

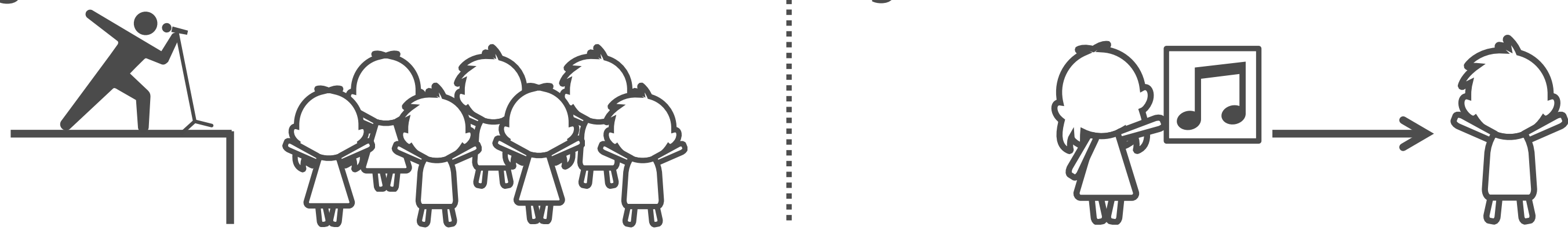
# Kiite Cafe: A Web Service for Getting Together Virtually to Listen to Music

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Unlike listening to music alone, **listening to music with others adds the qualities**

Feel social connection with others (e.g., attend a live concert) | Let others listen to one's favorite songs (e.g., introduce others to her favorite songs)

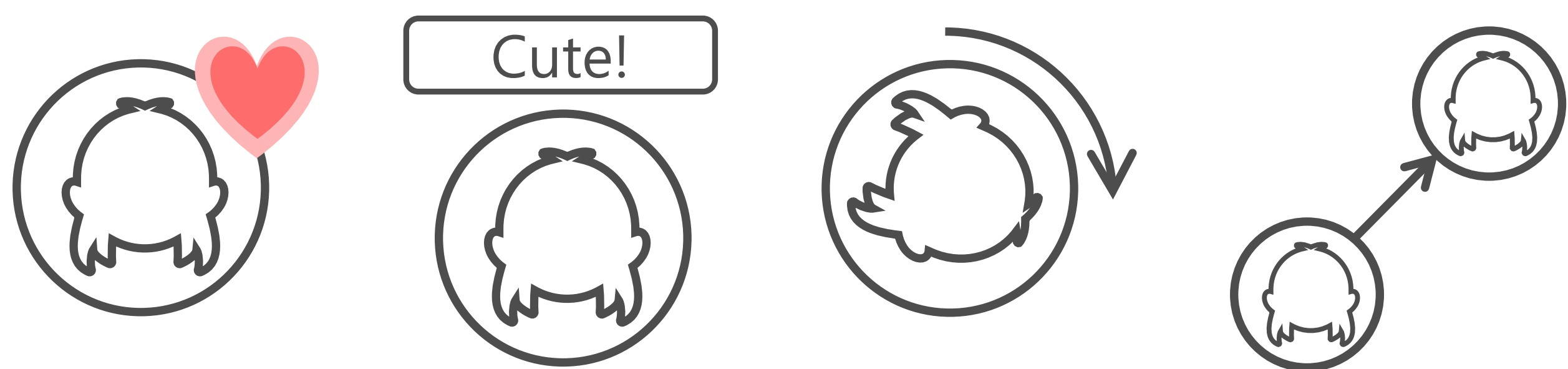


- Various social conditions can make it difficult to get together in person and listen to music with others
- **We propose a web service, Kiite Cafe, that enables people to get together virtually to listen to music without losing the above qualities**



