

Telegram Bots: Exploring the Landscape

August 2023

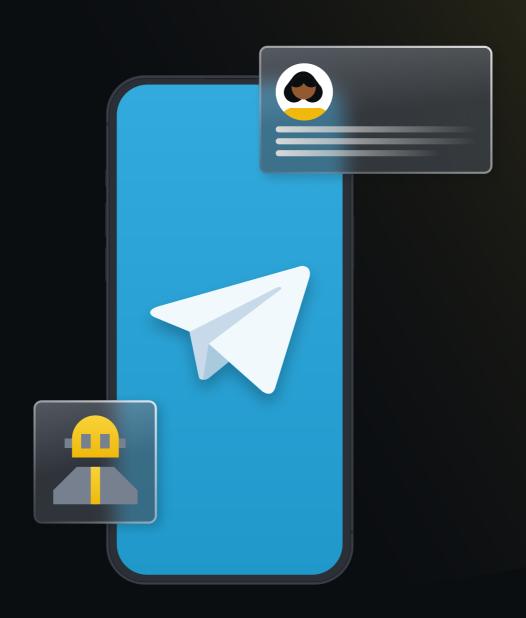


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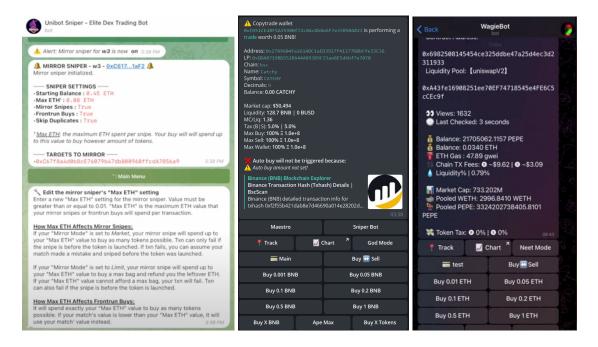
Key Takeaways

- Telegram bots have gained significant attention in recent weeks as surging token prices and coverage by the media and key opinion leaders drive interest to the space.
- By offering users a range of functions such as trading, sniping, airdrop farming, and others, Telegram bots enable crypto users to execute crypto activities easily via their mobile devices in a user-friendly manner.
- ◆ The cumulative lifetime volume of trades facilitated on Telegram bots has exceeded US\$190M, with a record high of US\$10M in daily trading volume recorded on July 23, 2023.
- The revenue model of Telegram bots involves charging users a transaction fee and, in some cases, a purchase or sales "tax" for transactions involving a bot's native token. Total revenue captured by Telegram bots has surpassed US\$28.7M.
- It is too early to gauge organic demand, as much of the current activity has been driven by skyrocketing token prices. Nonetheless, we will likely see continued developments, at least in the near future, as projects compete for market share.
- Users should conduct their own due diligence before interacting with any Telegram bot. This report does not constitute an endorsement or recommendation of Telegram bots by Binance Research.

Overview

With surging token prices and considerable discussion on Crypto Twitter (or rather, "X"), Telegram bots have emerged as a new narrative among the crypto community. By allowing users to execute a range of functions as easily as sending messages on Telegram, these bots have introduced a user-friendly alternative to existing decentralized finance ("DeFi") front-end applications.

Figure 1: Screenshots of user interfaces for Telegram bots



Source: Telegram Bots' Websites

How it generally works

- Step 1: Users enter a command in the channel of the Telegram bot.
- Step 2: A main menu is generated in which users can choose to set up a new wallet or connect an existing wallet.
- Step 3: Once the wallet is set up, users can fund the wallet with the address provided.
- Step 4: Users are prompted with an additional menu in which they can execute different types of transactions.

Ecosystem and Features

Common features include:

- Trading: Buy and sell tokens directly through Telegram.
- Sniping: Automatically buy a token when it's listed.
- Copy trading: Emulate the trades of other traders.
- ◆ Airdrop farming: Automatically execute a series of actions to help increase chances of receiving airdrops.
- Others: Bots could provide other features, such as analytics or a wallet tracker.

Figure 2: Examples of Telegram bots and features offered

		Trading	Sniping	Copy Trading	Airdrop Farming	Others
•	Unibot	V	V	V		
	Maestro	V	V	V		V
MENFREE	MEVFree					V
<u></u>	ChainGPT					V
	Wagiebot	V	V	V		V
0	Collab.Land					V
<u></u>	LootBot	V			V	V
	Mizar	V	V	V		
146	JDB					V
¥	Uniwhales					V

Source: Telegram Bots' Websites, Binance Research

Note that the mention of specific projects does not constitute an endorsement or recommendation by Binance, and users should conduct thorough due diligence.

