

PERSONA

Millennials are people born between the year of 1980 and 2000, and account for a significant segment of the population. They rely heavily on their mobile devices, desire convenience and are open to innovative ideas.

Being a major driver behind emerging market trends, millennials are forcing businesses to adapt to the changing consumer landscape and create new products that better suit the needs and expectations of this generation.

We have done some research online, and conducted a survey as well in order to gather information for the design.

Millennial Facts

31.2%



of the US
population are
between the
age of 18-34

85%



of that
population owns
a mobile device

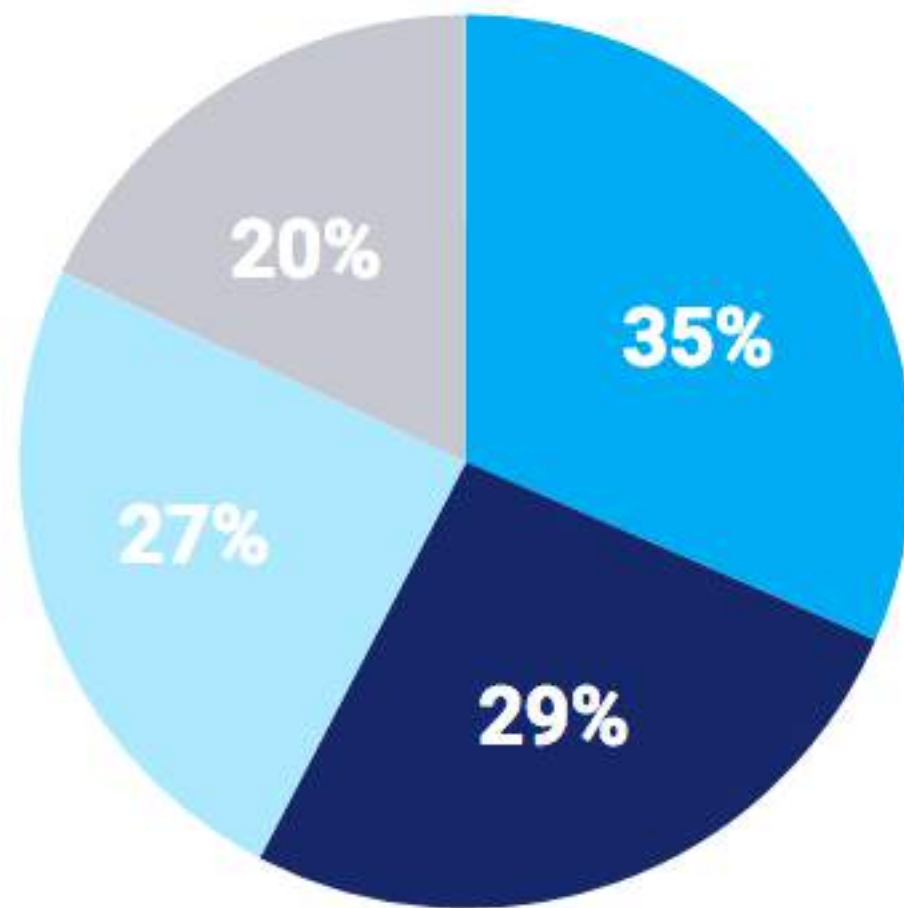
75%



Track their
expenses

PERSONA

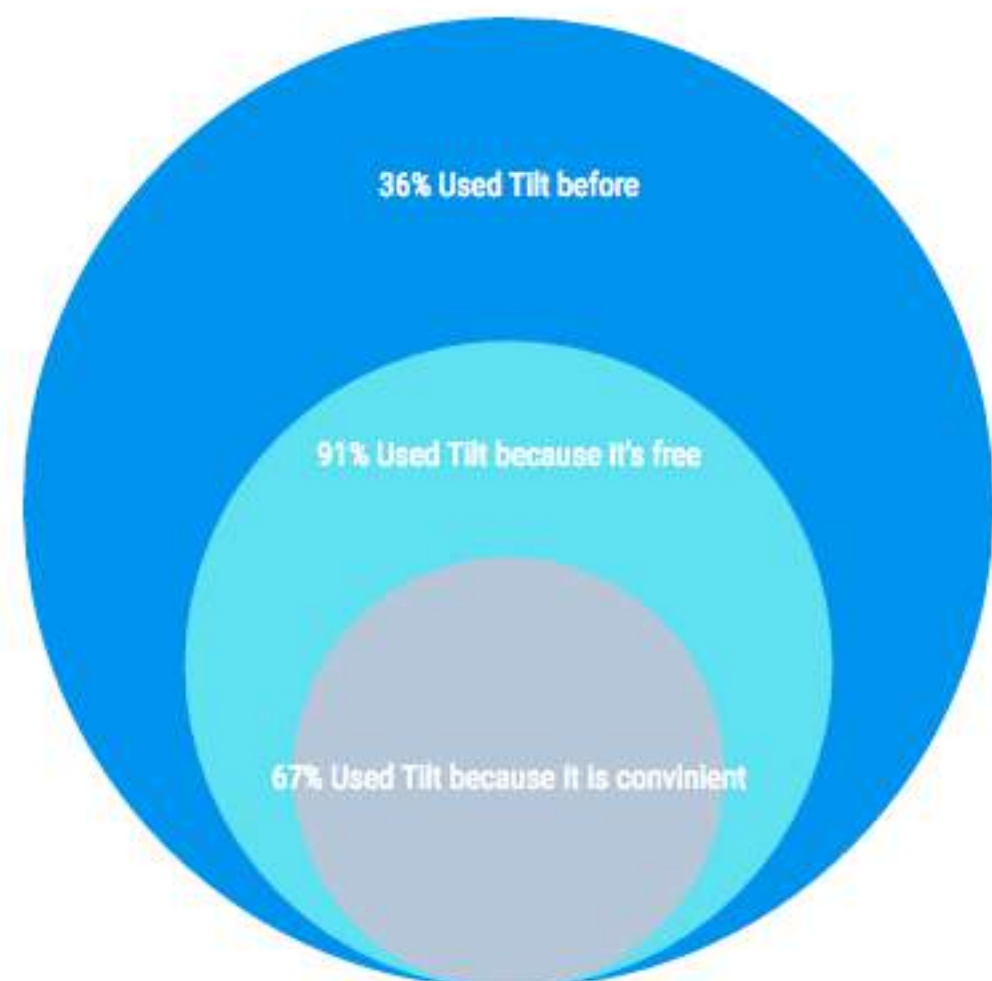
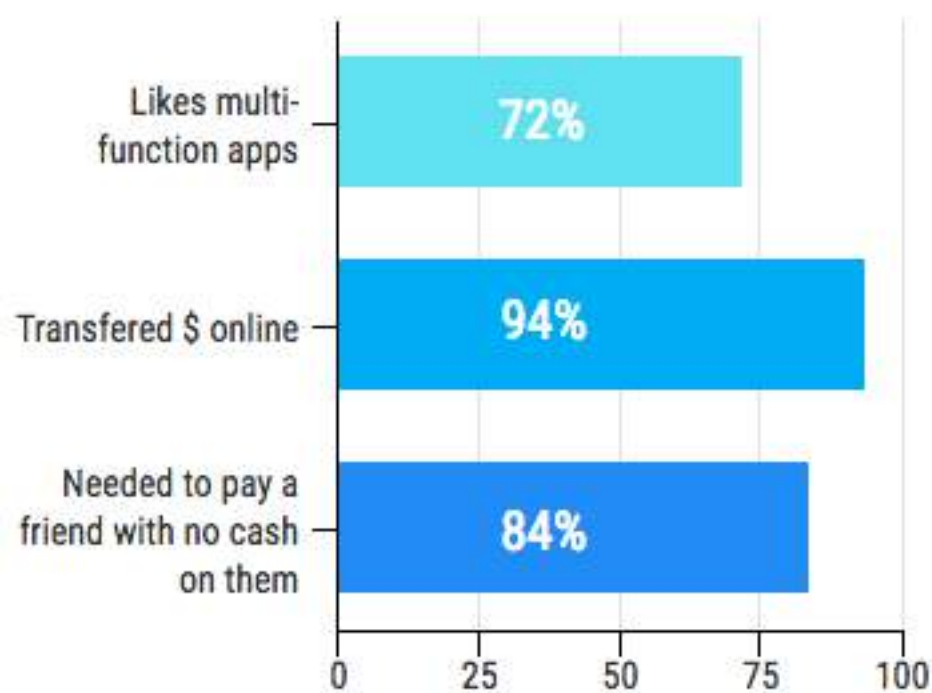
57% Uses a debit/credit card



