Project name:

Social Bonding in the City of Optimism - A Behavioural Science Study

Author name and contact info:

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I understand that I will be required to provide additional KYC information to the Optimism Foundation to receive this grant:

Yes

I understand that I will be expected to following the public grant reporting requirements outlined here:

Yes

L2 recipient address:

0xB34F3c68CCe3ea731582Be4B95B05ade211B027D

Which Voting Cycle are you applying for?:

Voting Cycle 10, Season 3

Which sub-committee should review your proposal?

Growth experiment grants

Project Description: Summary

An inclusive city provides an environment for human well-being and flourishing. It represents a place to be oneself, while also allowing community. It is this balance that creates a prosperous society. And yet, the paradox of cities is that people may be surrounded by others while still feeling alone. For citizens to live an enriched life, they require more than just the infrastructure and material wealth. What makes people feel at home in a city is a sense of belonging: the feeling of being connected to other citizens, i.e., caring for and, in return, being cared for by other citizens within a community. Such family-like bonds among members of a community typically lead to feelings of 'oneness' with the group and enduring group commitment. It is this social glue that facilitates emotional attachment.

Building a strong Collective for a more productive and empathetic society is at the core of Optimism's vision. Establishing strong social bonds through online, disembodied means of communications, however, can be challenging – particularly in a (pseudo)anonymous space, with little in-person interaction, such as DeFi. Moreover, the battle for attention and market dominance is high in DeFi. With new projects being launched almost daily, networks and protocols are facing the challenge of how to retain users long-term. Even though powerful brand and identity-building contributes to fostering a sense of community, such measures do not necessarily promote individuals' bonding within the group.

The goal of this scientific study is to strengthen the Optimism Collective by examining the relational ties amongst OP citizens as well as between OP citizens and the network. The insights provided by the study will equip OP with the necessary knowledge and tools to foster relational ties in the city of Optimism. Building a strong and loyal user-base goes beyond pure financial incentives. In order to attract and retain highly committed members – and consequently, keep liquidity and TVL on chain – strong relational ties amongst OP citizens/group members and the more abstract city itself are needed.

This study will shed light on the underlying mechanisms that drive those relational ties. By evaluating these mechanisms across different protocols and providing 'best practice' recommendations, this study will help the Optimism Collective to further strengthen its identity, as well as evolve and grow over time.

Ecosystem Value Proposition

What is the problem statement this proposal hopes to solve for the Optimism ecosystem?

The Collective is at the core of Optimism's identity. And yet, one pressing question for Optimism – and generally, any network and protocol in DeFi – remains: "What makes people stick to a network and/or protocol long-term?". Building a powerful Collective, providing meaningful community-team interactions, and increasing attachment to the network is critical in order to retain users long-term, particularly for networks like OP with the vision of maximising community benefit. In a rapidly evolving space, a strong Collective can only be achieved through fostering a deep sense of community, social bonding, and loyalty among members. These mechanisms are crucial for fostering user retention.

Moreover, there is a lack of serious scientific research in DeFi. Human psychology is driving the crypto market and DeFi space. This includes often erratic and seemingly unpredictable investment behaviour. Financial investment decisions generally trigger strong emotional reactions and even more so in a highly volatile environment such as DeFi. This typically leads to pump and dump behaviour that drives users to the places with the highest yields. With the goal to foster sustained growth of a decentralised ecosystem and cultivate a Collective that eventually expands beyond the digital realm and into the physical world, social science research is needed that sheds light on the underlying drivers of users' needs, emotions, and

behaviour. Even though Optimism has already established a solid community in terms of engagement, it is essential to identify valid mechanisms of how to retain existing users in a meaningful and sustainable way as well as increase attention in the space to acquire new users. This will become even more relevant once the novelty of Optimism starts wearing off and new shiny projects appear on the horizon.

How does your proposal offer a value proposition solving the above problem?

This study will contribute to advancing Optimism as a Collective. Exploring the underlying mechanisms of members' identity fusion, i.e., the deep feeling of 'oneness' with a group - and also potential 'non-fusion' - provides insights into the requirements for promoting and developing deep relational ties that lead to group loyalty, pro-group behaviour, and emotional attachment to the network. Based on the results, recommendations will be provided for how to foster relational bonds among OP citizens/group members and the more abstract city of Optimism.

