I reviewed the payment apps Zelle and Venmo.

Zelle's app privacy policy is available here:

https://www.zellepay.com/legal-and-privacy and is different from their website privacy policy. Zelle collects and uses personal information in standard ways such as fraud protection and detection and to improve customer experience. Personal information that is collected and shared includes: name, email, telephone number, profile photo, IP address, device information, transaction information, bank account information, biometric information and geolocation. When we use the App Zelle collects information from our device. What I found troubling is device and biometric data collection (voice, face, etc.) and the categories of third parties, listed below, with whom Zelle may share a user's personal information. These raise red flags in my opinion because the language is broad and vague allowing user data to be shared widely.

- service providers (e.g., companies that helpZelle® provide the service)
- law enforcement, government agencies, and other authorized third parties (as required by law)
- companies in the mobile app industry

Zelle does not not specify what information and only provides the example of 'your mobile device shares the name of your device when you use the App.' This is another red flag because there is so much information on our devices that could potentially be collected and shared. Zelle's privacy policy states that users can opt out of information sharing (exercising data privacy rights) to a degree.

Venmo's, a PayPal, Inc. service, privacy policy was longer (more detailed) but not as well organized compared to Zelle. It is found here: https://venmo.com/legal/us-privacy-policy/.

Information collected when using Venmo include: financial information, IP address, web log information, geolocation, phone number, machine or mobile device ID and other similar information, name, street address, email address, date of birth, and SSN, social Web Information (eg: Facebook Connect credentials and email account information). A user can import data from other social web services like Twitter, FourSquare, and email service providers and this is shared with friends and contacts.

Information shared with third parties are similar to Zelle's (service providers, law enforcement). There were several privacy concerns with Venmo. One concern is that another Venmo user may mention you in a transaction to which you are not a party by "tagging" your username in a transaction and then a link to your Venmo profile will appear in the transaction note or comment which means your data could be shared in unlimited ways. This can be managed in account settings. Another concern is that Veno states 'we may collect additional information from or about you in other ways not specifically described here' and then provides an innocuous example about customer service but I wonder what other examples exist. Venmo states it does not share financial information with third party social networking services but some personal information (username, profile photo, first and last name, month and year of Venmo account creation, and public transactions in which

you've been involved) is public information and may be seen by anyone on the internet, whether or not they have a Venmo account. Public information may also be seen, accessed, reshared or downloaded through Venmo's APIs or third-party services that integrate with our products. Venmo states, "If you do not agree to our collection of this information, you may not be able to use our Service."

Based on the data it seems that Zelle shares less user information compared to Venmo.