DATA ANALYTICS

More resume content for KEN BARLOW

Payment Reconciliation



- We transformed **eGov Strategies** from a humble two-person startup in a basement into a dynamic cross-functional team comprising nearly 20 developers, salespeople, and support staff. Just before getting acquired, we supported more than 700 local and state government clients, processing an impressive \$1.4 billion in online and in-person payments annually.
- In 2007, we began growing our online payment business (tax payments, city licenses and permits) at a faster rate than our constituent engagement business (website management and online services like pothole reporting and city email communications).

To support that effort, I accepted the responsibility of lead financial analyst for the **eGov Payments** business. In that, I became responsible for:

- Daily and monthly reconciliation efforts w/ payment clients (ranging in size from 400 to 4.7 million <Harris County TX>) – I was the ultimate contact when things went awry.
- Developing ETL processes and certifying records generated from our homebuilt financial reporting system against data obtained from our various payment processing partners (e-check and credit card processors)

Note: Part of my enthusiasm came from my most interesting class in grad school, a data analytics course taught by Wayne Winston (IU Bloomington professor).

- Developing processes (w/ checks and balances) and training documentation for support team and our clients to assist in the reconciliation process
- For our biggest client Harris County, TX (Houston), I developed a complex set of spreadsheets for Cadence Bank combining daily inputs from our system with daily deposit info from the bank. We then generated daily transaction reports and data files to Cadence so they could be uploaded into the county financial system.

The system went from a manual spreadsheet that took 50 minutes to produce to one streamlined via Pivot Tables & Lookups – taking less than 10.

Master's Program in Data Science

- Currently pursuing an IBM-sponsored program offered by Simplilearn that combines some online self-study, video lectures and end-of-session assessments and assignments.
 - Course topics include Tableau, advanced Excel, R Programming, Machine Learning and some Advanced AI topics
 - In addition to building my Tableau and Python skills through the class, I am creating a data analytics portfolio. View my Data Analytics page here: <u>https://tinyurl.com/KB-DataPage</u>
 - That profile links to my Tableau Public account where you can see VIZs that I have developed some at my own direction to build my skills

Completed Projects:

NFL DATA ANALYTICS FAN PAGE: Using Python and Tableau

- As an independent project, I decided to recreate a data analytics survey done by Seth Walder of ESPN Analytics using the public websites of NFL teams.
- His surveys in 2021 and 2023 provided a list of data analytics team members for each team. I decided to write a Python program to aggregate data from each of the NFL team websites, organize it by Football or Business Analytics, and provide an interface to view the data online via Tableau.
- You can view the resulting effort here: <u>https://public.tableau.com/app/profile/kenneth.barlow/viz/2024NFLAnalyticsFanReport/HomePage</u>

	Ec	otball Data Analytics Review		SEL	LECT SURVEY YEAR	WELCOME TO THE				
			alytics Review	2024 (nt	fl team pgs) 🔹	NFL ANALYTICS				
	ТМ	analyst	title			FAN P/	AGE.			
024	ARI	Charlie Adkins	Manager, Football Analytics &	Research		C	2027			
		Carter Tamblyn	Director, Football Systems			Survey Year:	2024			
		Heather Goldade	Systems Developer							
		Nick Tice	Football Analytics Assistant		ANALYST H	IISTORY				
		Joe Andruzzi	Football Analytics Assistant	Football Analytics Assistant						
	ATL	John Taormina	Football Data Analysis Season	al Assistant		IN 2023 SURVEY				
	BAL	Derrick Yam	Manager of Data and Decision	Science						
		James Oncea	Football Systems Developer							
		Terrell Parker	Scouting & Salary Cap Analyst							
		Sophie Cortese	Football Administration / Salar	ry Cap Analyst		Growth of NFL Analytics Team				
		Andrew Rogan	Coaching / Scouting Analyst			(2021-2	(2021-2024)			
	BUF	Luis Guilamo	Director of Analytics & Applica	tion Development						
		Dennis Lock	Senior Director of Football Res	search						
		Warren Zorilla	Senior Developer							
		Raymond Alonzo	Developer							
		Malcolm Charles	Data Analyst	Data Analyst						
		Evan Weiss	Football Analyst							
		Drew DiSanto	Sports Performance Data Ana	lyst						
	CAR	Bennie Contrino	Football Analytics Coordinator	T			167			
	CHI	Krithi Chandrakasan	Director of Football Analytics							
		Richard Hildebrand	Football Systems Engineer			113				
		Luke Rogers	Football Data Engineer			84				
		Ryan Hubley	Football Research Analyst			04				
_	CIN	Elizabeth Blackburn	Director of Strategy & Engage	ment						
		Sara Kurosu	Data Engineer							
		Sam Francis	Football Data Analyst							
		Dave Lapham	Bengals Analyst			2021 202	3 2024			
		Amun Tanveer	Financial Analyst			FILTER OUT E	XECUTIVES			
	0.5					(AII)				

