

Case Study

Technology Partner for a travel agency

December, 2020

Client

A US based travel agency.

The Challenge

Client has been in business in the New Orleans area since 2013 and has gained specialized knowledge on vacations to the Disneyland® Resort, Walt Disney World® Resort, Disney Cruise Line, Adventures by Disney® and Aulani, A Disney Resort & Spa. The elite EarMarked Platinum status level recognizes client's stellar sales performance in Disney Vacation Planning.

Project started in the last quarter of 2013 with Rakesh working as a freelance programmer. Later as the agency that hired Rakesh moved on, Rakesh started handling the client directly. Most of the initial work was fixing bugs. Many Google products were integrated together by a single script written in Google Apps Script (Google Spreadsheets, Google Calendar, Google Sites and Google Forms).

When JS Tigers was started this was one of the major client for JS Tigers. Over a period of the last 4 years we have added many new features, fixed bugs and did many enhancements to the existing Google Apps based system. Original System was designed and developed by James Ferreira, author of [Google Apps Script](#) by Oreilly.

We have also delivered a new custom web based solution built from scratch based on client requirements to manage their business almost completely end to end.

Google Workspace Support

1. System has a Google Spreadsheet for each Sales Agent in the company. Each Spreadsheet of Agent had a copy of the script. So updates were complex. To release one new feature or bug fix, we had to update code on each of Agent's Spreadsheet. We solved this problem by converting most of the functions in the Script to a common library and including this library in each Agent's Spreadsheet. This reduced time to update and release new features.
2. A new create quote feature was added using Google Sites. Users can select options such as resort name, quote template and enter price and other information to generate a quote for the customer. This quote was in the form of a web page on Google Sites.
3. A major bug in the way Google sites were accessed from Google Apps Script was handled. While accessing Google Sites pages from Google Apps Script, there was a limit of maximum 500 sub-pages. The challenge was however this restriction was not documented officially.
4. A custom search and reports features for Manager Spreadsheet.
5. Handle Payment requests submitted via [CognitoForms](#). Data submitted via CognitoForms is added to Google Spreadsheet and an email is sent to the Agent.
6. Manage templates script.
7. **This Week** feature that displays a list of events in Agent's Google Calendar in a sheet for easy summary like viewing and planning.

Web Development

Towards the start of 2018, the client eventually decided to go for a custom web application to manage her business. The application was expected to have features like quotes, trips, booking, client sites, users, reports, commission calculations among others. Development on the same was started in January 2018.

We have used MEAN stack (MongoDB, ExpressJS, Angular, Node.js) for development. Application backend is deployed on Google Cloud Platform, MongoDB Atlas is used for database and godaddy.com shared hosting is used to host the application frontend.

Challenges in new system development

Biggest challenge on the new system has been the delivery timeline. JS Tigers was a small 1-3 person operation when order for the new system was finalized. It was a challenge to scale up the operation and deliver the application in a reasonable time.

Client has been supportive and generous in this process but it has taken us more than 2.5 years to reach where the client wanted to reach with the new system.

More than 99% of reported bugs and issues have been resolved and the system is now ready to go live. We are now supporting the client to move from Google Spreadsheets to the new system.

Client Profile 2.0

Workspace / Clients / Add Client

Client

Information Tracking

Client Information

*Mandatory

First Name* Middle Name

Last Name* Nick Name

Gender* Address 1

Address 2 City

State Zip Code

Birth Date Anniversary Date

dd/mm/yyyy dd/mm/yyyy

Extra Email Campaigns

You will be able to add extensions once the client has been saved.

Contact Details

You will be able to add contact details once the client has been saved.

Additional Notes

You will be able to add client notes once the client has been saved.

