Final Milestone Close-Out Report - Telegram Bots

Project Link: https://milestones.projectcatalyst.io/projects/1300185
Project Number: 1300185
Fund & Category: F13: Cardano Use Cases: Concept
Project Manager: Paul
Date Project Started: Apr 2025
Date Project Completed: Nov 2025

Challenge KPIs

Challenge KPI	How It Was Addressed
Prototype a novel Cardano-based product, service, or business model	Delivered a fully working MVP with three Telegram bots for real-time interaction with Cardano on-chain data
Bring utility and on-chain interaction to Cardano	Enabled wallet monitoring, token price alerting, and whale tracking — all powered by live Cardano mainnet data
Explore feasibility of a low-friction UX	Telegram bots operate without user accounts, wallets, or browser interaction — reducing barriers to on-chain visibility
Demonstrate potential for adoption or expansion	Architecture supports public use, group sharing, and personal tracking — designed for scalability and expansion
Design and test user interaction models for first product concepts	Built and validated a command-based system for alerts, subscriptions, and queries using /price, /watchaddress, /whalealert, and more

Project KPIs

Project KPI	How It Was Addressed
MVP Telegram bots deployed	Built 3 distinct bots: (1) Public alerts bot, (2) Personal tracking bot, (3) Group utility bot
Wallet address alerts working	/watchaddress command lets users monitor any Cardano address for incoming/outgoing transactions including dex swaps
Token whale tracking and price alerts	/whalealert and /pricealert commands notify users of large trades or custom price movement thresholds
Price query available via Telegram	/price and /p commands return live price info for any token in private chats or group chats
Daily general alerts posted publicly	Public channel posts daily top 10 token stats and top 5 whale trades with automated formatting as well as large swaps on top 10 tokens or big price changes
Alert speed: < 60s delivery	All alerts tested and confirmed to be delivered within 30 seconds of detection by the indexer
Evidence provided in video & PDF	Milestone 3 Report + Final Demo Video submitted

Key Achievements

- Built a full MVP of a real-time, indexer-powered alert system using Telegram - a platform already widely adopted in Cardano circles.
- Deployed three user-ready bots with zero onboarding friction:
  - @cardanoalerts – public channel with whale trades, price spikes, and daily token stats
  - @cardano_sentinel_bot – personal bot to track wallets, token price alerts, and whale trades
  - Group-enabled version – allows querying /price in any Telegram group
- Delivered on every milestone submitted
- Created a scalable backend using a custom Cardano indexer and Redis queue system
- Validated user commands in real-time via test cases and public demonstration

Next Steps

With the MVP now deployed and publicly available, we are actively exploring ways to expand and improve this toolset. Our next priorities include:

- 🔍 **Expanding Stat Coverage**
  Adding deeper DeFi insights and analytics.

- 📲 **Enhanced Notifications**
  Giving users more control over alert triggers.

- 👀 **User Experience Improvements**
  Smoother onboarding, clearer command help, and integration of visuals (charts, summaries) into alerts.

- 🌍 **Ecosystem Integration**
  Exploring collaboration with Cardano DEXs, wallets, and analytics tools to embed or extend bot functionality.

Final Thoughts/Comments

This project has demonstrated that powerful Cardano analytics and alerts can be delivered in a simple, accessible way through Telegram. We've successfully taken a complex backend infrastructure and turned it into a set of user-friendly tools that anyone in the community can use with no setup required.

We're proud of what was achieved during this funding round and appreciate the support from Catalyst and the Cardano community. We look forward to building on this foundation and exploring how to bring even more real-time utility to Cardano users.

Links to Supporting Materials

- 📄 Milestone 3 Report (PDF)
- 🤖 Telegram Alerts Channel: @cardanoalerts
- 👤 Telegram Bot (DM): @cardano_sentinel_bot
- 💬 Telegram Bot (Group mode): Add same bot to any group