\$ Over a **THIRD** uses debit cards because it is easy

● Easy ● Financial security ● Security and safety ● Speed

Survey Results from Target Group





Stakeholder Interview

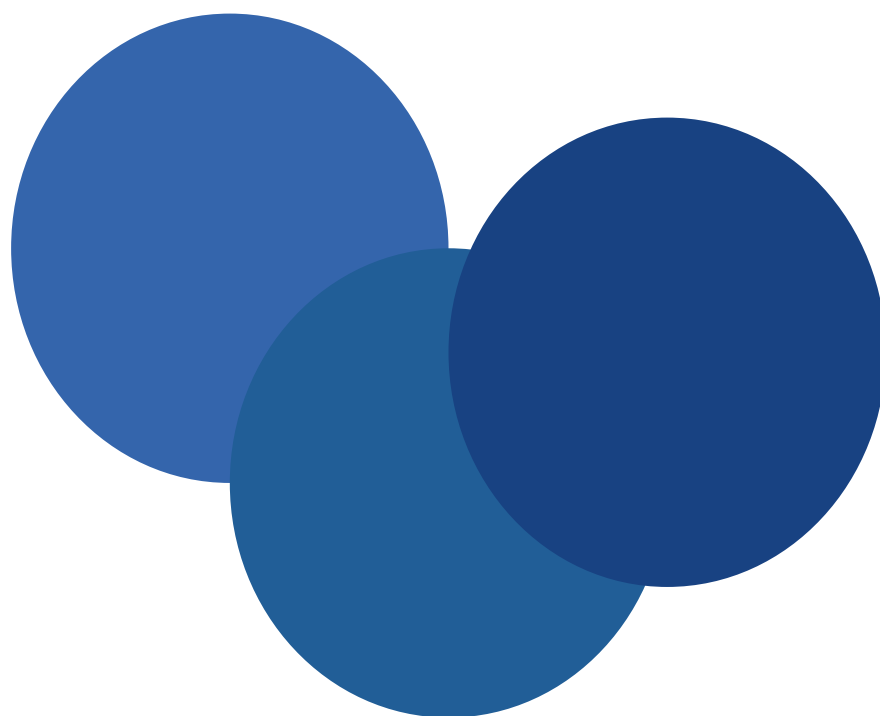
A group of university and professionals have been interviewed about their opinions regarding existing mobile payment apps and the kind of banking apps they would like to see in the market.

The interviewees all preferred apps that rank highly on accessibility and usability.

These apps would have to be easy to use without having to read long and tedious instructions. With a few clicks, users would be able to transfer money, track their spending and pay for items. Users were also intrigued by innovative and cool features that would grab their attention and would be fun to use.

Taking the needs and expectations of the target audience into account, we have designed our app so that it requires a minimal number of clicks for the users to access all available functions, and contains features that users have never seen before. In short, our product is the future of the mobile payment app.

The following page is an interview with one of our respondents.





Drew Naqib Alamis a student from the University of Waterloo. He eats out with friends quite often and experiences the pain of bill splitting all the time.

What do you like/dislike about current banking or money transfer apps?

I use Paypal and it's pretty easy to use. I don't like how it gives instructions on intuitive things like all other apps though, I never read them

What features do you like in them, and what features do you wish they have?

It [PayPal] just a money transfer app and I can see my transfer history, so I guess the features are just standard. I've also used e-Transfer before, but I have to set up questions which is pretty annoying. Paypal saves me a few clicks, but it doesn't have as much features as the website, such as changing my currency and currency checker.

What is your purpose when you use such apps?

Sending money and checking my balance.

Do tedious sign up forms make you less inclined to use the app?

Somewhat, but it can't be avoided for money apps I suppose.

If you have four ways to use one function, how do you feel about it?

I think I would be pretty surprised and be eager to try them all out. Never experienced it before though.

Are you willing to try features you have never seen before?

Definitely! Always fun to try out cool features.



Key Performance Indicators



InApp Indicators

- # of users who registered a bank account in the app reflects how well the app design engages the users
- # of permissions granted, in this case, location service & camera, measures how much users trust the app from the design
- # of screens visited indicates how well the app captures the user's attention and how easy to use the app
- The average number of times the user enters the app a day reflects the usage of the app, and whether the user becomes dependent

User Flow

- User reviews reflect the usability of the app and reveal areas of improvement
- Users' feedback can be taken into consideration when modifying the products to better suit the needs and expectations of the users.
- Measuring the average active users on the app per day reflects the size of user base





Key Performance Indicators

CONT



of Transactions Per Day for Each Feature

- The total dollar amount of transactions can be calculated to indicate volume of money involved
- Users' preferences are revealed by the method of transfer they choose, and more UX efforts will be devoted into the feature that is the most used.
- The # of items added to the shopping cart in the app, and the # of items that were abandoned midway reflects the usability of the design of the purchase process

Retention Rate of Users

- Measuring how many users stop using the app after three months reflects whether the UX offers value
- The average session time reflects whether the app design is able to keep the users the app





Consumer Journey Map

Overview

Bob is a university student who will engage in the app. He will use it in the following four scenarios:

1. Transferring money
2. Shopping
3. Budgeting
4. Virtual currency balance checking

Scenario #1: Transfer money

Anticipate

a) Needs to send money to a friend at a restaurant.

b) Wants to find a money transfer app because cash isn't carried often when needed to pay back a friend. Searches in App store and Visa app pops up.

Engage

Opens the App

- a) Anticipating the app to be like any other money transfer app.
- b) Curious how app will look like.

Loading page:

Likes the professional looking app.

Transfer Page is Displayed Instead of Login:

Feels convenient as there is no need to log in to try out the app, not forced to register at the beginning

Register:

- a) The registration form fields pop up one at a time. User feels refreshed from traditional sign in forms.
- b) Feels more secure because the app is made by Visa

First Page: Account Page:

Once the user has registered a bank account, the account page becomes the first page to appear. User easily navigates to use the features in the app, and is able to view his or her virtual currency immediately after app launch.

Money Transfer

Sees Four Options to Transfer Money

- a) At first overwhelmed by the number of ways to transfer money
- b) Eager to try out all the new ways to transfer money

Uses Cheers/ GPS/QR Code to Transfer Money

- a) Feels convenient because there is no need to add contacts.
- b) Finds it very cool and new.

Transfers Money Using AR

- a) Fascinated by technology.
- b) Wants to transfer money using this method again.
- c) Gets to have a physical feeling when transferring money digitally



Transfer Complete

Has the Option to Add Contacts with One Click


Finds it convenient and glad that there is no need to enter multiple fields.



Exit

Reflection

Thinks the app is really cool and new. Would definitely recommend the app to friends so everyone can transfer money with the new methods.



Scenario #2: Checking Transaction History

Anticipate

a) Wants to see how much money has been spent in the current month.

b) Wants to buy a \$100 dollar cake but wants to see how much money is spent on food so far.



Account Page

a) Hopes to see transaction history page first instead of needing to click back to see it.

b) Does not mind making a click or two to see the transfer history page.

Engage

Transaction History

A pie chart including transactions from all accounts of spending categories are displayed. Has the option to filter transactions to show only certain categories, or certain debit/credit card spending.

a) Feels convenient to be able to see all Visa transactions from all accounts.

b) Feels a bit uneasy to see a lot of money was spent on unnecessary categories.

Exit

Reflection

Would use the app again because it is simple. Sad to see \$200 already went to chocolate this month though.



Scenario #3: Shopping

Anticipate

Has an exam coming up but needs to buy some stationaries.
Hoping line isn't long at the store.



Makes Two Clicks to Go to the Shopping Page

a) Finds it convenient without having to line up.
Also glad that no time is wasted waiting in line.

Views shopping cart

a) Knows how much they will cost in total without needing to calculate.
b) Glad that there is no need to check off the shopping list because it is automatic.

Engage



Exit

Reflection

Glad that time is saved for one extra practice question. Will definitely ace the exam.

Scenario #4: Checking Virtual Currency

Anticipate

Starbucks has new drinks again.
Wants to check if there are enough Starbucks points to redeem a drink.

Account Page

- a) Sees there are enough points for a drink
Time to go to Starbucks and get one!
- b) Sad to see one more point is needed for a drink. On the bright side, finds out that there are enough League of Legend Riot Points for a new skin.