## Architecture 1

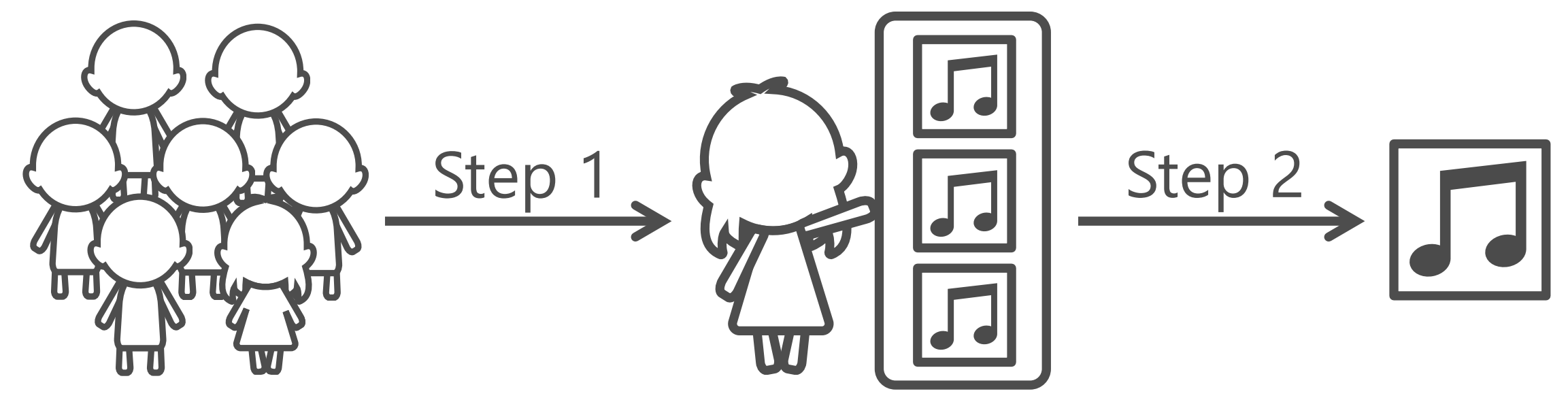
Visualization of each user's reactions to a played song



- Four kinds of reactions: **Favorite, Comment, Rotation, and Move**
- Kiite Cafe does not provide any guidance on when users use these functions because we want them to use it as they please

## Architecture 2

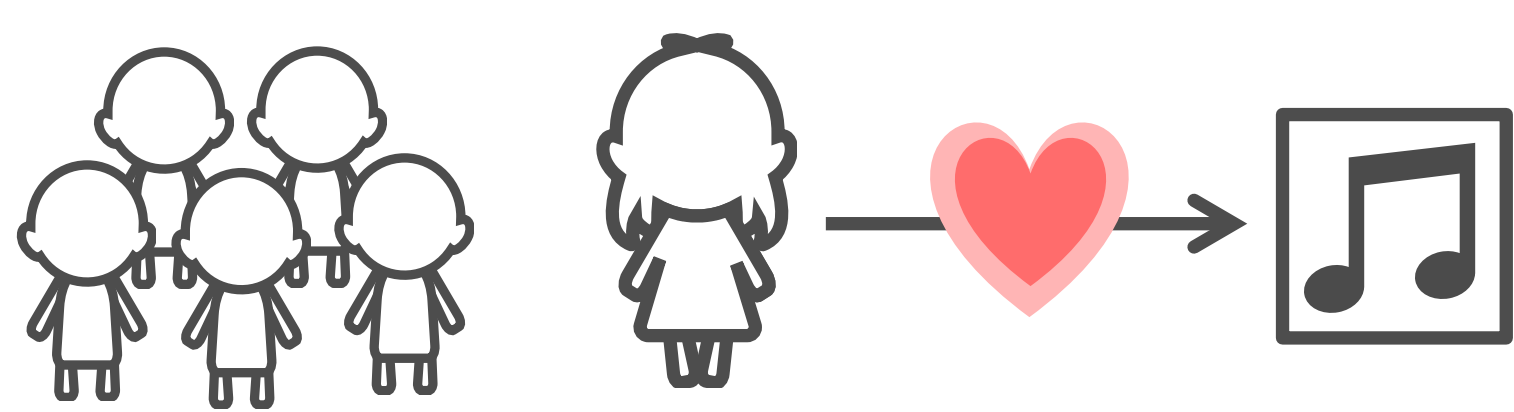
Selection of played songs from users' favorite songs



- Step 1: select a user from users who are logged in to Kiite Cafe
- Step 2: select a played song from the user's favorite songs
- **Select a user/song fairly to diversify the played songs**

