

Case Study #1: Telegram Bot Service

The Client: An internationally known media personality, with a large channel and discussion group on the Telegram platform.

The Problem: The Telegram platform requires users to self-moderate their groups to a large extent, compared to other social media platforms. Spam and other undesired content can quickly become prohibitive for large public groups. For an international celebrity with fans in many time zones, this effectively meant having a team of volunteers, in different time zones, who were active in the group and were trusted with power to moderate the group.

The client's intention was to use a Telegram Bot to assist with this moderation, but he was not able to find a bot with the right functions and features to be effective for his needs; each commercially available bot he tried brought new pain points, making it an ineffective solution. The most significant pain point was the inability to delegate different powers to different volunteers, based on escalating levels of trust; this defect limited the number of volunteers they could work with.

The Solution: After going through strategic discovery with the client, Easy Day LLC proposed to develop a private, custom Bot Service, with a sophisticated feature set tailored to the client's needs. The Bot would support a tiered delegation of powers, which would allow the group's administrators to employ a much larger group of volunteers to assist with their moderation efforts. The Bot would also include spam filtering tools, along with other unique features to further enrich the client's use case.

The Result: The sophisticated moderation tools provided by the Bot resulted in a greatly improved moderation experience in the group, and allowed the administrators to grow the group to levels which previously had been prohibited by moderation challenges. The various enrichment features provided fun and excitement for the group's members, boosting activity and retention.

The Bot has operated continuously as a SaaS, for 5+ years, and is now used by a community of groups, via a licensing feature which allows the client to sell access to others. The Bot Service has performed over 5 million API exchanges with the Telegram Service, lifetime-to-date.

The Tech: A Telegram Bot account requires a corresponding Web Service in order to function. Telegram communicates with the Bot Service via Webhooks, and the Bot Service communicates back via REST API. This particular Bot Service resides on a Virtual Private Server. The back-end CMS comprises a relational database (MySQL) and Easy Day LLC's own proprietary, lightweight CRUD framework, using object-oriented PHP with PDO for database operations. Incoming Webhooks and outgoing API requests are processed by PHP scripts. The Bot includes a simple, browser-based UX using PHP, HTML and JavaScript, and secure login-via-Telegram. As this is a busy service requiring fast responses, performance optimization was the strategic priority in development.