

Survey Results: Wallet Add-Ons

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1. Introduction

Cryptocurrency wallets, or wallets in short, allows users to send or receive cryptocurrencies as well as interacting with Dapps and therefore, cryptocurrency wallets is one of the most important tools that all cryptocurrency users will use. However, there are a few limitations to cryptocurrency wallets. Firstly, wallets lack extra functionality to perform more complex tasks that may not be related to cryptocurrencies at all. Secondly, if all of the extra functionalities were to be built into the wallet, the wallet will experience bloat over time, causing the wallet to consume more resources in the process. Wallet add-ons could be the solution the mentioned problems. However, what do people have to say about wallet add-ons? Do the majority welcome the idea of wallet add-ons? And how does the general idea of wallet add-ons look like?

2. Browser Add-Ons

Browser add-ons gives browsers extra functionality that users can benefit from. For example, “uBlock Origin”, a popular browser add-on that blocks advertisements and other elements that are undesirable when surfing the web for browsers that do not natively support such functionality, is an example of an advantage of what add-ons could do when added to a browser like Firefox.

Another advantage to including add-ons in browsers would be to customize the user experience of the browser, changing the looks according to the liking of the user, enhancing the overall user experience through the use of custom themes build by others.

However, using add-ons in browsers carries some risks. For example, some add-ons were developed such that unsuspecting users thought that the add-on was a legitimate add-on. Upon closer inspection, the add-on seemed to have other functionalities that is malicious. Therefore, users should be careful when installing add-ons by ensuring that they are installing reputable add-ons from an actual developer, on sites that users know that they will certainly get the right add-ons to reduce the likelihood that users will come across a malicious add-on and install them by accident.

3. Wallet Add-Ons

Wallet add-ons, like browser add-ons, should give users benefits such as enhancing user experience or to add functionalities that the wallet does not natively support.

Wallets should be able to send and receive cryptocurrencies as a basic functionality.

However, users who use these wallets would want to customize the looks of the interface of their wallets or use password managers that may not be provided by all wallets should be able to access such features with the help of wallet add-ons by allowing developers to interface with the wallet with the use of Application Programmable Interface, or APIs.

To ensure the security of wallets while using add-ons, wallet APIs may include restrictions to protect the wallet user in the event of a malicious add-on attempting to execute tasks beyond its intended functionality.

4. Survey Objectives

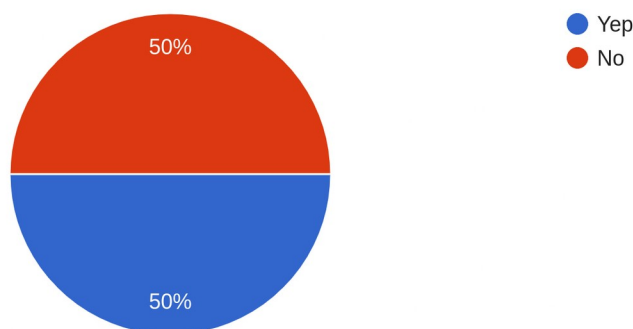
A survey was conducted over a period of 14 days to understand what Algorand users would think of having add-ons in wallets. There were a total of ten questions, with five multiple choice questions that are compulsory to answer.

5. Survey Results

a. “Do you use browser add-ons?”

Do you use browser add-ons?

4 responses

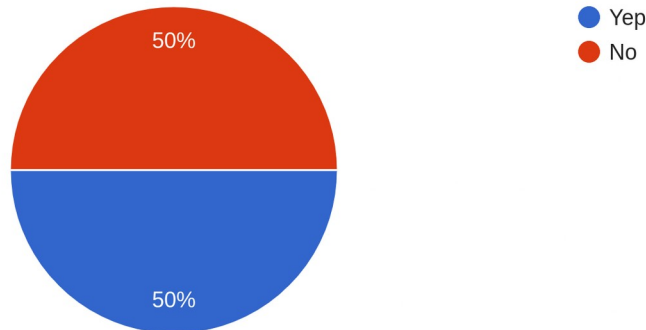


This question would indicate how many of the survey participants are familiar with using browser add-ons. According to the survey, two out of the four respondents were familiar with browser add-ons. This could mean that wallet add-ons should follow the way that the browser add-ons were designed.

b. “Have you developed browser add-ons before?”

Have you developed browser add-ons before?

4 responses



This question indicates how many of the respondents were familiar with developing add-ons for browsers. This question is useful when designing APIs for developers who are keen on developing add-ons for wallets by providing familiar ways when interfacing with the wallet. Two out of the four respondents agreed that they had developed browser add-ons before.

c. “What do you like about browser add-ons (If you answered "Yep" in Question 1)?”

What do you like about browser add-ons (If you answered "Yep" in Question 1)?

3 responses

I dont like them because its browser specific.

offer functionality directly in the browser without the need to go to a website, automatic integration in website like passwords for example

convenience

This question would allow respondents to mention what do they like about browser add-ons. Useful for developing add-ons that users would want to use in wallets that are already in browsers.

d. “What are the limitations do browser add-ons have?”

What are the limitations do browser add-ons have?

1 response

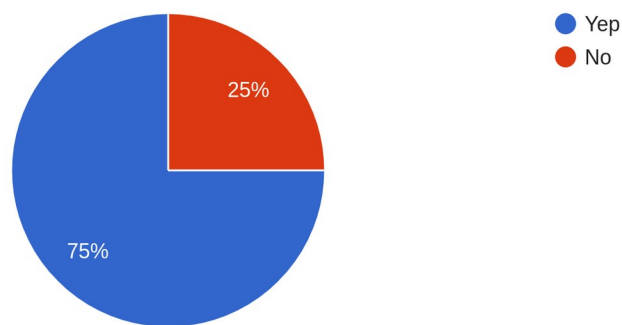
Ask ChatGPT he knows it quite well :)

This question would allow respondents to state their concerns regarding to browser add-ons. Useful when designing wallet add-on APIs in order to avoid the shortcomings that browser add-ons have.

e. “Would you like to have the ability to customize apps?”