Add Client

Client Profile 2.0

Workspace / Quotes

Quotes

Quote Number	Date Quoted	Agent	Lead Guest	Proposed Check In Date	Proposed Check Out Date	Quote Template	Status
Quote Number	dd/mm/yyyy	Agent	Search Lead Guest	dd/mm/yyyy	dd/mm/yyyy	Quote Template	All
11503-2009	09-30-20019	Michelle Couvillon	Nick Bryson	07-20-2020	07-26-2020	WDW 2020	Quoted
4248-1076	08-28-2917	Angelina Davini	Debra Kruse	09-10-2018	09-15-2018	WDW 2018	Quoted
8647-9153	12-14-2108	Tara Swaim	Doug Balash	10-21-2019	10-26-2019	WDW 2019	Quoted
7297-7802	07-14-2108	Tara Swaim	Keri Owen	06-10-2019	06-13-2019	WDW 2019	Quoted
7408-3026	07-27-2029	Candi Franzo	Jaime Deno	03-03-2019	03-07-2019	WDW 2019	Quoted
11029-9481	07-23-2029	Candi Franzo	Beth Turkin	11-23-2019	11-30-2019	WDW 2019	Quoted
6406-4749	05-05-2028	Sonia McCutcheon	Courtney Loveless	06-29-2018	07-03-2018	DCL	Quoted
5523-1844	02-05-2028	Lora Leigh Brown	Toni Kiddy	10-15-2018	10-19-2018	WDW 2018	Quoted
14042-6772	11-09-2021	Jodi Zullo	Christy Loring	08-25-2021	08-30-2021	WDW 2021	Quoted
14333-9100	12-31-2020	Erica Carpenter	Callie Kelly	03-24-2021	03-28-2021	WDW 2021	Quoted

Quotes

Client Profile 2.0

Workspace / Quotes / Create Quote

Create Quote

Quote Template*	Proposed Check In Date* dd/mm/yyyy	Proposed Check Out Date* dd/mm/yyyy	Date Quoted* 02/01/2021
Lead Guest*	No Email Added. Update	Agent : CupCake IT Team	
Resorts/Cruise +			
Other Details			
Gratuity	Park Tickets	Dining Plan	Travel Party
Special Notes	Vacation Protection Insurance	Memory Maker Photo Package	Magical Express Transfer
Quoted	Notes		

Create Quote

Client Profile 2.0

Workspace / Trips / Edit Trip

Trips

Regular Trip - Amber Bates - January 2021

Trip Information | Bookings | Flights & Activities | Invoice & Itinerary | Documents | Notes | Tasks

Trip Information

Other: Amanda Songer

Start Date*: 04/01/2021

End Date*: 09/01/2021

Active: Group trip?