Engage

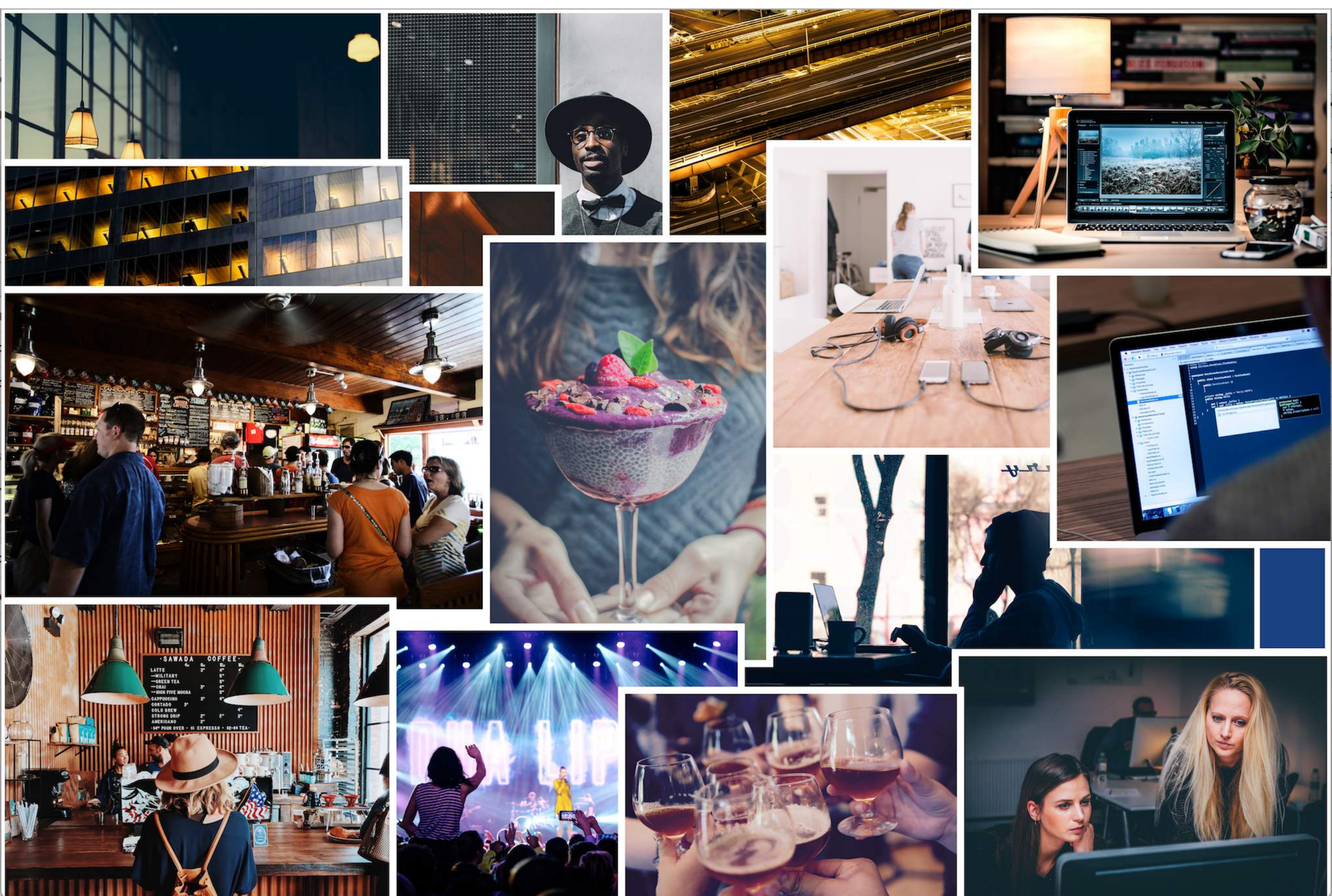
Exit

Reflection

- a) Wants to go to Starbucks to get one more point.
- b) Sad that there aren't enough points for a drink, but gladly discovered that there are enough points for a League of Legends skin. Got to check the app more often!

MoodBoard

Work Hard & Play Hard



People

Play

Concentrate

Rapid

Interact

Focus

Spend

Busy

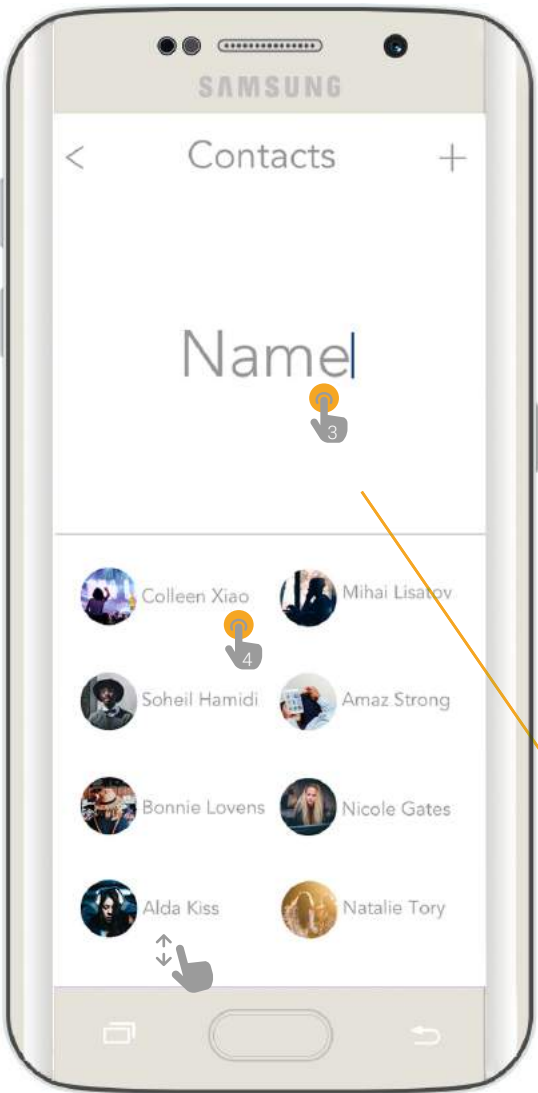
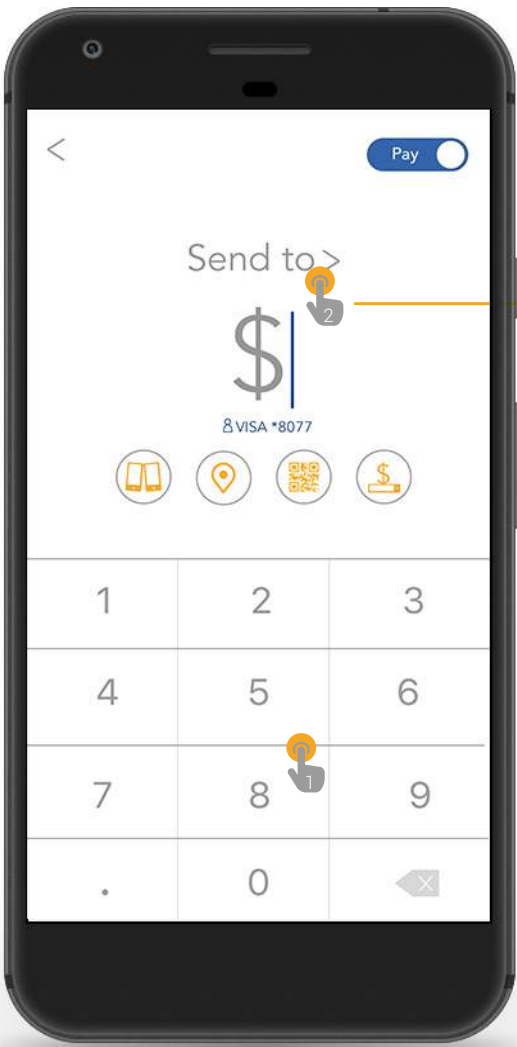
Life

Rapid

Flow of General Transfers

Entry: Pay

First User

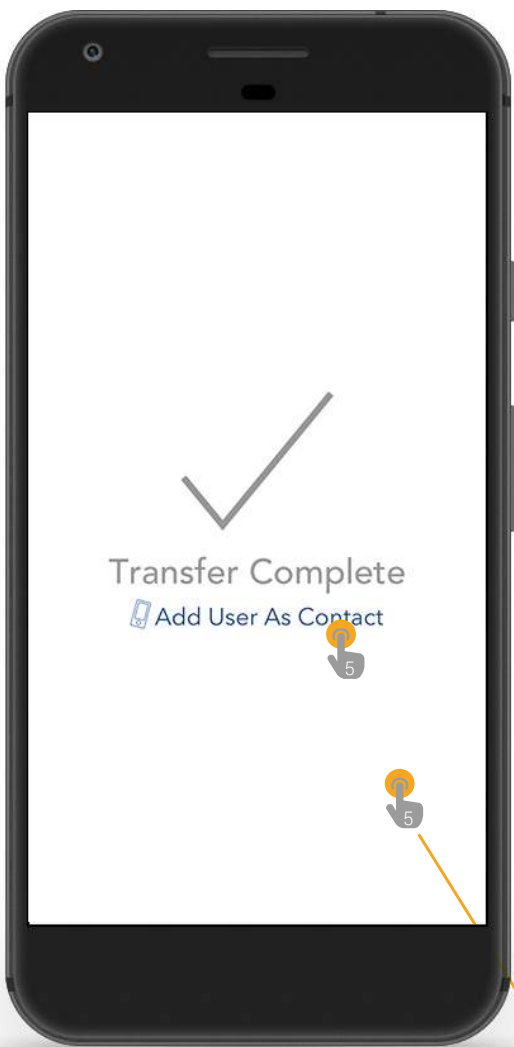


User browses through his or her contacts, or search by name.

