MICHIGAN STATE UNIVERSITY Alpha Presentation Email Improvement Tool

The Capstone Experience

Team Amazon

Nafisa Ahmed Will Gamba Annika Karlstrom Jack Sleeman Byzjon Speights Michael Than

Department of Computer Science and Engineering Michigan State University

Fall 2023



From Students... ...to Professionals

Project Overview

- Goal: Improve quality of Amazon emails
- Compare new emails to pre-existing email templates
- Provide instant feedback on email objective, clarity, and empathy
- Provide email summary and possible duplicates

System Architecture



The Capstone Experience

Team Amazon Alpha Presentation

Home Page



Submit

Analysis Page

hazon		
Ema	il Improvement Tool	()
Email	Empathy: NEUTRAL	
Dear [Your Name],		
We are delighted to inform you that your recent request for additional capacity in US Oversize from October 1; 2022, to February 28, 2023, has been granted. This means that an extra 100 cubic feet of capacity will be added to your FBA capacity limit for the specified period. You will not be charged the reservation fee at this time; it will be billed at the end of the	Clarity: expert	
specified period. The fee may be reduced under the following circumstances: In accordance with our lowest reservation fee guarantee, if other requests are granted later at a lower reservation fee for the same storage type and period, we'll lower your fee to match it. You have	Summary	
the opportunity to offset up to 100% of the reservation fee by using the additional capacity to drive sales. You'll earn performance credits for every sale generated from using the extra space. To view your request and get more information, please visit Capacity Manager.	Possible Duplicates: 1	ř
Thank you for choosing Fulfillment by Amazon.		
Best regards, The Fulfillment by Amazon Team		

Category:

Analysis Page - Clarity

mazon		
	Email Improvement Tool	H
Email	Empathy: NEUTRAL	~
Dear [Your Name],		
We are delighted to inform you that your recent request for a capacity in US Oversize from October 1, 2022, to February 28, been granted, This means that an extra 100 cubic feet of capa added to your FBA capacity limit for the specified period. You charged the reservation fee at this time; it will be billed at the specified period. The fee may be reduced under the following	2023, has city will be will not be end of the 0.9549076557159424	~
circumstances: In accordance with our lowest reservation fee if other requests are granted later at a lower reservation fee fi same storage type and period, we'll lower your fee to match it the opportunity to offset up to 100% of the reservation fee by additional capacity to drive sales. You'll earn performance cre every sale generated from using the extra space. To view your and get more information, please visit Capacity Manager.	vou have using the dis for Summary	~
Thank you for choosing Fulfillment by Amazon.	Possible Duplicates: 1	
Best regards, The Fulfillment by Amazon Team		

Category:

Analysis Page - Summary

React App	× +		*	1	٥	×
€ → C a d	lev-1312.d1zfir3v33eojt.amplifyapp.com/inialysis		\$		cogreto	
amazon						ľ
		Email Improvement Tool			Home	e.

Email

Dear (Your Name),

We are delighted to inform you that your recent request for additional capacity in US Oversize from October 1, 2022, to February 28, 2023, has been granted. This means that an extra 100 cubic feet of capacity will be added to your FBA capacity limit for the specified period. You will not be charged the reservation fee at this time; it will be billed at the end of the specified period. The fee may be reduced under the following circumstances: In accordance with our lowest reservation fee guarantee, if other requests are granted later at a lower reservation fee for the same storage type and period, we'll lower your fee to match it. You have the opportunity to offset up to 100% of the reservation fee by using the additional capacity to drive sales. You'll earn performance credits for every sale generated from using the extra space. To view your request and get more information, please visit Capacity Manager.

Thank you for choosing Fulfillment by Amazon.

Best regards, The Fulfillment by Amazon Team

Empathy: NEUTRAL ~ Clarity: expert ~ Summary ~ An extra 100 cubic feet of capacity will be added to your FBA capacity limit for the specified period. You have the expecting the offeet up to 100% of the resentation fee bu using the

period . You have the opportunity to offset up to 100% of the reservation fee by using the additional capacity to drive sales . You'll earn performance credits for every sale generated from using the extra space .

Possible Duplicates: 1

Category:



Team Amazon Alpha Presentation

Analysis Page - Duplicates

Read App X +		v − 0
⇒ C a dev4312 d1zfr3v33eojt amplifyapp.com/ analysis		🖈 🗖 🙆 ticognito
mazon		
Ema	ail Improvement Tool	Home
Email	Empathy: NEUTRAL	¥1
Dear [Your Name], We are delighted to inform you that your recent request for additional capacity in US Oversize from October 1, 2022, to February 28, 2023, has been granted. This means that an extra 100 cubic feet of capacity will be added to your FBA capacity limit for the specified period. You will not be charged the reservation fee at this time; it will be billed at the end of the specified period. The fee may be reduced under the following circumstances: In accordance with our lowest reservation fee guarantee, if other requests are granted later at a lower reservation fee for the	Clarity: expert	
	Summary	×
same storage type and period, we'll lower your fee to match it. You have the opportunity to offset up to 100% of the reservation fee by using the additional capacity to drive sales. You'll earn performance credits for every sale generated from using the extra space. To view your request and get more information, please visit Capacity Manager.	Possible Duplicates: 1	~
Thank you for choosing Fulfillment by Amazon.		-
Best regards, The Fulfiliment by Amazon Team	Hella, Congratulational Your Impuept for more capacity US Diversize form Dct 1, 3002 in US Diversize form Dct 1, 3002 in Sink 28, 2003 has been granted. Status of request Stratege type Period Requestined volume (optic feet) Submitted maximum insemables for oper cubic food) Current reservation fee (per cobic locit/Granted Diversize Dct 1, 2002 to Fe/5, 22, 2003 100 200	

Category:



e extra 100 cubic teet of city that you requirited will be id to your FBA capacity limit fo

Analysis Page – Zoomed In

Summary

An extra 100 cubic feet of capacity will be added to your FBA capacity limit for the specified period . You have the opportunity to offset up to 100% of the reservation fee by using the additional capacity to drive sales . You'll earn performance credits for every sale generated from using the extra space .

Possible Duplicates: 1

Hello, Congratulations! Your request for more capacity in US Oversize from Oct 1, 2022 to Feb 28, 2023 has been granted. Status of request Storage type Period Requested volume (cubic feet) Submitted maximum reservation fee (per cubic foot) Current reservation fee (per cubic foot)Granted Oversize Oct 1, 2022 to Feb 28, 2023 100 200 99The extra 100 cubic feet of capacity that you requested will be added to your FBA capacity limit for the period. To view your request, go ^

~

The Capstone Experience

What's left to do?

- Implement Categorization
 - Train ML model on email data received this week
 - Filter for duplicate detection
- Improve Feature Functionality
 - Work with Amazon ML experts
 - Expand feedback
- Scalability & Security
 - Efficiency
 - Authorization
- Improve UI
- Assess Stretch Goals

Questions?

