

Closeout Report

Price prediction model

Project Summary

- The price prediction model project was initiated to meet client's request to provide an algorithm to predict the next period prices that maximise the total firm's profit, provided that accurate predictions of market conditions and of your per-unit cost in the next period are known.

The project milestones achieved on completion of the project were,

- Exploratory Data Analysis and Pre-processing of given data
- Forecasting the models
- Model building - 6 models were trained with an accuracy of 98 to 100% for the sample data.

Methodology

- The project followed an agile methodology including kickoff meets, regular scrums and finally ending with a retrospective meeting post the client review.

Results

Performance Baseline:

	Planned	Actual	Notes
Actual Project Schedule vs Planned	Launch on Jan 19th	Launched on Jan 17th	We were able to launch the project two days prior as we had the project plan inclusive of time buffers to make revisions.
Actual Project Cost vs Planned	Staffing and compensation: 50\$	Staffing and compensation: 40\$	Overall, we nearly matched our budget
Planned Scope vs Delivered Scope	To train a model with highest accuracy of predicting market priced by maximising the total firms profit.	Trained 6 models with 98 to 100% accuracy for the given set of data	The team came up with an alternative approach which was not specified by the client so we had to sort those discrepancies

Key Accomplishments:

- Installed tablets at two restaurant locations and integrated tablets with POS system
- Added menus, coupons, branding, and additional content to tablets
- Negotiated with tablet vendor over timing
- Created a plan for training and Trained BOH and FOH
- Managed waitstaff expectations and concerns
- Created system for maintenance/locking
- Implemented system of surveying and measuring customer satisfaction
- Shorter wait times for tables, the average tablet checkout time as 1 minute/less
- Customers reporting tech issues each week were reduced to 5%
- Reduce table turn time by 30 minutes
- Reduce food waste by 25%

Lessons Learned

- Freelancers came up with alternative approach which was out of scope so convincing them to stick to project scope and client requirements were crucial
- Found out we weren't hitting our objective of clearly marked functions specified by the client, so we worked out on revising the model from the alternative approach provided by the team
- The commencement of the project was delayed due to national holidays and had to add additional staff to speed things up so backup team should be always ready.

Next Steps

- Follow-up and record client feedback
- Make code revisions if necessary
- Manage pay-out to the staff

Project Documentation Archive

[Project Proposal](#)