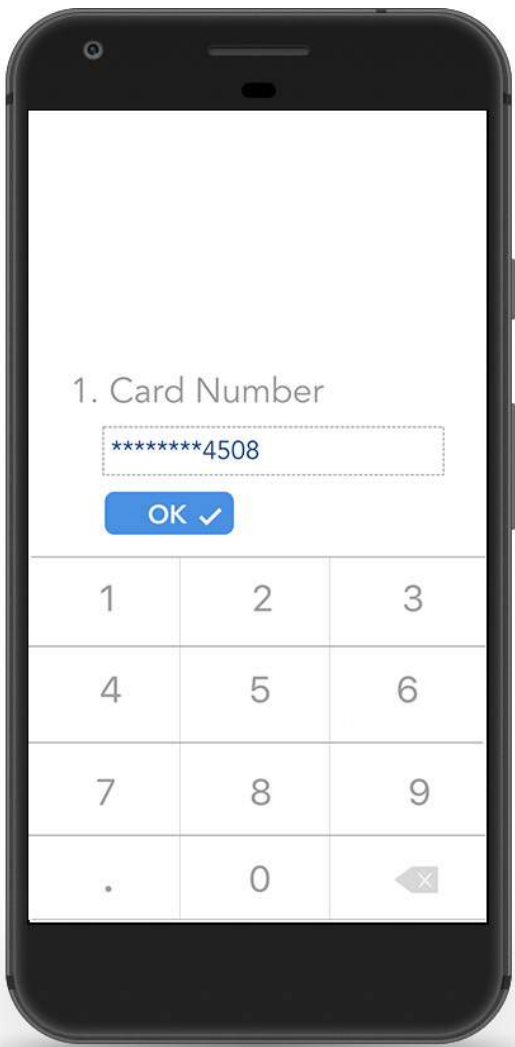
The contacts are ordered, so that the ones most frequently used will be at the top to minimize clicks.

With the [Visa Merchant Search API](#), the user can also search for registered stores to add as contact.

1 User Enters amount to pay



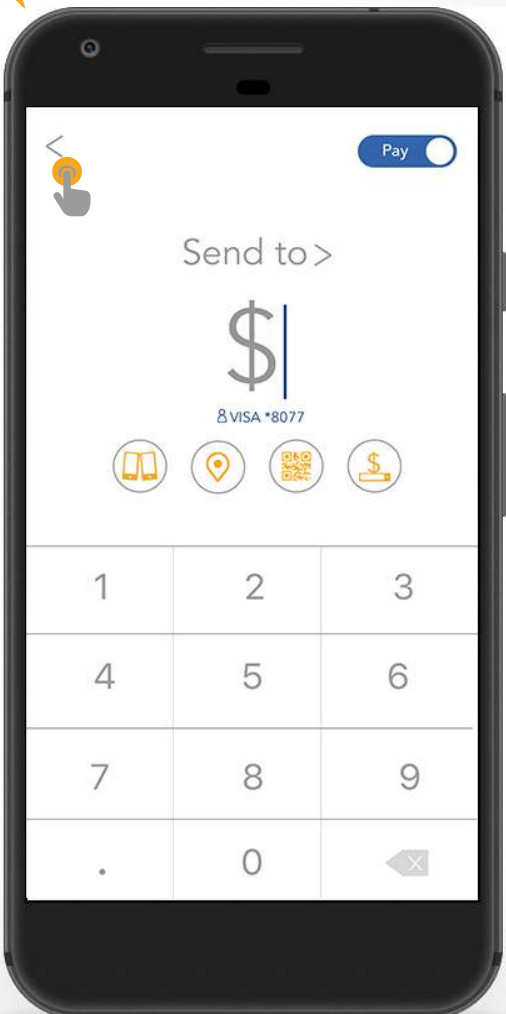
By default, both payor and payee will not add each other as contact, unless both parties select "Add User As Contact".



If the user has not registered a bank card that Visa supports, the app will prompt user to enter information one at a time, and not overwhelm the user.

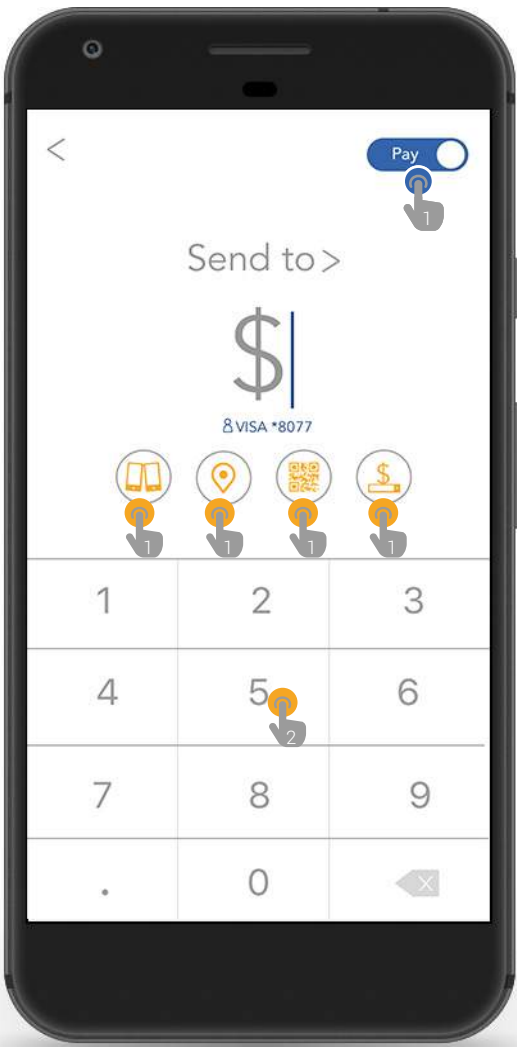
Using the [Visa Checkout API](#), the user can register their Visa supported bank account to the app, and no need to go through this step again for purchases. General money transfers can also be done using the [mVisa API](#).

