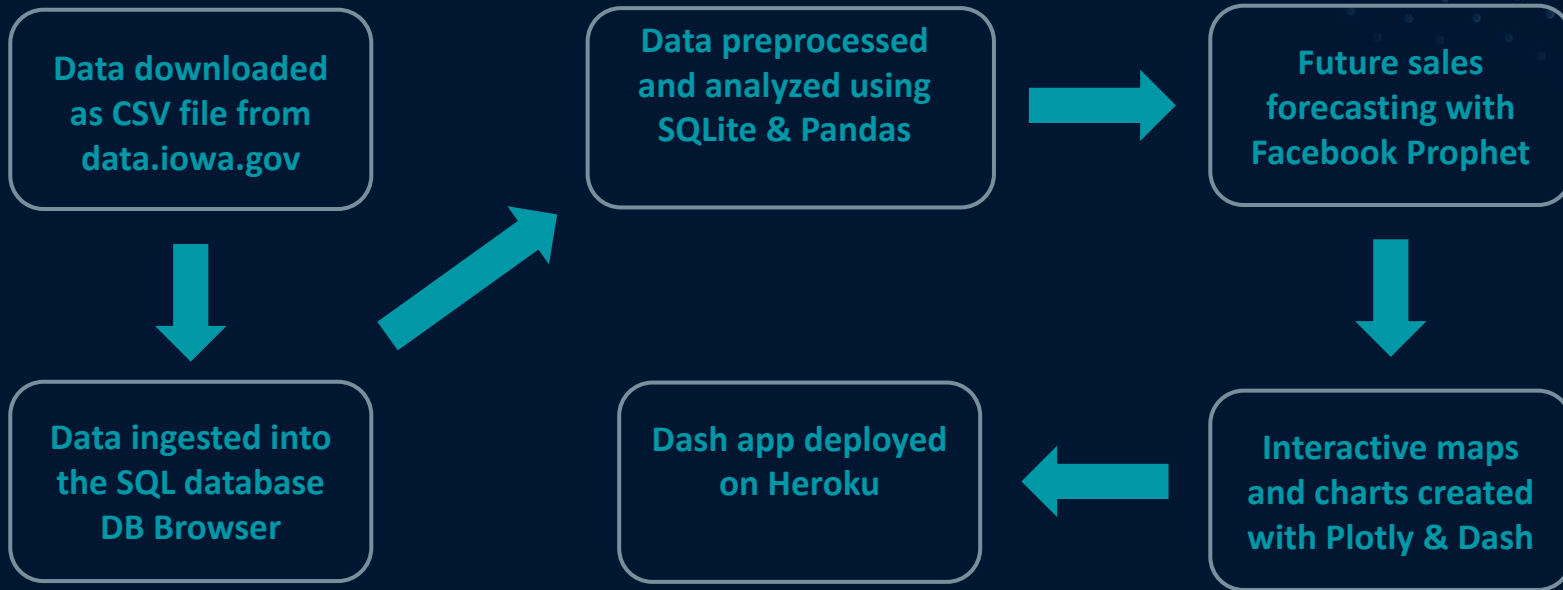
PROJECT GOAL

Into a useful
application



Data Pipeline

Polk County, Iowa Liquor Sales



DATA

- Data obtained from iowa.gov
- Filtered data:
 - Vodka sales
 - Years 2018 - 2022
- Rows: 5M+ transactions
- Features: 24



WEB & MOBILE APPLICATION



PLOTLY

Make charts and
choropleth map



DASH

Create app layout



HEROKU

Deploy app

DASH APP

User Input:
Metric &
Location

County
monthly sales
for 2021

Try the app
yourself!

[https://bit.ly/
3RzWTNi](https://bit.ly/3RzWTNi)

Iowa Vodka Sales Dashboard

Total State Sales 2021

\$86.98M

ABD Total Profit 2021

\$29M

State Sales per Capita 2021

\$28.68

User Input

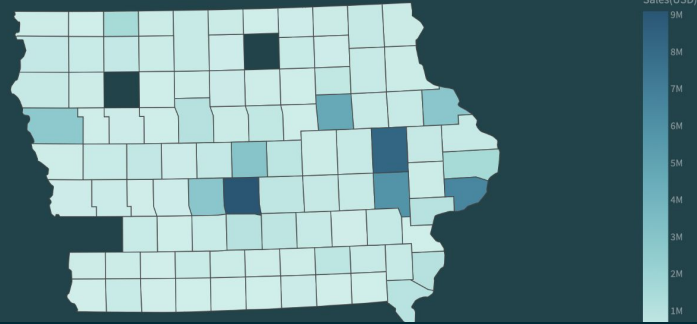
Choose a Metric:

Sales(USD) x ▾

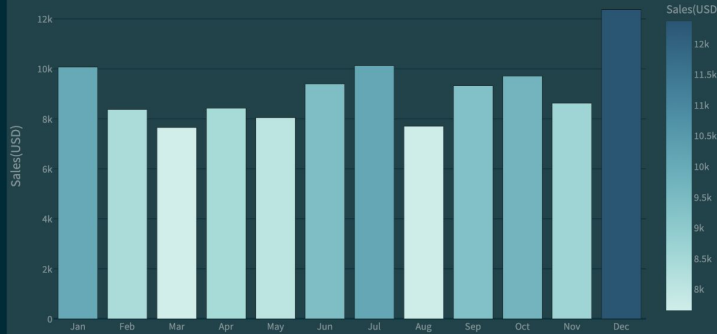
Choose a County:

Adair x ▾

Iowa Vodka Sales(USD)



Adair County 2021 Monthly Vodka Sales(USD)



Top Selling Products for Adair

Product Name	Sales(USD)
Titos Handmade Vodka	32154.45
Hawkeye Vodka	12950.82
Smirnoff 80prf	8269.94
Absolut Swedish Vodka 80prf	5754.49
McCormick 80prf Vodka PET	5744.76

State-level
sales insights

Iowa
choropleth
map of county
sales

Top selling
products for
chosen county

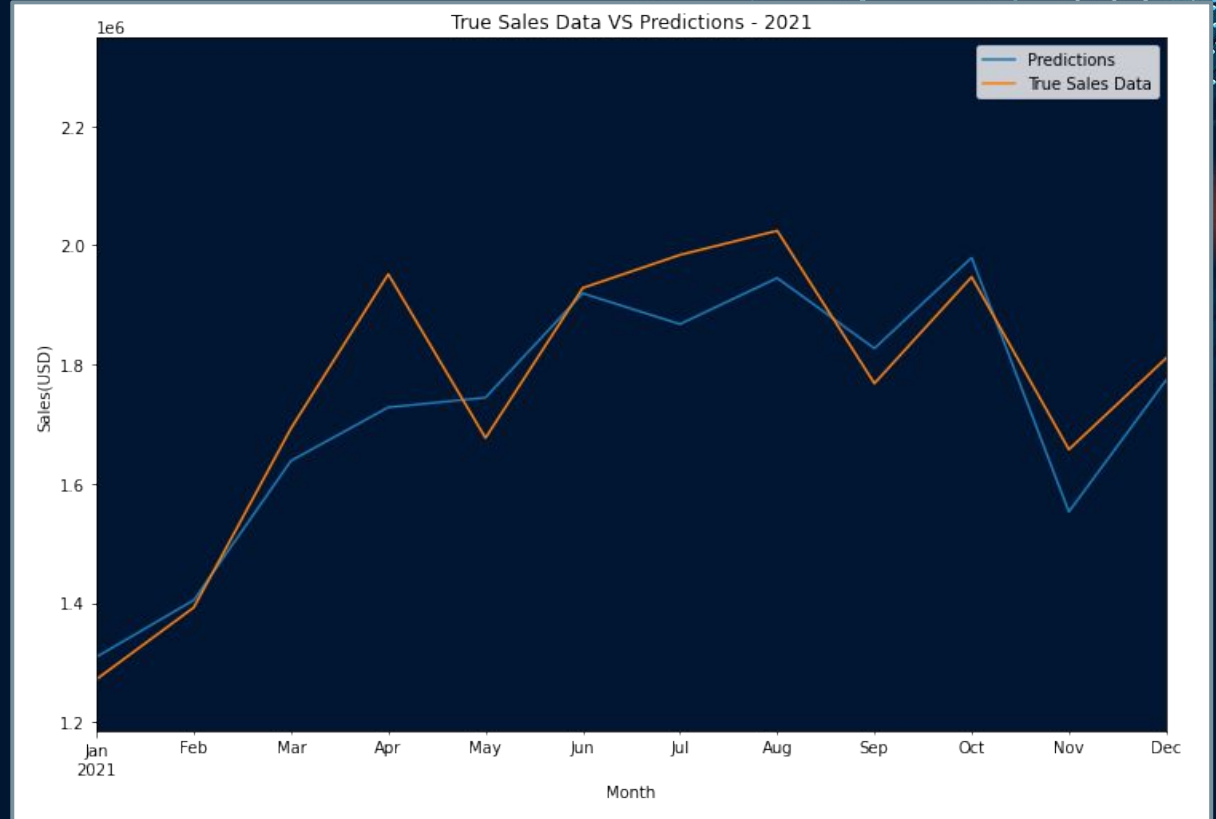
Sales Forecasting with Facebook Prophet

TRAINING DATA

Polk County Vodka
Sales (2018-2020)