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Telegram Bots Landscape

With the proliferation of Telegram bots, crypto users have access to an alternative medium to execute crypto activities via their mobile devices. This may appeal to non-sophisticated DeFi users, where existing front ends are generally more clunky and could require more steps.

Additionally, proponents of Telegram bots argue that they could potentially usher in new users to crypto by increasing accessibility and ease of use. Today, Telegram reportedly has over 800M monthly active users, representing a huge market for the potential expansion of crypto.

1,000.0 800.0 700.0 750.0 Aonthly Active Users (M) 500.0 500.0 400.0 200.0 180.0 250.0 100.0 60.0 50.0 35.0 0.0 Mar-14 Dec-14 Sep-15 Feb-16 Dec-17 Mar-18 Apr-20 Apr-22 Nov-22 Jul-23

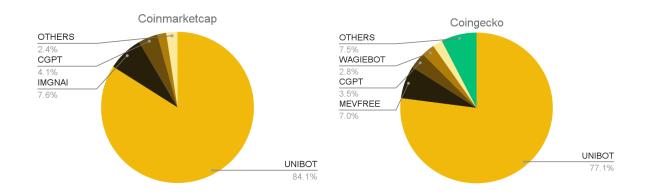
Figure 3: Telegram has 800 million monthly active users

Source: Statista, Telegram

Interest in Telegram bots has also surged in recent weeks, propelled by soaring token prices and coverage by the media and key opinion leaders. As of the time of writing, the market capitalization of bot-related tokens is over US\$150M, with numerous tokens having experienced multifold growth in a short period of time⁽¹⁾.

A key contributor has been the UNIBOT token, which represents more than 77% of the market based on market capitalization. Using Unibot as a proxy for the sector, interest, as represented by Google search interest, has also risen significantly.

Figure 4: The UNIBOT token has the largest share by market capitalization



Source: Coinmarketcap, Coingecko, Binance Research, as of Aug 2, 2023

Figure 5: Google search interest for Unibot spiked in the latter part of July

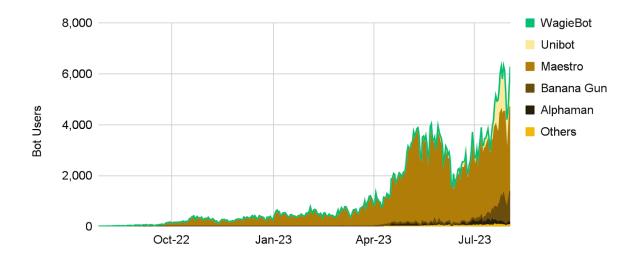


Source: Google, as of Aug 1, 2023



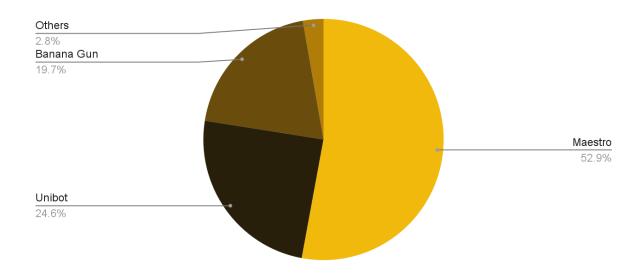
User metrics of Telegram bots hit a record high in July, with over 6,000 daily unique users. As one of the pioneers in the space, Maestro holds the lead with around 2-3K daily active users. Unibot is catching up and has narrowed the gap significantly in recent weeks; daily active users have more than quadrupled from around 400 to a high of 1.7K within a span of two weeks in July.

Figure 6: Number of daily active users exceeded 6K at its peak



Source: Dune Analytics (@whale_hunter), Binance Research, as of Aug 2, 2023 "Others" include Bolt, Ready Swap, and Swipe

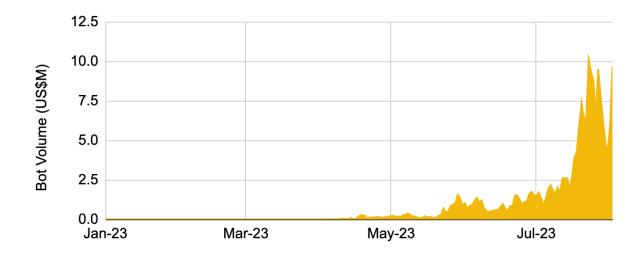
Figure 7: Maestro and Unibot have the greatest share of users



Source: Dune Analytics (@whale_hunter), Binance Research, as of Aug 2, 2023 "Others" include Alphaman, Bolt, Ready Swap, Swipe, and WagieBot

Overall, adoption of Telegram bots has picked up as users test out the features they offer. Daily trading volume on bots reached a record high and exceeded US\$10M on July 23, 2023. The cumulative lifetime trading volume has also surpassed US\$190M. Note that the actual volume is likely higher, as not all data is readily available.