Returns to transfer screen
User can immediately do another transaction



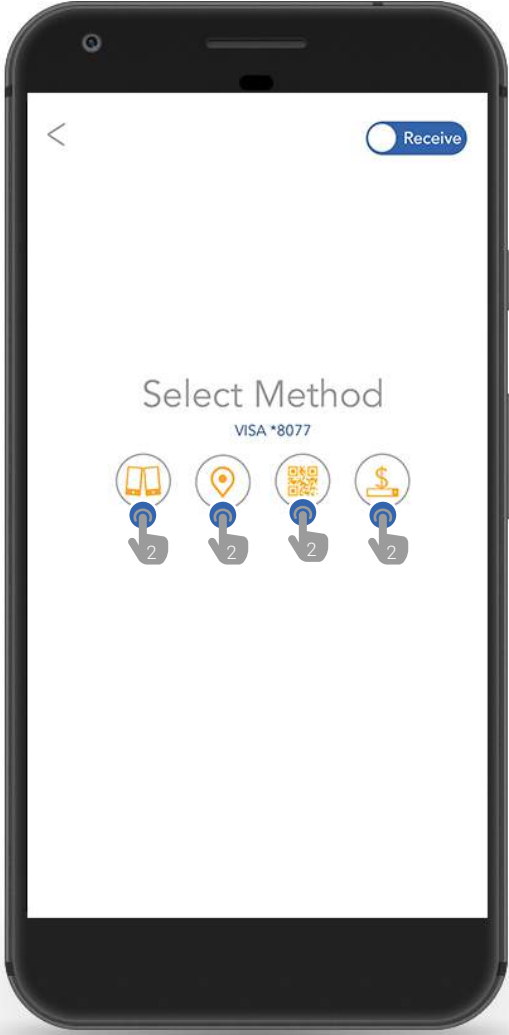
Pay

First User



Receive

Second User

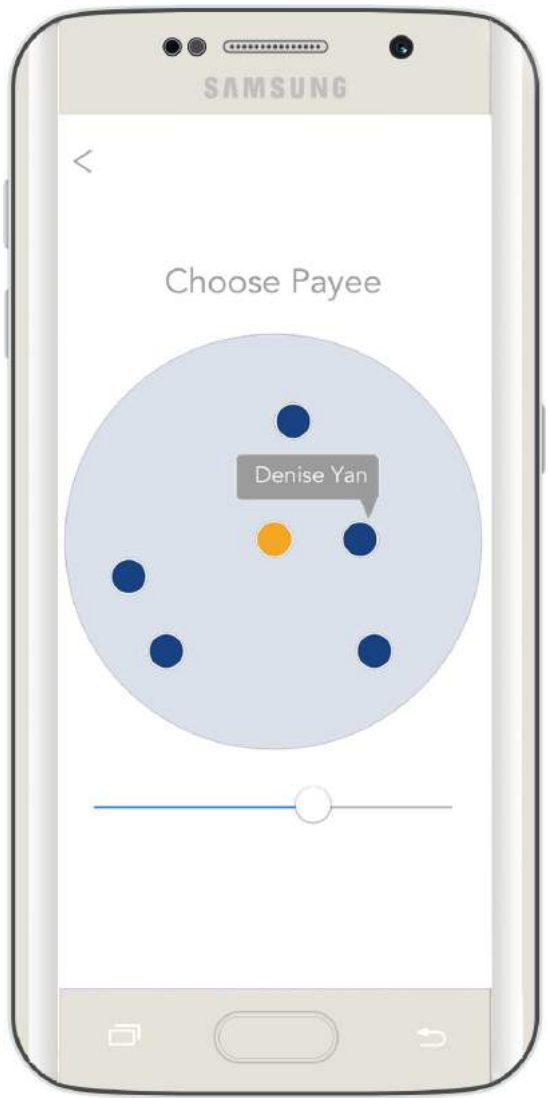


Payor and Payee goes to map feature with GPS.

Both parties become visible on the map for as long the transaction is needed. Payor selects payee and pay.



With the slider, payee selects the radius of being able to be detected, and payor selects the radius of detection.



1 User Enters amount to pay

With Visa Direct's mVisa CashInPushPayment and CashOutPushPayment APIs, payor can transfer money to payee with registered bank cards supported by Visa.



Through NFC connection between Android phones or Bluetooth connection for Iphone, two users can bring their phones together to "cheer" and transfer \$.



Payee display his or her QR code and the payor scans the QR code and transfer the \$

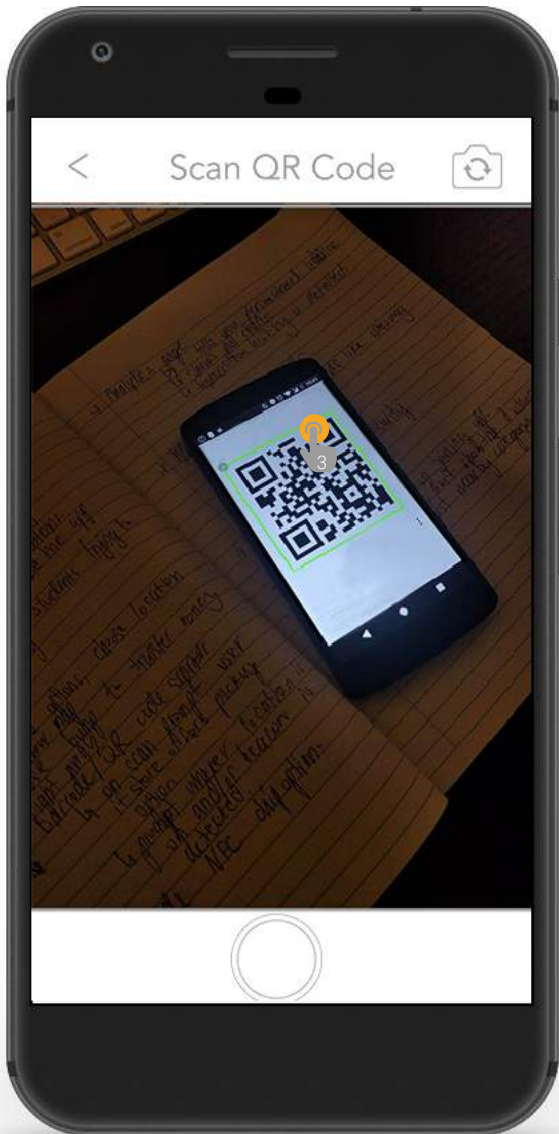
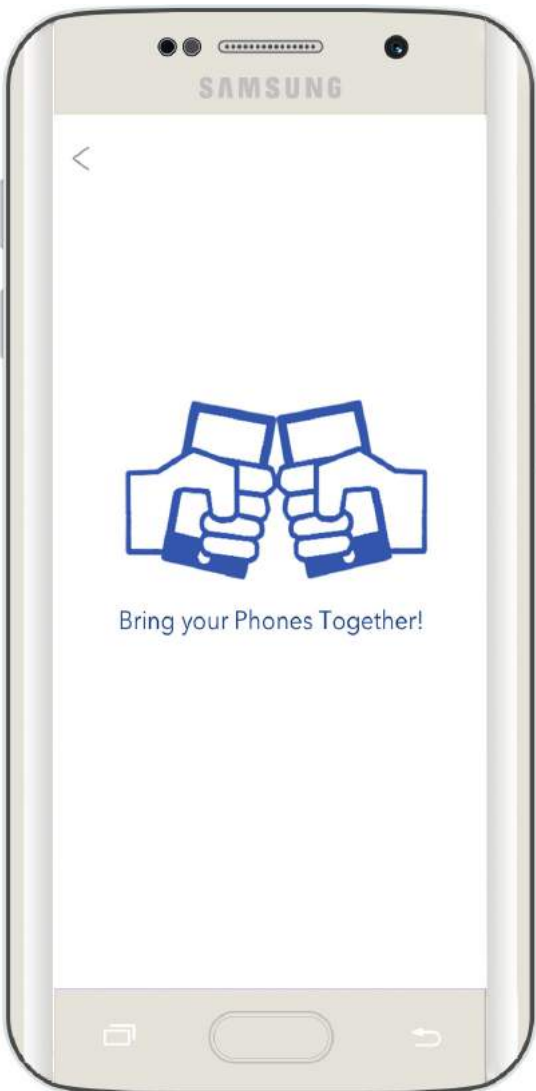


Both Payor and Payee enters Augmented Reality Camera.

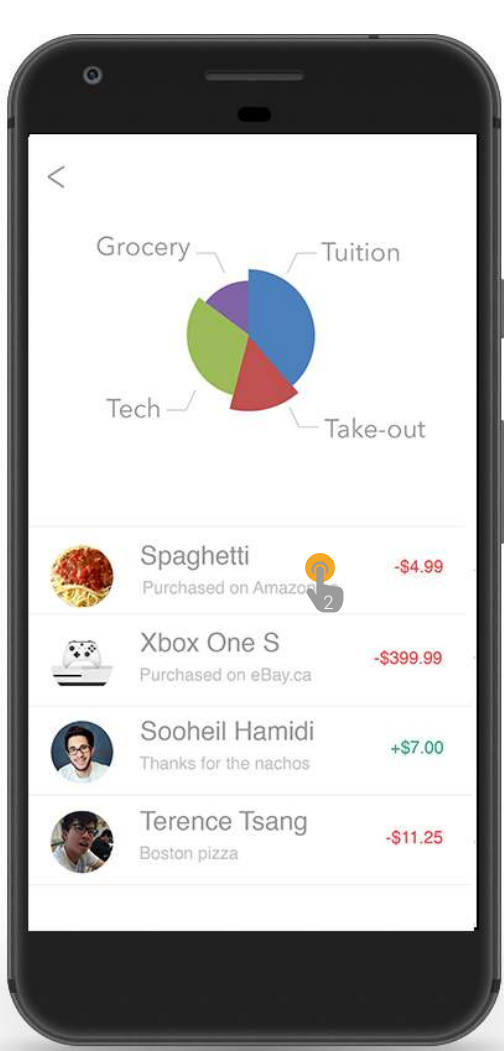
Like Pokemon Go, with GPS and wifi, the location of cash is stored in server based on user location.

The payor can drag the cash closer to the payee and the payee can see the cash through the phone.

Once payee selects the virtual cash, there will be a confirmation sent to both parties.



The app tracks all the transactions made by any of the registered Visa bank cards through this app.



Using the [Visa Wallet API](#), the user can track all his or her virtual currency in the application.

Once the user has registered an account, this view becomes home screen.