By closing the gap regarding a lack of scientific knowledge on user retention and sustainable community-building, this study will contribute to advancing the DeFi space with Optimism as a unique use case. This goes hand in hand with building reputation and strengthening respect for Optimism beyond DeFi. DeFi is a space that is often being criticised for its immaturity and naivety by non-DeFi audiences. As a first-mover, Optimism will garner targeted attention from scholars and help elevate the space to a more mature level by funding a scientific study and fostering cutting-edge scientific knowledge.

Lastly, the findings will be translated into marketing communication measures for increasing attention in the space and attracting new users. Designing targeted communication strategies around emotional attachment based on the findings of this study will contribute to the overall perceived innovative power of Optimism; an innovative power that promotes Optimism's vision and goes beyond technical excellence.

Why will this solution be a source of growth for the Optimism ecosystem?

First, exposure to the Optimism brand is an essential component of growth. Optimism will be among the first blockchains to appear in a scientific journal on a psychological topic related to community-building, tapping into uncharted territory. This first-mover advantage will enable Optimism to accelerate brand awareness and recognition, increase user attention, and foster trust before other entrants to that field. In so doing, this study contributes to Optimism's value proposition of building for the public good. By providing in-depth scientific knowledge and making it available to a broad audience, Optimism will strengthen its pioneering role in facilitating public goods. The results of this study will be published in an open source, peer-reviewed scientific journal to make sure the results are accessible to the broad public. Producing peer-reviewed research, funded by Optimism, will add to building a positive reputation during a time when the whole crypto industry is experiencing somewhat of a reputational crisis.

Second, the results of this study will provide a template to foster user retention and community-building by providing a scientific foundation for 'social bonding' measures in crypto communities. Social bonds between members of the community define the strength of a Collective. Strongly connected members typically show a high willingness to fight for and protect their own in-group. Accordingly, it can be assumed that highly fused members are likely to be more committed, stick to the network, and encourage new users to join the network through positive word of mouth. As a unique use case, Optimism will pioneer scientific insights into the relevance of identity fusion and social bonding in DeFi.

Third, the researchers have demonstrated the importance and value of social science research for DeFi. For example, the 'sense-making study' conducted at Beethoven X shortly after the Luna crash in May 2022 yielded an increased sense of community, user engagement, and trust that overall led to a more serious standing of Beethoven X in the space. The goal of the sense-making study was to provide users with a confidential space to share and process their traumatic experiences related to the crash and uncover the so-called 'cognitive gaps', i.e., struggles, inner conflicts, and confusions of users with regard to the crash specifically and the space generally. The main findings of the study were summarised in a [Medium article](#) and the study will be published in a peer-reviewed journal.

The following quotes reflect users' perceived value of the study:

"Knowing that Beethoven X facilitates such kinds of studies has definitely increased my trust in the protocol." (Participant 17)

"I find it super interesting that you look at this from a social science point of view. This is quite unique and unexpected from a DeFi protocol." (Participant 3)

"This is a very, very interesting study. One of a kind in the space!" (Participant 15)

At Beethoven X, the study has inspired new community-centric formats that facilitate meaningful user engagement.

Detailed Project Description & Methodology

This study applies a social psychological lens to examine the extent of "identity fusion" amongst members of the OP community as well as between members and the network itself. Identity fusion describes the experience of feelings of oneness with a group; it emphasises intragroup dynamics and the extent to which people develop relational ties to the group. As a well-established concept, particularly relevant for studying fan communities, identity fusion predicts extraordinary pro-group behaviour and great fidelity. Strongly fused individuals experience an exceptional sense of personal agency and reciprocal strength from group membership; they develop family-like ties to other group members as well as the more abstract collective.

