WeCasa

Notifications DAR Report

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Github Repository:

https://github.com/githelsui/WeCasa

Notifications DAR Version Table

Version	Description	Date
1.0	Initial DAR - Use Cases - Technologies, Metrics, Evaluation	12/05/2022
1.1	Content Improvements - Divided DAR into separate reports based on each technology - Reduced weights - Added more quantifiable metrics based on BRD needs - Removed approved technologies (web hosting, database engine) - Added technologies for app-specific features - Calendar API	12/07/2022

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Business Needs & Metrics

Cost: WeCasa wants to reduce our technology costs to $0. So any notification service that requires an upfront cost is not ideal, and will be scored as a 0. Due to our small user base for the next 6 months, notification services that provide a set quantity of free emails per day are also ideal.
Security: Security is a primary concern for the API's of our application. Security concerns regarding these APIs include phishing attacks, DoS attacks, stolen credentials, and more. The score in this category will be based on whether the notification service provides protection against all of these concerns.
Email Capacity: WeCasa will be utilizing the notification service for our Nudging and Reminders features, requiring our technology costs to be reduced towards $0.
Sending Confirmation: For logging purposes, we would like to be able to confirm the success of notifications being sent to users. Scores for this category will be based on whether or not the service supports confirmation emails (0 if no, 1 if yes).
Email address validation: The notification service must include methods for built-in email address validation to ensure unnecessary emails are not being sent to reduce our costs.
Efficiency: The notification service must include various optimization tools to increase the speed of emails being sent to ensure WeCasa is a dependable application for our target audience.

Technology Comparison

Scale: 1-1.75, based on how influential that metric is in our decision making. Higher numbers indicate more importance.
Scores: 0-1, based on how well they match our desired use case.

Metrics	SendGrid	Amazon SNS	SendInBlue
Cost - **1.5**	100 free emails per day forever, $90 per month plan to upgrade - **0.5**	1,000 free email deliveries, $0.10 for every subsequent batch of 1,000 emails, pay per use - **1**	300 free emails per day, $24 per month to upgrade to 20,000 emails per month - **1**
Security - **1.75**	Emails are delivered via a TLS-encrypted connection - **1.5**	Delivers using HTTPS - **0.75**	Encrypted data transmission using SSL/https/VPN technology - **1**

Email capacity - **1.5**	For $0, we get 100 free emails per day. Or 30,000 emails a month. - **1**	For $0, we get 1,000 notifications. - **0.5**	For $0, we get 300 emails a day. Or 90,000 emails a month. - **1.5**
Sending confirmation - **1**	Ability to send confirmation emails with Verify API (*Send email*, n.d.) - **1**	Amazon SNS will send a subscription confirmation message given the provided endpoint (Treichler & Hardmeier, 2005). - **1**	Ability to set up automatic confirmation emails (*Send an automatic*, n.d.) - **1**
Email address validation - **1**	Email Address Validation API available within SendGrid (*Email Address Validation*, n.d.) - **1**	No email validation - **0**	Requires third-party integration with Mailfloss or Emailable. No ability within SendInBlue API (*Sendinblue email verification*, n.d.) - **0**
Efficiency - **1**	Includes delivery optimization tools and approximately takes and can take either 0 to 603.03 seconds to deliver a message (Rideout, 2020) - **1**	Approximately takes 0.78 to 2.88 seconds to deliver for each message (Rideout, 2020) - **0.5**	Approximately takes a few seconds to deliver each message (Rideout, 2020) - **0.5**
Total	**7.875**	**5.0625**	**7**

Recommendation

SendGrid

Glossary

Term	Definition
API	Application Programming Interface
SNS	Simple Notification Service
SSL	Secure Sockets Layer
VPN	Virtual Private Network

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