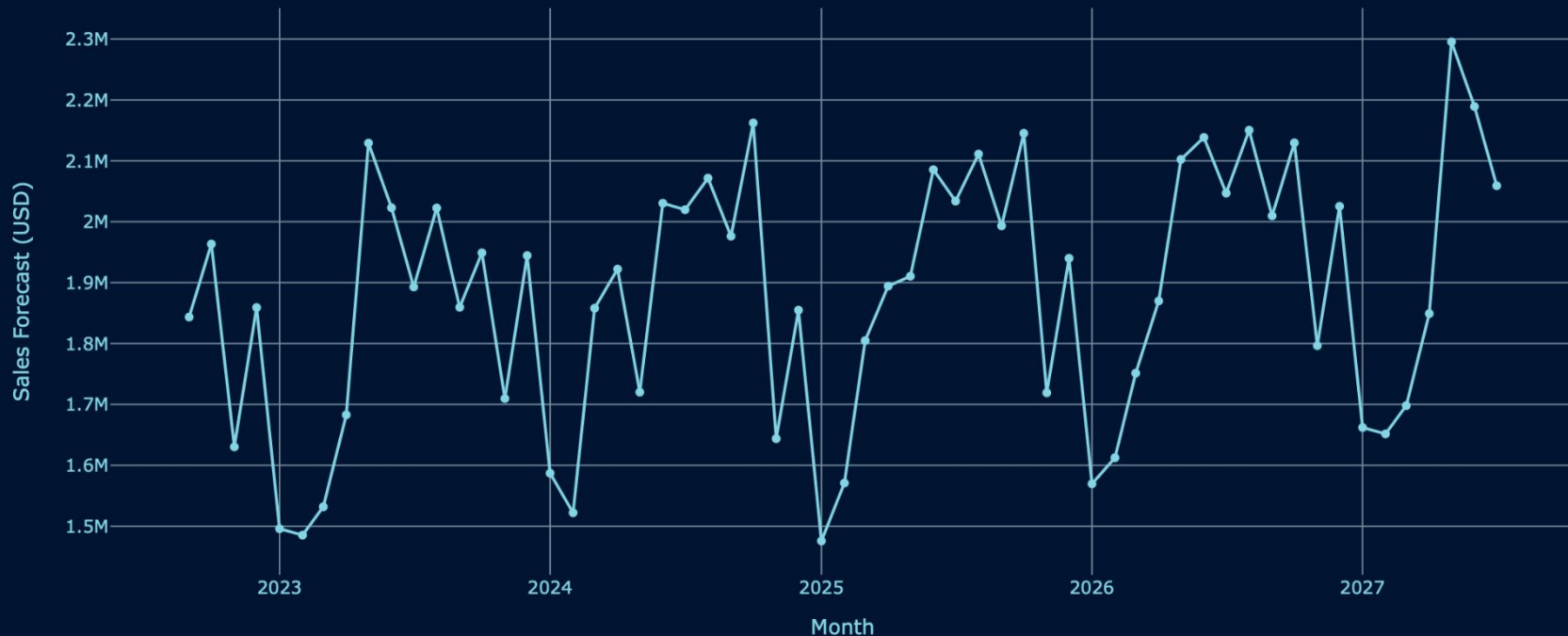
TESTING DATA

Polk County Vodka
Sales (2021)



Sales Forecasting with Facebook Prophet

Future Sales Forecast Polk County, Iowa



NEXT STEPS



FORECAST

Add FB Prophet forecasting to app



ALL LIQUORS

Include all products sold



API

Connect to API to automatically update data



FILTERS

Allow more user inputs to filter data, i.e. - by city or brand

THANKS!

Do you have any questions?
leah.j.nagy@gmail.com



Connect on LinkedIn:

<https://www.linkedin.com/in/leah-j-nagy/>

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