As the name suggests, identity fusion involves the union of the unique personal identities and social identities of fellow group members. Whereas personal identities are characteristics that make someone a unique person, social identities refer to characteristics that align a person with fellow group members. When fusion occurs, both the personal and social selves remain salient and influential but the boundaries between them become blurred. Highly fused members might therefore be identified and perceived as 'typical' members of a group, representing a specific personality type. Such a (perceived) personality type might become representative of the whole community, however, may deviate from the (pre-)defined brand identity. Graph 1 illustrates the potential extent of identity fusion between the self and the group; and graph 2 illustrates the example of high identity fusion between OP members and the OP network.

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Identity fusion

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Graph 1: Extent of identity fusion between the self and the group.

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Identity fusion

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Graph 2: Illustration of a high identity fusion between OP members and the OP network.

The main characteristics of 'identity fusion' are summarised below (Tab. 1):

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Table identity fusion

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Based on the power of identity fusion in fostering enduring group commitment and pro-group behaviour, the goal of this study is to examine identity fusion in-depth. This includes measuring the extent of identity fusion between OP members, examining the consequences of identity fusion for the network, and exploring underlying drivers for identity fusion.

Research questions

An in-depth examination of identity fusion will be achieved by answering the following research questions:

Main questions:

Q1:

What is the extent of relational ties, i.e., identity fusion between OP members within the OP community?

Q2:

How does identity fusion between OP members influence relationship continuance intentions with the OP network – i.e., the abstract city of Optimism?

Sub-questions:

Q3:

What is the perceived personality of the OP community?

Q4:

How do community-specific factors, e.g., group rituals, branding etc., influence the perceived personality of the OP community and identity fusion between OP members?

Design of the Study

We will apply a mixed-method approach to ensure an in-depth exploration of the phenomenon under investigation. By combining quantitative methods with exploratory, qualitative measures, mixed-method is a rigorous approach and unique in that it provides a deep understanding and yields more complete evidence of the phenomenon under investigation.

The specific measures include:

- Measure the extent of identity fusion, i.e., feelings of connectedness and reciprocal strength between OP members within the OP community

- Examine how identity fusion of OP members influences their intention to continue engaging with the OP network

- Explore the perceived personality of the OP community

- Examine community-specific factors that influence the perceived personality of the OP community and identity fusion between OP members

Comparability of the Results

This study will be conceptualised specifically for Optimism. To increase comparability and collect more nuanced results, however, we plan to additionally conduct the study across several protocols/product ecosystems on OP. Participation from Beethoven X has been confirmed, and we're in discussion with additional protocols on OP. The comparison between different protocols building on OP will provide Optimism with valuable insights into the relational ties amongst members of the broader Collective within the OP ecosystem. Importantly, the mechanisms that underlie fusion with a group and explain its consequences may be different across protocols and networks.

Research Phases, Deliverables/Milestones, Timeline

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Timeline_part1

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Timeline_part2

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*the timeline & study duration is largely dependent on the availability of study participants; thus, deviation from the suggested timeline may occur

Number of OP tokens requested:

~41'000 OP (depending on current market price)

How will the OP tokens be distributed?

The OP tokens will be distributed among the three researchers involved in this project over a period of ~5-6 months.

Costs - Required Grant (in USD)

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Grant Costs

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How much will your project match in co-incentives?

Since we're aiming to conduct the study also across 1-2 protocols on OP, we intend to fund 30% of the overall costs of USD 69'000 via the partnering protocols.

Why will incentivized users and liquidity on Optimism remain after incentives dry up?

This study will fill this very gap of how to retain users long-term by examining and identifying valid mechanisms that will contribute to user retention after incentives dry up. This question is literally what we're studying =)

Timeline

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timeline

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Project links:

[Presentation](#)

Additional team member info:

Josey: https://twitter.com/BeetsJosey

Erudraeth: https://twitter.com/erudraeth

Blackfaun9

Previous project contributions:

Sense-making of a historical crisis in crypto:[Josey Beets – Medium](#)

Did the project apply for or receive OP tokens through the Foundation Partner Fund?:

No

Competitors, peers, or similar projects (please link):

None

Is/will this project be open sourced

? Yes, it will be open access once the results are published; any data collected in this research will be treated as confidential and reported in an anonymised manner

Optimism native?:

Yes

Has your project previously applied for an OP grant?

No