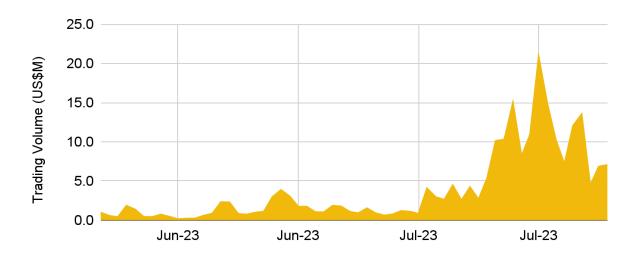
Figure 8: Daily trading volume on Telegram bots exceeded US\$10M in late July



Source: Dune Analytics (@whale_hunter), Binance Research, as of Aug 2, 2023 Coverage: Alphaman, Banana Gun, Ready Swap, and Unibot

The trading activity of tokens has the ability to influence community engagement, especially for new narratives. Rising token prices and volumes attract eyeballs and discussions, and vice versa. While still elevated, we have noticed that the slowdown in trading volume of the bots' native tokens in recent days (Figure 9) has coincided with the general decline in bot users and bot volumes, as shown in Figures 6 and 8, respectively.

Figure 9: Token volumes of Telegram bots on DEXes



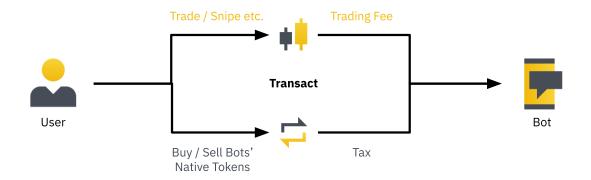
Source: Dune Analytics (@tk-research), Binance Research, as of Aug 2, 2023 Coverage: 0XS, ALFA, ALLIN, BOLT, BS, COLLAB, DUNG, FIRE, FRENS, GENIE, LOOT, MOETA, NEOBOT, TKB, UNIBOT, WAGIEBOT

Regardless, considering the nascency of the sector and the volatility associated with new narratives, it is too early to tell if recent data points suggest a trend reversal or merely represent a blip before activity rallies again.

Protocol Revenue

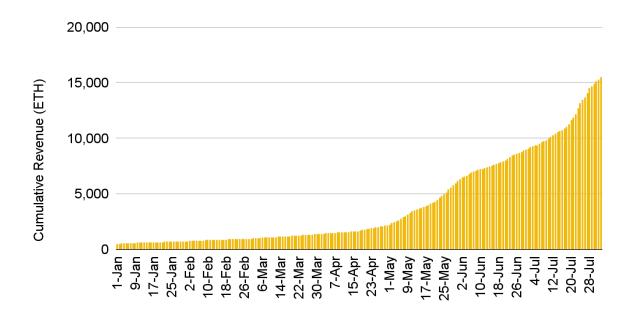
Notably, Telegram bots have been effective in translating adoption into revenue for their respective protocols. This is generally achieved by charging users a fee for transactions executed through the bot. Another slightly controversial fee model employed by some is to charge a purchase or sales "tax" for every buy or sell transaction involving a bot's native token.

Figure 10: Common revenue streams include trading fee and purchase or sales tax



In total, Telegram bots have collected over 15.5K ETH (around US\$28.7M) in lifetime revenue, based on publicly available sources.

Figure 11: Telegram bots have collected more than 15.5K ETH in revenue



Source: Dune Analytics (@whale_hunter), Binance Research, as of Aug 2, 2023 Coverage: Alphaman, ASAP, Banana Gun, Bolt, Maestro, Ready Swap, Scarab, Swipe, Unibot, WagieBot It is worth highlighting that not all revenue pertains to actual trading revenue collected by the bots. For instance, Unibot has collected a total of 4.3K ETH (around US\$8.0M), of which around 86% pertains to purchase or sales tax rather than trading revenue⁽²⁾.