Would you like to have the ability to customize apps?

4 responses

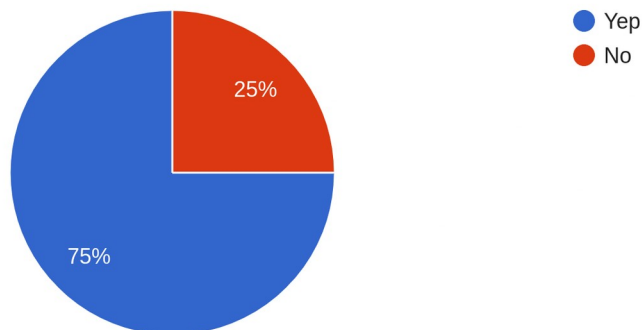


This question would indicate if respondednts would like to customize any of their applications, not necessary wallets, to give them a personal touch or to modify the app to suit their needs. Three out of four agreed that they would like to be able to customize their applications.

f. “Should wallets have add-ons?”

Should wallets have add-ons?

4 responses



This question give users a choice if they would like to see wallet add-ons being implemented in wallets. The majority indicated that they would like add-ons to be implemented in wallets.

g. “If you answered "Yep" in Questions 4 or 5, what kind of wallet add-ons would you want to see?”

If you answered "Yep" in Questions 4 or 5, what kind of wallet add-ons would you want to see?

3 responses

Depends on the wallet architecture what it allows

add ons that dont interfere with the wallet in the sense that it can alter the UI for the tx your are signing or that interacts in any way with your private key like: a UI interpreter that tries to explain what the tx does in easy words "you will send 100 A to A6TH.. and will get back 20 USDC". anything else might make the wallet less secure

encrypt/decrypt using algorand keys

This question allows respondents to suggest wallet add-ons that they would want to use in wallets.

h. “What are the limitations do you think most current wallets have?”

What are the limitations do you think most current wallets have?

3 responses

- Accessing HSM
- not easy to use for people who arent crypto native. people need to know what they are doing instead of being able to just click some buttons and feel secure
- they don't support that, they're closed source or don't allow contributions

This question would allow wallet developers to understand what are the pain points of wallets that are being developed currently. Could be useful when developing add-ons to solve these issues.

i. “What kind of programming language do you want to use to develop a wallet add-on?”

What kind of programming language do you want to use to develop a wallet add-on?

2 responses

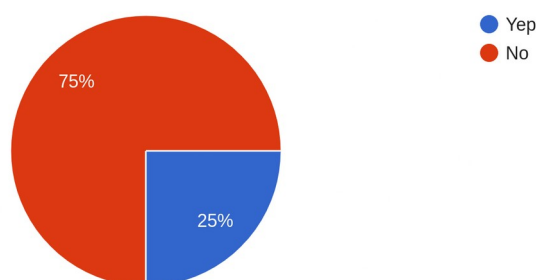
- Typescript
- javascript

This question would allow wallet developers to know what are the most popular programming languages among respondents that would want to use to develop wallet add-ons. Typescript and JavaScript are some of the programming languages that were stated in this question and therefore, the responses could indicate that developers who want to develop wallet add-ons prefer a smoother transition from developing browser add-ons to wallet add-ons without having to learn a new language as the mentioned languages are most popular languages for building browser add-ons.

j. **“Would you like to pay a very small amount for non-critical add-ons like themes to show your support for developers who developed them?”**

Would you like to pay a very small amount for non-critical add-ons like themes to show your support for developers who developed them?

4 responses



This question would allow respondents to share their view in showing support for wallet add-on developers who choose to monetize their applications by purchasing non critical add-ons like themes that enhances the aesthetics of a user interface for a very small amount. Three out of four respondents disagreed to this question.

6. Comments

In the Algorand Forum, there was a reply that could give us more perspectives on wallet add-ons. The following was the reply:

IMO this is a bad idea. Wallet apps are primary hacking targets, adding ability to run code makes it much easier.

In 2023, wallet hacks had impacted many cryptocurrency users, not just Algorand, which resulted in huge amounts of assets to be stolen. This reply highlighted that just like browser add-ons, wallet add-ons are capable of being malicious and could increase the chances that wallet add-ons with an improper design would be hacked, leading to assets being stolen as a result. Therefore, wallet add-ons should be carefully designed so that incidents of hacks from an improper wallet add-on design would be unlikely.

7. Survey Limitations

The survey only aims to capture the responses from the Algorand community and therefore, perspectives from other cryptocurrency communities like Ethereum, Bitcoin and Cardano were not recorded in the survey. This could mean that other communities may show a different sentiment towards the survey and a separate survey should be done to understand the perspectives of other cryptocurrency communities towards wallet add-ons.

Since the survey has only four responses with one reply in the Algorand Forum, we should assume that these responses may not be accurate but can indicate that the majority shows the similar views towards the survey.

8. Conclusion

A survey was conducted to understand how would the Algorand community would respond to the idea of wallet add-ons. The survey respondents reacted positively to the idea of having wallet add-ons included in add-ons and stated their preferences on how wallet add-ons should be designed. However, there were some responses that cautioned on the risks of providing wallet add-ons that could potentially cause massive loss for wallet users if the add-ons were improperly designed.

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