



MOLLY'S VISION

The Molly founders believe the world is rapidly changing and diners are expecting more from their phones. They believe their phones should do more but require less attention. Phones should act as our trusted agents and the phones should be tasked with slogging through the administrative details of our desire for something like impromptu dinner with new friends at a restaurant.

This means:

1. Removing logistical complexities - Coordinating uber rides to the dining experience, keeping track of the group size, etc
2. Allowing for social connection with friends and new friends, Keeping diners mentally relaxed - making the reservations, recommending venues based on group's preferences, available reviews and diner's current status (in / out)
3. Keeping diners healthy - presenting menu favorites based on specific health goals, preferences, allergies, etc.
4. Calculating for diners - dividing bills based on personal values, customs, culture and financial health
5. Allowing diners to say our goodbye on their terms - Pre analyzing the route home, calculating waiting times, time to bed, allowing diners to snooze their agent for a prompt later.

This “magic” is based on an individual core set of values stored in a personal Molly Smart Contract. This set of values that can be updated to grow with diners with an additional option to also learn and adapt to diner's demonstrated behaviors if preferred.

The Problem

When dining out, splitting a bill can be a source of conflict among friends¹, and is event more anxiety inducing when dining with people you just met. To reduce and avoid any conflict, our app allows a group to decide on sharing the bill as early as possible. Then, at the restaurant, the charges will be divided seamlessly, in real time, in a way that is most comfortable for all involved.²

¹ “The dining experience, an \$863 billion market, is broken”
<https://futuresresearch.com/technologys-disruption-of-the-restaurant-industry/>

² Our app will increase restaurant spending by reducing the cost of dining.



The Solution : Molly Trustless Dining

Molly is an application (app) that links to our Molly Dapp. Molly:

- painlessly imbues a smart contract with the logic needed to split a bill at restaurants.³
- allows diners to set and forget a tailored set of rules for sharing that should be defined in a contract.
- Molly is a secure payment system and fiduciary smart agent that operates within the ethereum ecosystem.

Relevance of Blockchain Technology

Our app focuses on defined events (e.g. when group checks in, when the check is finalized). *Using the Ethereum* blockchain allows Molly to

- a. Prevent transmission of names of users and credit card numbers.
- b. Keep track of diners and orders (no free riders).
- c. To easily and seamlessly configure the terms of the smart contract using the app itself. (interoperability)
- d. Reduce costs for guests and restaurants through Peer-to-Peer connection. Disintermediate both banks and reservations platforms systems (Open Table, Seamless).

³ Base Case: Walk-in

1. Users have app installed
2. Arrive at Restaurant
3. Check-in to the restaurant
 - a. One user creates the group & shares QR code
 - b. Group scans: QR Code.
4. [Ordering]
 - a. App shows menu and you select
5. Check-out
 - a. Split -
 - b. Itemize - phone shows you menu, you tap your stuff
 - c. Server Side calculations → You're DONE (or not done)
 - d. Payment preferences

MOLLY

- e. Today all current settlement forms require counterparties, Banks, Amex, Visa, etc. Molly would allow for closer to “instant” settlement avoiding multiple days.
- f. Molly uses available ether wallets.

Molly reduces costs⁴ for guests and restaurants through via a peer-to-peer connection. We disintermediate banks and reservations platforms systems (Open Table, Seamless). Characteristics of our solution include:

- a. Since all parties verified on the blockchain, we prevent the “free rider” problem. This also helps relieve the “dine and dash” problem to the extent that diners use the system and are verified.
- b. All restaurant orders verified and attached to an identity.
- c. As more people use the system, tax receipts verified.
- d. We support social dining: dining with strangers or relatively new acquaintances. “People of all ages eat better when they share a meal with others. ... They also eat less pop and fried foods. Eating together gives young children the chance to learn more words and how to communicate better.”
- e. Reduced concerns/anxiety over situations; payments can be pre-arranged by phone (or AI agents). Value is transferred instantly and belongs to the business that provided the service. This value is available for the business to leverage immediately, including B2B transactions - other businesses using the Molly network experience the benefit, which will benefit the local community.

Social Impact

- Consumer benefits: Customers get to experience more time interacting with their group or the business representative, the money relationship is almost pre-determined and can be put aside for people to be present to the experience.
- Business benefits: Businesses can focus on relationship building, benefit from reduced fees (savings could be passed to customers). Businesses have more

⁴ Credit Cards - TIME to settle - 14 days for INTL Credit Cards. Cash - Cash deposits, charge-backs, cash counterfeits, international settle time.



assets immediately and the Ethereum market allows faster B2B transactions with less transactional overhead.

- Societal benefits: Reduced concerns/anxiety over situations; The value is available for the business to use immediately - other businesses in the Molly network experience the benefit, which also benefits the local community. By making it easier to dine out (even with strangers) our product will have significant and positive social return. Molly facilitates social interactions: "People of all ages eat better when they share a meal with others. ... They also eat less pop and fried foods."⁵ Economic impact enormous: total spending on restaurants in the US 2019: \$890 billion. Our solution will, we estimate, lower the cost of dining out. We estimate the social impact of our solution in the 1.5x range (over time, with wide adoption), based on the impact of social sharing economy companies like AirBnB.⁶

By making it easier to dine out, even with strangers, our product will have higher than industry average social and financial return.

Economic Impact

Given the importance of the restaurant sector, the economic impact will be enormous.* Our solution will, we estimate, lower the cost of dining with strangers. Given the impact that social facilitators (Facebook, AirBnB, UBER, BikeShare) have, we estimate the social impact of our solution in the 1.5x range (over time, with wide adoption).

<https://www.airbnb.com/economic-impact>

Business Model

1. Revenues

- a. Percentage fee on transaction amount⁷

⁵ <https://www.healthlinkbc.ca/healthy-eating/eating-together>

⁶ <https://www.airbnb.com/economic-impact>

⁷ From restaurants with the Connect system, **OpenTable** receives a fee for each diner who completes his reservation. It receives \$2.50 per diner who reserves through **OpenTable's** site, and \$0.25 per diner for reservations **made** through the restaurant's site using **OpenTable** software. Assumed ~3% transaction cost = \$26 billion → Assumed 1% transaction cost = \$9 billion.



- b. Advertisements
 - c. Subscriptions: consumer, restaurant.
 - d. Partner with existing POS solutions (ex: Open Table to deliver functionality)
2. Molly is a simple, transaction-based business. Its simplicity and scalability give us a real advantage:



Appendix:

Market Research

- \$863 billion: Restaurant industry's projected sales in 2019.
- 1 million+: Restaurant locations in the United States.
- 15.3 million: Restaurant industry employees.
- 1.6 million: New restaurant jobs created by 2029.
- 10%: Restaurant workforce as part of the overall U.S. workforce.
- 9 in 10: Restaurant managers who started at entry level.
- 8 in 10: Restaurant owners who started their industry careers in entry-level positions.
- 9 in 10: Restaurants with fewer than 50 employees.
- 7 in 10: Restaurants that are single-unit operations.

<https://restaurant.org/research/restaurant-statistics/restaurant-industry-facts-at-a-glance>

<https://pos.toasttab.com/blog/restaurant-management-statistics>