21548687

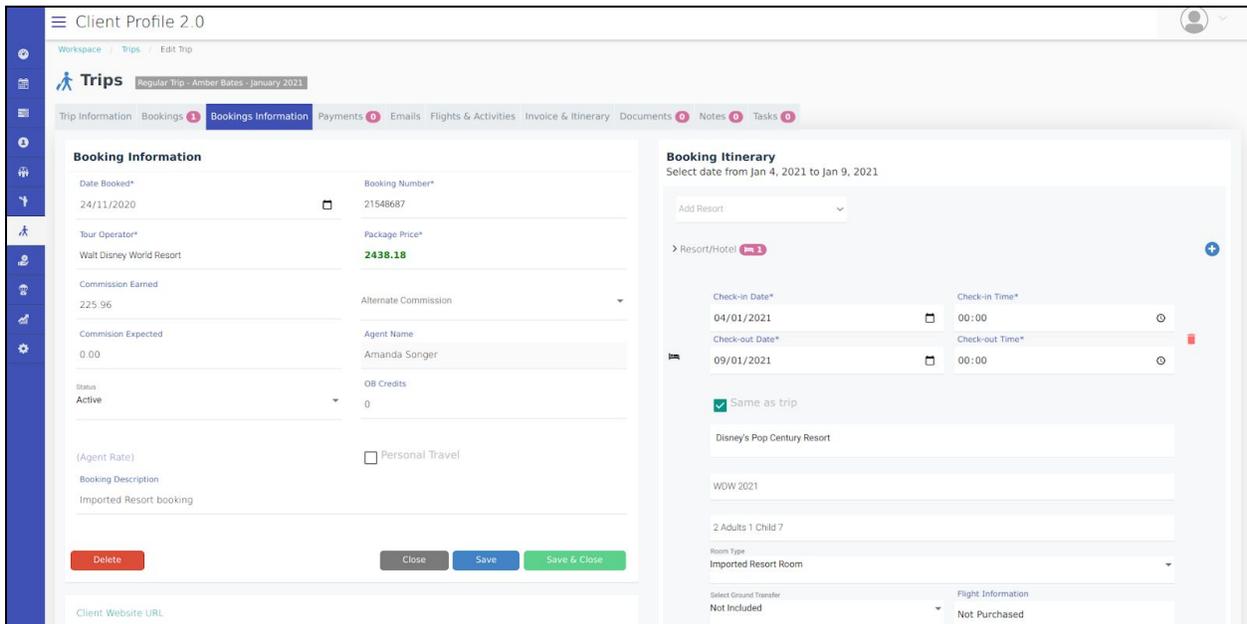
Close Save Save & Close

Travelers

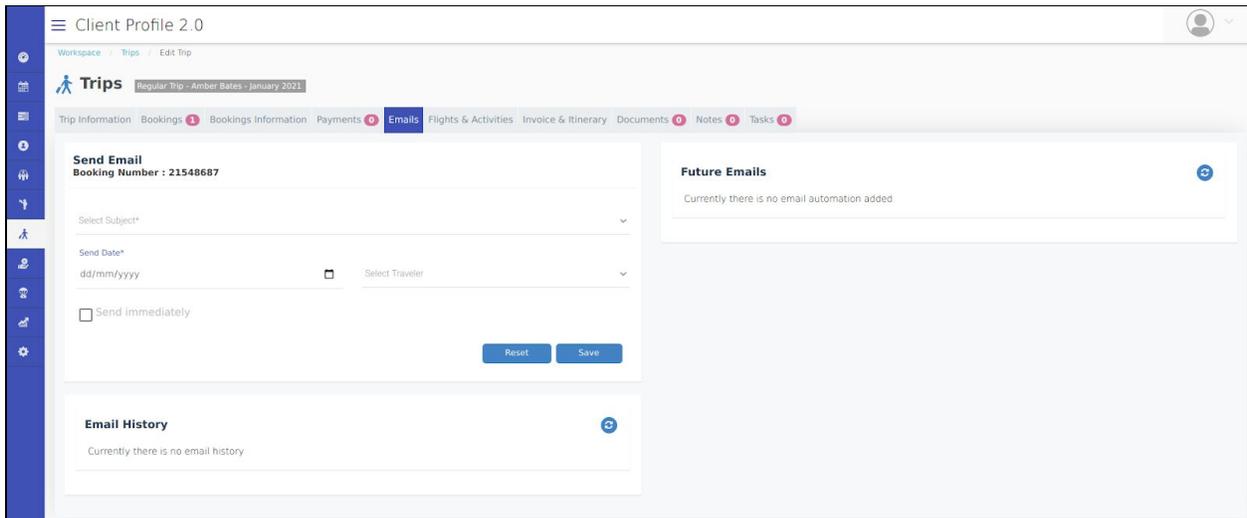
Amber Bates primary
(no birth date provided)
(no anniversary date provided)

+0 additional

Add Trip



Add Booking Information and Booking Itinerary



Setup Emails

The Value

We believe by partnering with JS Tigers, client has been able to run their day to day operations efficiently. We have provided support on Google Workspace and Google Apps Script using a very small team and limited budget.

For the new application we could have put more effort to reduce turnaround time and deliver a better quality application.