With the [Visa Checkout Get Payment Data Api](#), The user can view the payment information. In the customData of payment request, depending on the who the payee is, different information can be stored. In this case, the cashier's at Amazon Store was recorded

As for eBay, the name of seller would be recorded.



Touch Anywhere to Go Back to Previous View



Clicking on Cart Icon Transfers to Cart Screen

With the [Merchant Locator API](#), once the user walks into a supported store, the app will match the user's location from GPS and register the user with the store.

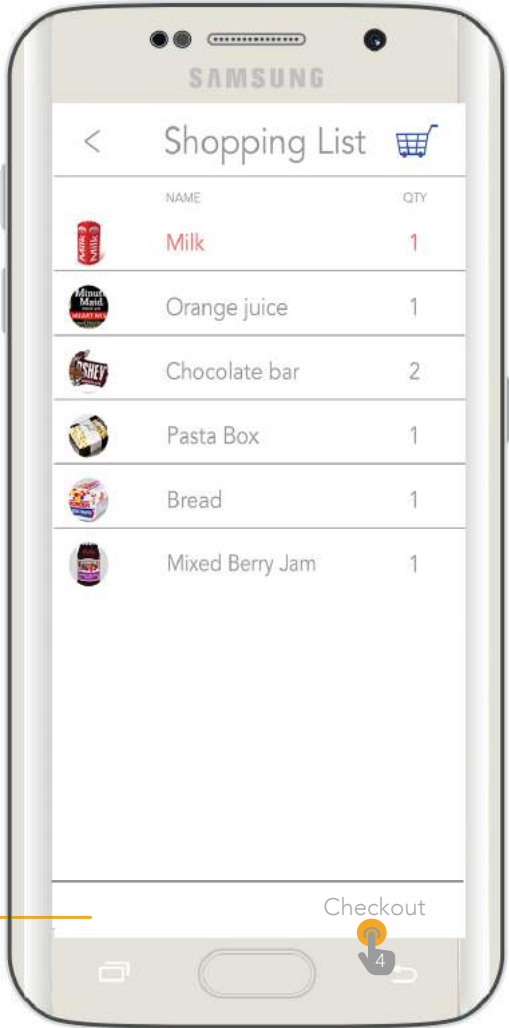
Present

The user can scan the bar code of the item in the store to buy the item with [Visa Direct](#). With NFC tags being as low as \$0.01 USD from Alibaba, the tags can be added to every item for security. Random checks by the store with high penalty costs will also be made. The user with an Android phone, can then tap the phone on the item. If the user has not registered a bank card, the app will prompt the user to with the registration view. The user is then able to walk out with the item without needing to wait in line.

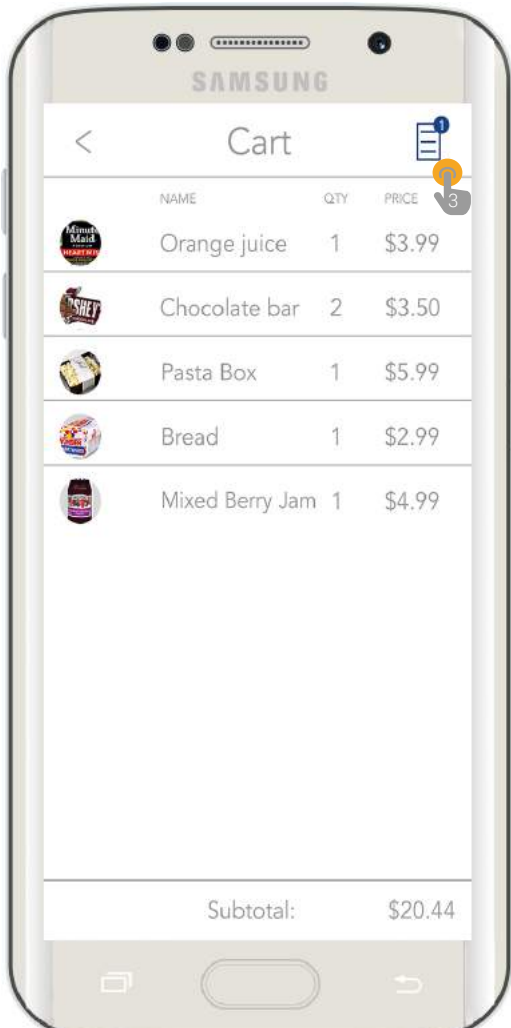
Future

Retail, fashion, and electronics stores can put one display item of each different item in the store, significantly minimizing store size and rent; iPhones will also support NFC tag scanning. The user can tap on to the NFC attached to the display item to view the details of the item and purchase it. The app will then notify the store system to decrease the count of that item, diminishing shrinkage. Once the item is ordered, the warehouse at the back, possibly roboticized like Amazon, will fetch the items for the user. When the user leaves the store, the items are ready at the front.

Items yet not purchased shows in the Shopping List.



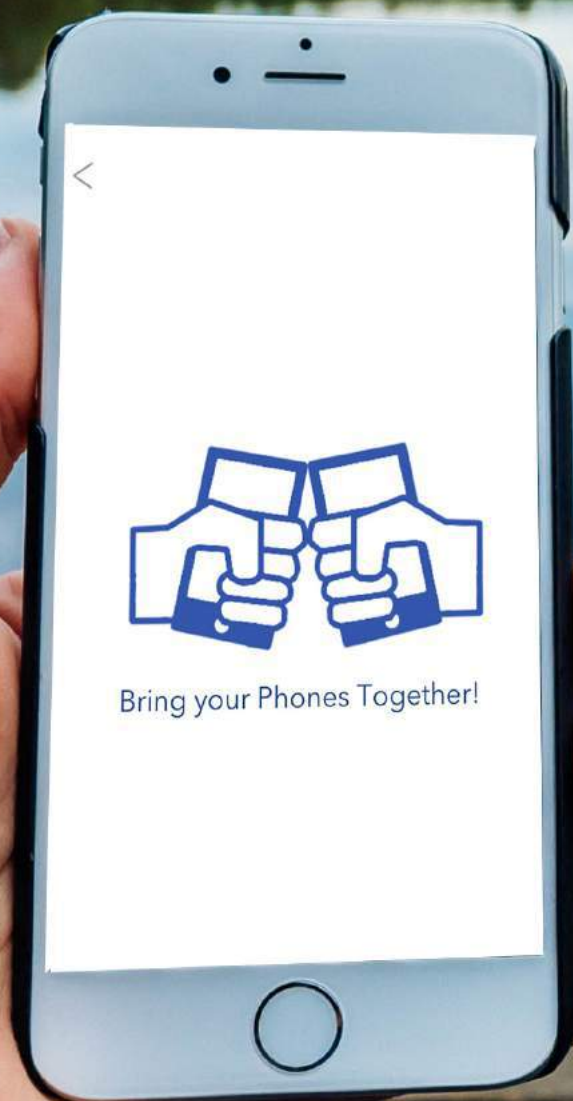
Checkout button conveniently placed under the Shopping List.