Maestro currently leads the pack in terms of cumulative revenue collected, given that it is the first mover in the space (having launched in July 2022). Additionally, its relatively high daily active user count of around 2-3K has allowed Maestro to rake in consistent trading revenue. The trading revenue is derived from a 1% transaction fee charged by Maestro for every successful buy or sell order through the app.

10,000 9,235 7,500 Cumulative Revenue (ETH) 5,000 4,323 2,500 626 468 223 167 158 154 127 42 0 Maestro Unibot Wagie Scarab Bolt Alphaman Swipe Banana Gun ASAP Ready Swap

Figure 12: Maestro leads the pack in terms of collected revenue

Source: Dune Analytics (@whale_hunter), Binance Research, as of Jul 30, 2023

Outlook and Risks

The rise of Telegram bots has introduced an alternative medium for crypto trading. By offering a smoother user experience and increased accessibility compared to DeFi front ends, Telegram bots could potentially carve out a niche in the crypto ecosystem for a certain set of users.

At the current stage, it is still too early to gauge organic demand given that much of the current activity has been propped up by skyrocketing token prices. Nonetheless, the space has definitely heated up, and we will likely see further developments as bots compete for market share.

Examples of ongoing and potential developments

- Expansion to other mediums: Numerous bots have expanded beyond Telegram to other mediums such as Discord. This enables them to reach a greater number of users and provides another venue to execute transactions.
- Increase product suite: While some bots may choose to specialize in a single field (e.g., Sniping), our guess is that more will try to develop new features to cover more ground and position themselves as a one-stop shop. Users need to only go to one bot to execute a myriad of different transactions.
- Multi-chain expansions: We have observed bots going multi-chain beyond just the Ethereum blockchain. This enables them to provide users with the ability to trade across different blockchains.
- Price competition: Fees for most Telegram bots are currently not the cheapest.
 When the sector matures and numerous established players compete with minimal product differentiation, lower fees could be used as a way to attract users.

Risks

It is important to recognize that interacting with Telegram bots is not without risks. Considering the nascency of the sector, it is absolutely essential for users to be aware of them and to conduct thorough due diligence before interacting with a bot. Examples of risks include:

Security of assets: Bots have different setups but generally allow users to either
create a dedicated wallet or connect an existing wallet. In both cases, the bots will
have access to the private keys, which could be a risk. As the old adage goes, "not
your keys, not your crypto."

◆ Smart contract risks: Considering how bots operate, interaction with smart contracts is inevitable. While not foolproof, projects that have undergone rigorous audits would allow developers to identify and resolve critical issues.

Given the above-mentioned examples of risks, bots may not be suitable for everyone. Nonetheless, users may be able to mitigate risks by (1) trading in smaller sizes; (2) keeping minimal funds on the wallet; and (3) creating a new wallet instead of using your main wallet to interact with bots. These risk mitigation techniques are only examples - they should not be relied on as financial advice. Users interacting with bots should conduct their own research and due diligence.

Closing Thoughts

Telegram bots have seen surging interest and usage in recent weeks. By offering users a relatively seamless way to execute transactions, bots have the potential to carve out their own niche in the crypto ecosystem. Alongside increasing adoption, Telegram bots have also been effective in accruing revenue, leading to discussions about them providing a <u>real yield</u> to token holders.

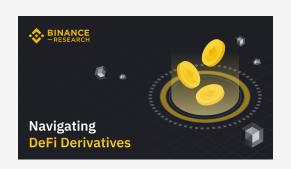
Nonetheless, it is important to understand that not all bots are the same; a large proportion of revenue generated by some bots may be from sales or purchase tax on their native token transactions rather than bot trading revenue. As such, consistent revenue growth for these bots is predicated on the continued strong trading activity of their native tokens.

At the current stage, it is too early to tell if Telegram bots will be able to sustain users' interest, but ongoing developments by projects are a welcome initiative. We would be keen to watch how the space develops going forward, especially in mitigating some of the risks involved with bots and innovating helpful new features for users.

References

- 1. https://www.coingecko.com/en/categories/telegram-bots
- 2. https://dune.com/whale_hunter/unibot-revenue

New Binance Research Reports



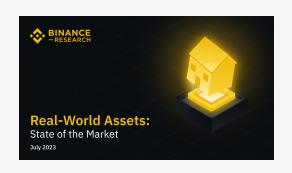
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A review of the real-world assets market



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