## User Experience and Effect 1

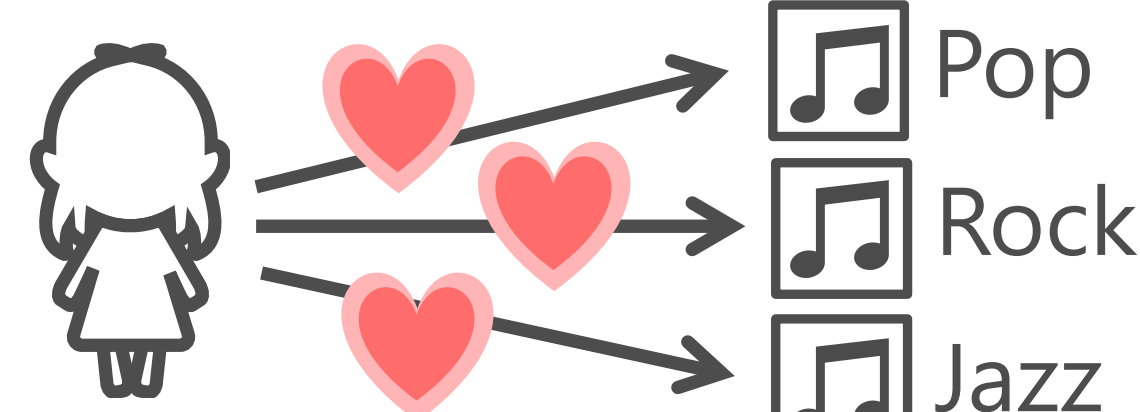
Motivation to react to songs



- By sharing all the users' reactions with each other, **Kiite Cafe motivates them to react to the currently played song**
- The more users get together on Kiite Cafe, **the more meaningful it will be to show their reactions**

## User Experience and Effect 2

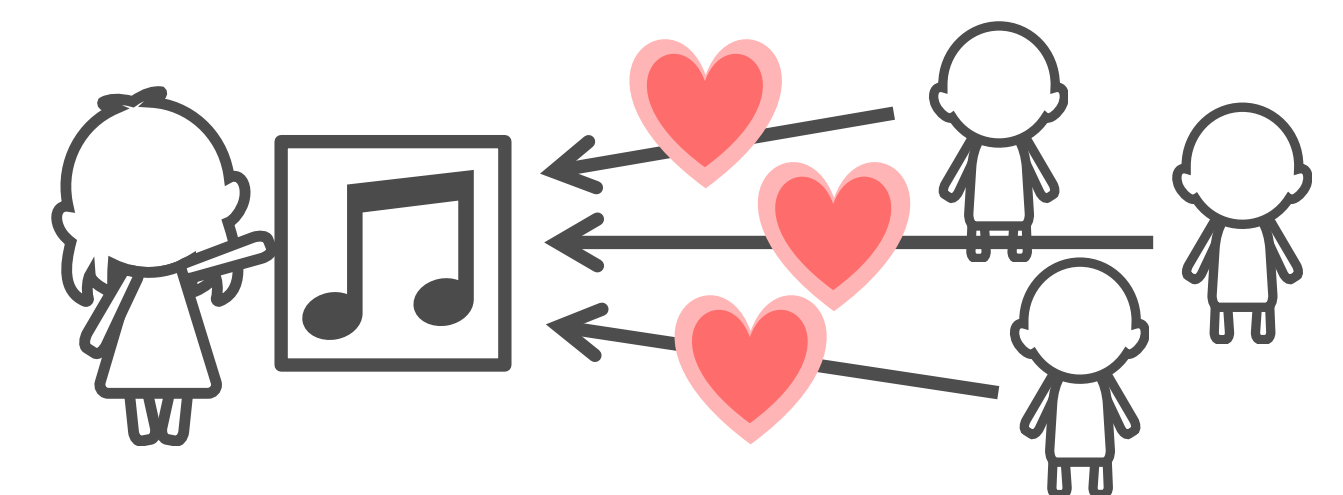
Diversification of song listening



- Listening to a diverse range of songs enables users to **find not only songs that match their musical preferences but unexpected or serendipitous songs**
- **A user will react to more diverse songs on Kiite Cafe** than when she listens alone