Payer chooses a
Method

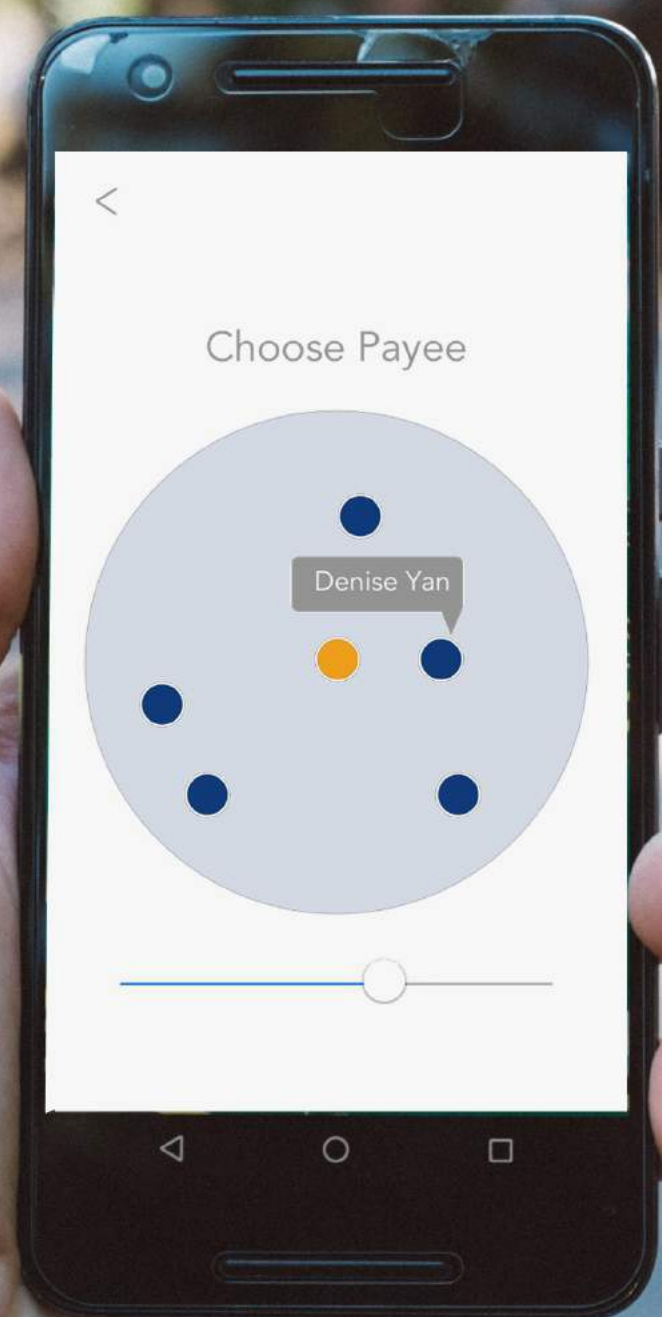


Receiver Matches



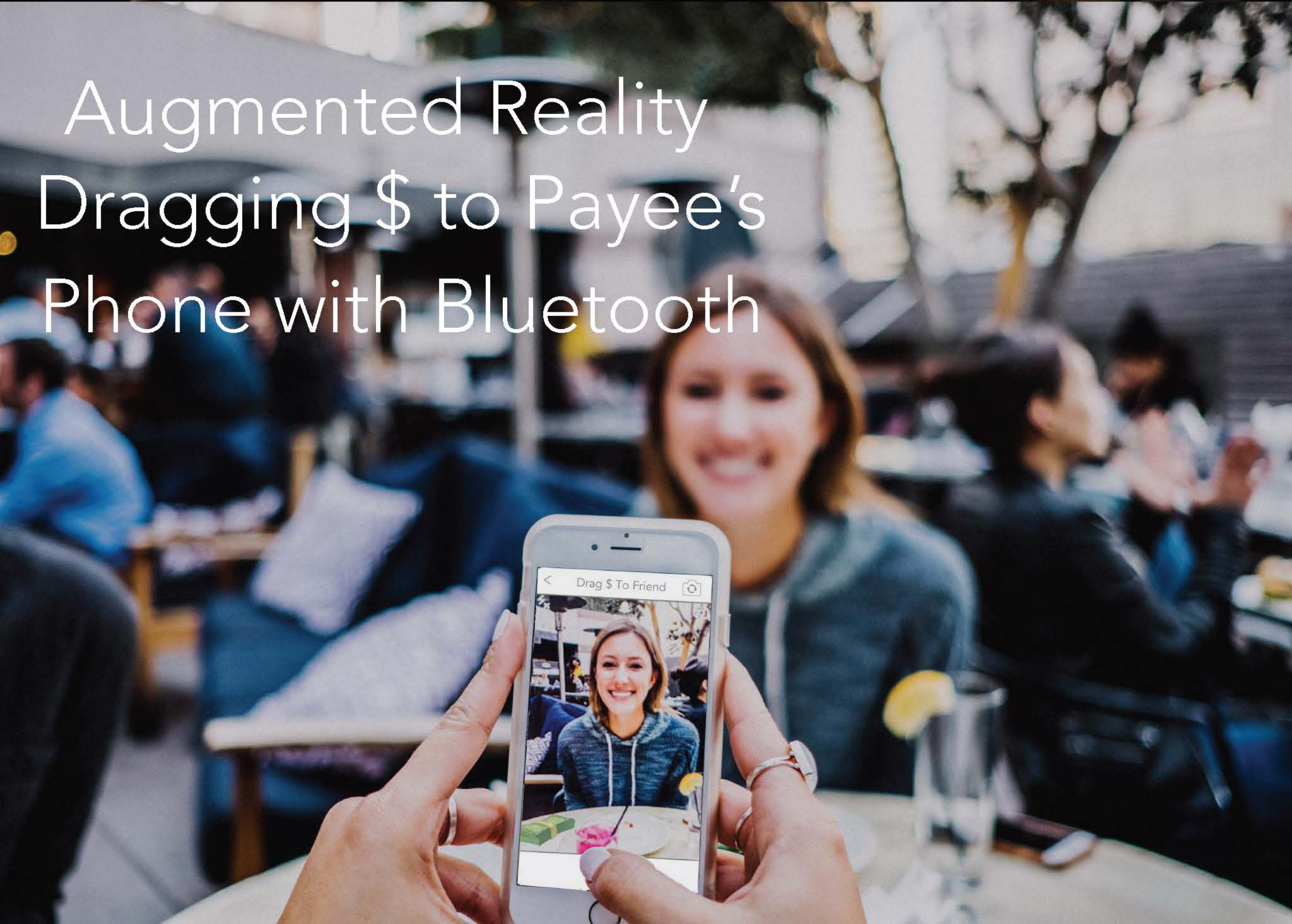
Tap Your Phones
Together

Find Payee with
GPS





Scanning
QR Code

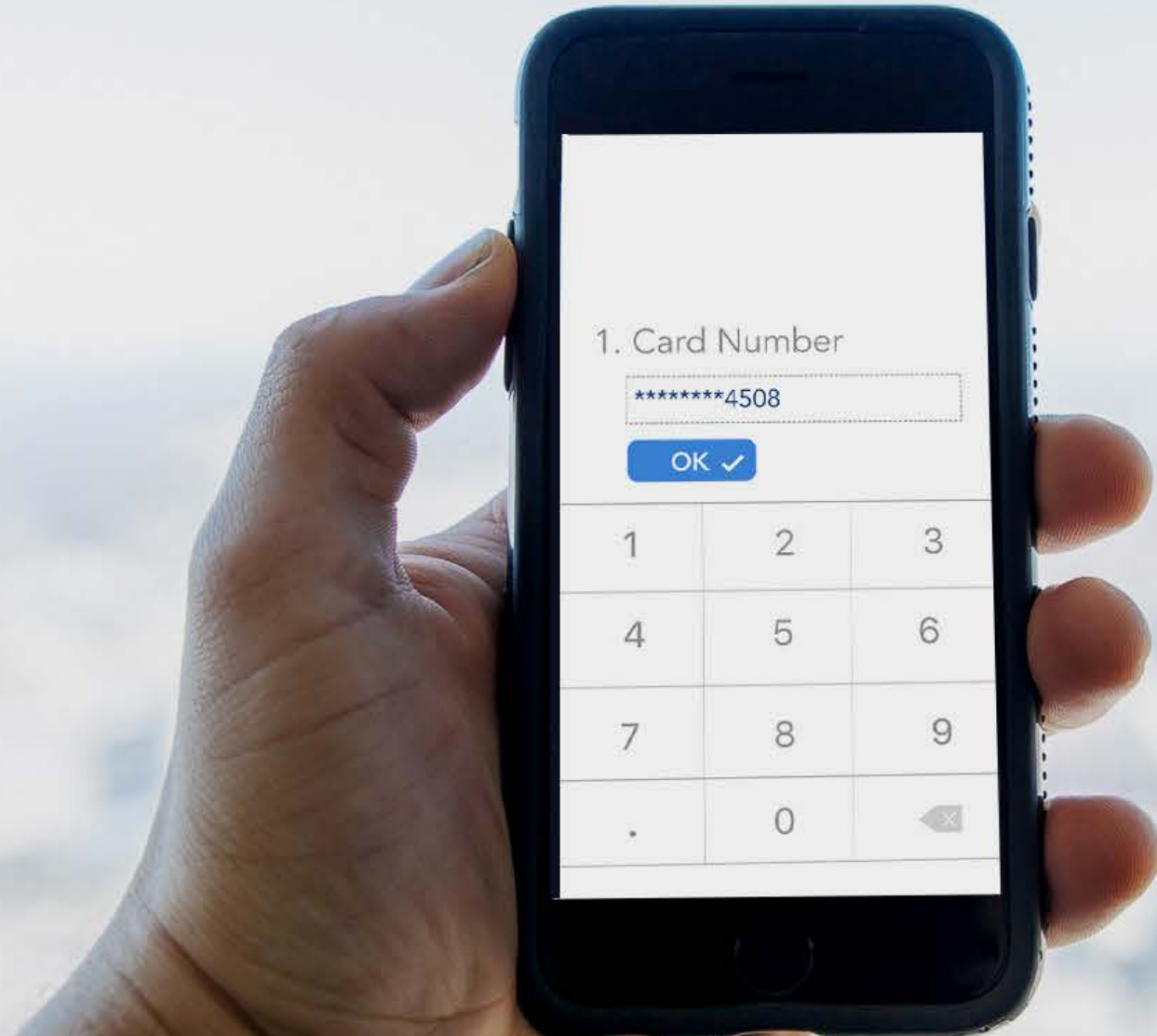


Augmented Reality
Dragging \$ to Payee's
Phone with Bluetooth

A hand holds a white Nokia smartphone. The screen shows a 'Contacts' app with a list of names and profile pictures. The names visible are Colleen Xiao, Mihai Lisatov, Soheil Hamidi, Amaz Strong, Bonnie Lovens, Nicole Gates, Alda Kiss, and Natalie Tory. The phone is held against a background of a person's arm and a blue bag.