PET FRIENDLY SOLUTIONS RESEARCH: Using Tableau, JavaScript, Excel & Yelp API

- One of the first projects that I completed was an analysis of NYC pet friendly hotels for a Dugger Dinners team member visiting NYC for a week:
 - I modified a JavaScript program that I wrote that pulls a bunch of pet friendly data from the Yelp API for our client hotels (list of nearby dog parks, pet friendly restaurants, pet services, etc.).
 - The new program identifies pet friendly hotels near where our team member is staying, with Rating, Price, Phone and Location data for each. I cut-andpaste data to Excel but can also pull data w/ Python.
 - I added a pet friendly rating (based on our experience) and uploaded the data into Tableau. Our team member now has several reports that she can use to prioritize hotels based on their location (walking distance or taxi distance). As she plans calls or visits, she can also understand which hotels higher-

Miles (group)	Hotel Name												
Near (less than 1/2 Mile)	Kimpton Hotel Theta(yelp) Margaritaville Resort Times Square (yelp) Hyatt Centric - Times Square Hampton Inn New York Times Square Residence Inn by Marriott New York Manhattan/Central Park (yelp) Pod Times Square Hotel (yelp) Pod Times Square Hotel (yelp) The Chatwal, a Luxury Collection Hotel, New York City(yelp) Courtyard by Marriott New York Manhattan/Central Park (yelp) The Algonquin Hotel Times Square, Autograph Collection(yelp) The Westin New York at Times Square (yelp) The Draper New York, Tapestry Collection by Hilton (yelp)									;		:	
	W New York - Times Square (yelp) Moxy NYC Times Square (yelp) Sheraton New York Times Square Hotel (yelp)			E E									
Close (1/2 Mile to 1 Mile)	Park Hyatt New York(yelp) Crowne Plaza HY36 Midtown Manhattan (yelp) The Bernic Hotel New York City, Tapestry Collection by Hilton (yelp) Courtyard by Marriott New York Manhattan/Times Square West (yelp) Moxy NYC Lower East Side JW Marriott Essex House New York(yelp) Homewood Suites by Hilton Midtown Manhattan Times Square-South Moxy NYC Chelsea(yelp) Martinique New York on Broadway, Curio Collection by Hilton(yelp) The Lexington Hotel, Autograph Collection (yelp) Le Meridien (yelp)									ł		•	
Taxi (1 Mile to 2 Miles)	Moxy NYC Downtown Hampton Inn Manhattan-Chelsea(yelp) Moxy NYC East Village(yelp)											1	
Uber (2 Miles to 5 Miles)	Hotel 50 Bowery(yelp) Moxy Brooklyn Williamsburg												
Far (More than 5 Miles)	Canopy by Hilton Jersey City Arts District		-										
		2.6 2	.8 3.0	3.2	3.4 3	.6 3.8	4.0	4.2	1	2	3	4	
				R	ating						Price		

rated and which ones are more expensive (the premiere hotels are better).

Business Data

- Developed financial models for the business, used to attract investors and ultimately for the sale of the business:
 - Multi-year P&L projections (w/ my business partner and our CFO)
 - Historic revenue and profitability trends (2007-2020) for the **eGov Payments** business aggregating data from our system, SQL databases & flat files.