## User Experience and Effect 3

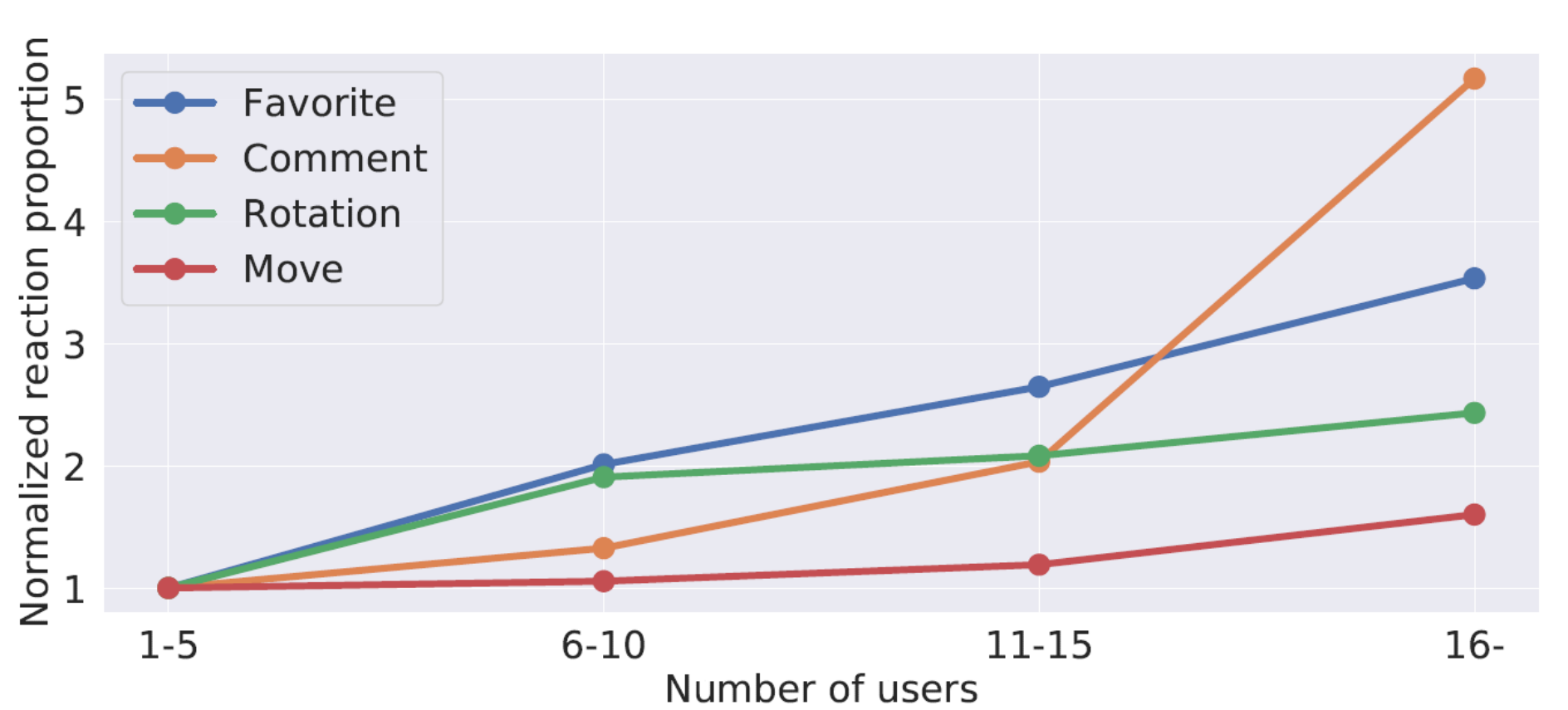
Contribution as curators



- A user can see **the moments when other users start liking her favorite song**
- When a user experiences the joy of contributing as a curator, **she will look forward to the next curation opportunity and stay on Kiite Cafe for a longer time**

**User behavior logs for five months by 1,760 users** (Favorite: 29,127, Comment: 9,826, Rotation: 59,983, Move: 45,353)

## Evaluation 1



For all reactions, **a user reacts to a played song more frequently as the number of users on Kiite Cafe increases**