Long Distance Paying
to Added Contacts

Register Your Bank Account
Partnered With Visa

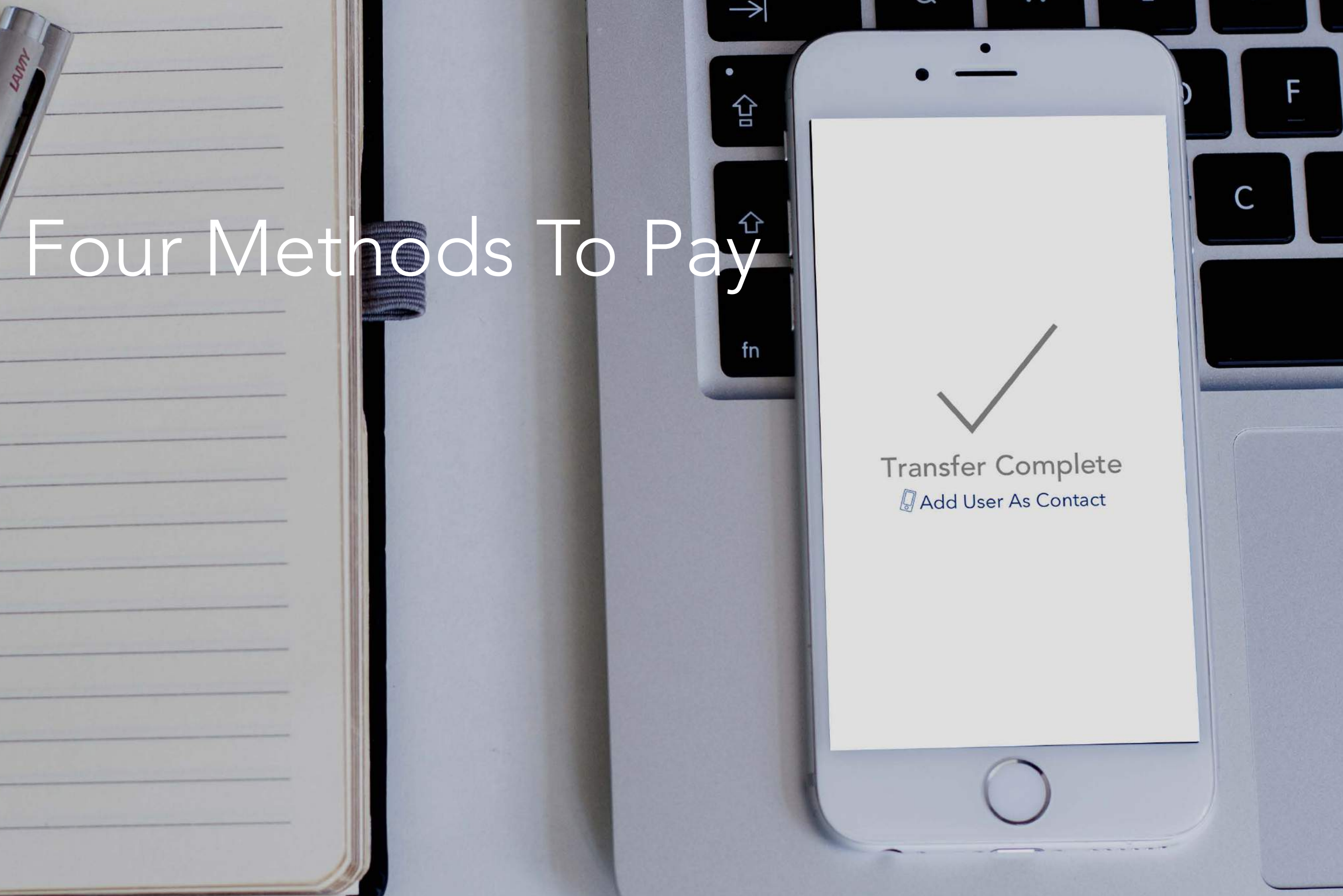
A hand holds a black smartphone. The screen shows a registration form for a bank account. It includes a section for '1. Card Number' with a text field containing '*****4508' and an 'OK' button. Below this is a numeric keypad with digits 1-9, 0, and a backspace icon.

1. Card Number

*****4508

OK ✓

1	2	3
4	5	6
7	8	9
.	0	⌫



Four Methods To Pay



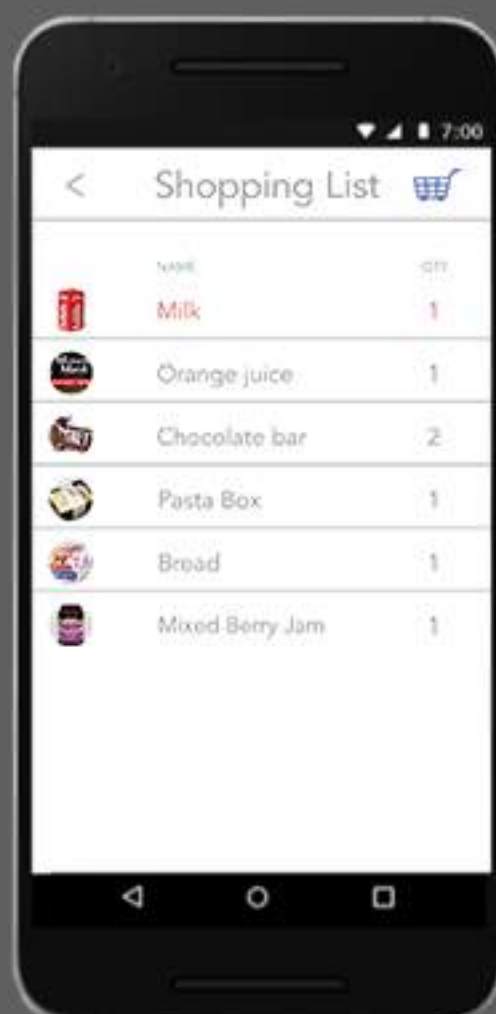
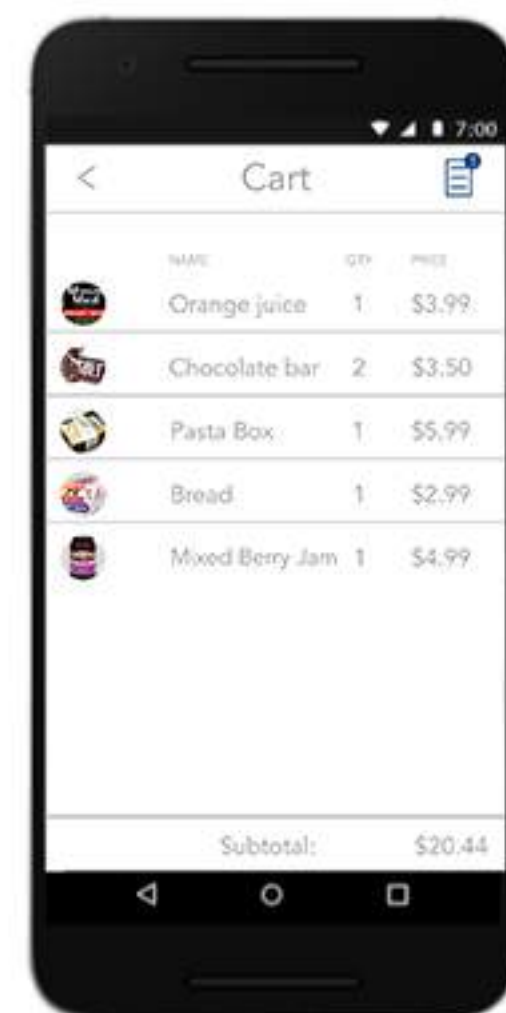
View Your Virtual Currency from Visa



Shopping made easy!

Simply scan the bar code to pay for the item.
No more waiting in the line, no more hassle.

Viewing your cart is
as easy as a click ...



... as well as keeping track
of your grocery list.

Transaction History from Stores and Friends