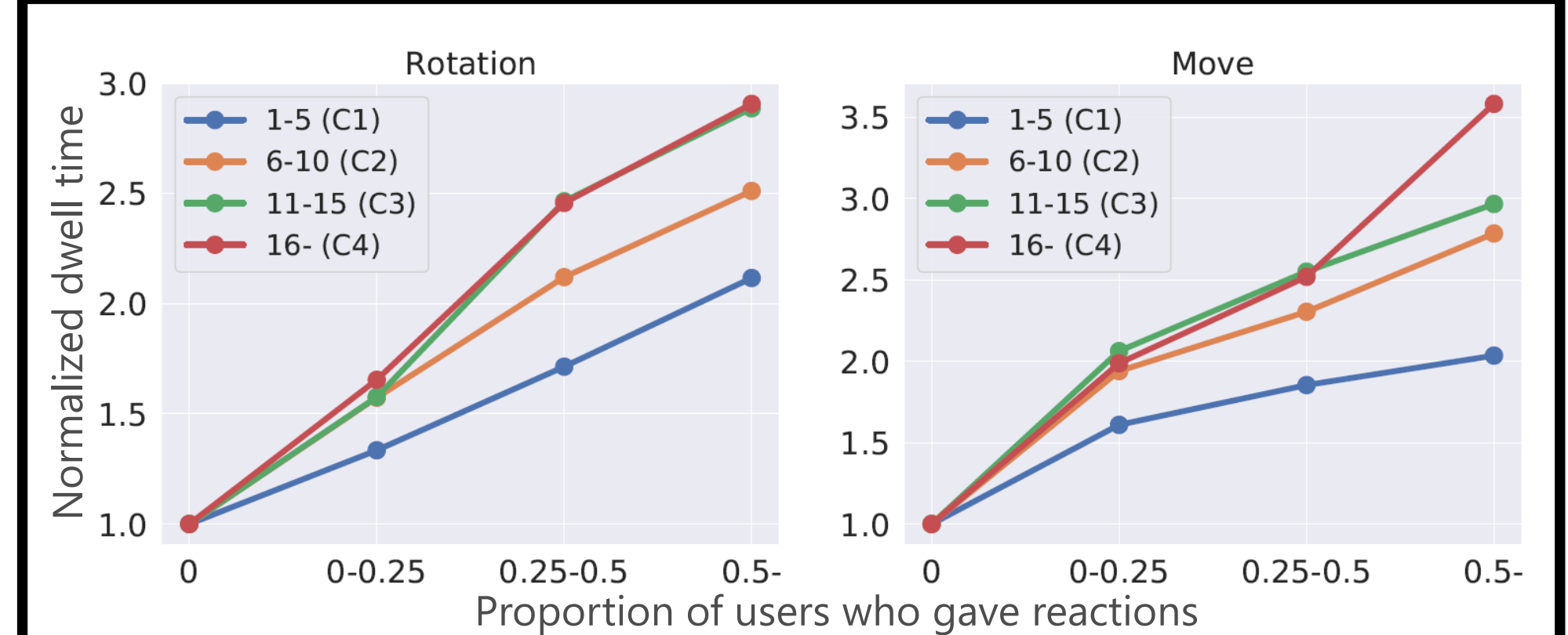
## Evaluation 2

Reaction $r$	$avgdiv(S_u^{Org})$	$avgdiv(S_u^r)$	p-value
Favorite	10.493	10.960	$1.99 \times 10^{-6}$
Comment	10.384	10.920	$4.40 \times 10^{-3}$
Rotation	10.502	10.918	$5.80 \times 10^{-6}$
Move	10.559	11.050	$8.21 \times 10^{-9}$

$avgdiv(S_u^{Org})/avgdiv(S_u^r)$ : song diversity before/after starting to use Kiite Cafe

- For all reactions, the diversity of songs producing reactions increases compared to that before starting to use Kiite Cafe
- **Kiite Cafe is also useful for users to find songs that are different from their daily musical preferences**

## Evaluation 3



For Favorite, Rotation, and Move, **the dwell time increases as the proportion of users who give that reaction increases**

- **Kiite Cafe has been used for several online events**
- At an event on Aug. 29, 2020, a famous creator of VOCALOID songs made a specific playlist
- During the one-hour event, 140 Kiite Cafe users enjoyed simultaneously listening to the playlist
- **Demonstrate a new style of online music events**
- This kind of online event will also be valuable for **users who cannot easily attend physical events for reasons such as geographic remoteness**



## Contributions

- Proposed the two architectures
- Implemented and released Kiite Cafe
- Described three user experiences and their effects on users
- By analyzing user behavior logs, we quantitatively showed that the architectures do provide the effects