

ASHE PAY

A NEW PAYMENT SYSTEM



By Michelle Kelrikh

The current payment systems are flawed and dominated by the same players they have been for the past sixty years. Now, two Yalies are hoping to change this. In September 2014, Mark Pham BK '16 and Teddy Shim BR '17 released Ashe Pay, a new innovation in an industry that has seen much stagnation since its inception.

Its success, they say, would overhaul the payment industry such

that American Express, MasterCard, Visa, and Discover are no longer the only players in the game anymore. These industry giants currently rely on a system riddled with inefficiencies and opacities that Pham and Shim said their online transaction system transcends.

As things stand, multiple parties handle the money involved in any individual credit card payment

or online transaction. Each party charges a fee for clearing the payments and moving the money to the next step, making the aggregate cost more expensive for both merchants and customers. Take the example of YalePrint, the online campus system that students use for access to University printers: Adding \$20 to one's account, one actually results in a \$18.73 bump in YalePrint funds because of all of the fees subjected by these

intermediate parties.

There also remains the issue of human error affecting the success of any credit transaction and the security of the user's financial information. This can give rise to crises like the December 2013 malware issue that caused over 70 million Target customers to have their credit or debit card information stolen digitally. Sitting at the heart of this incident was an issue with one of the extraneous parties, the point of sale terminal.

Merchants in the current system are also face the risk of fraud perpetrated by customers in the form of chargebacks, a deceitful practice that starts when a customer falsely claims a certain charge to be invalid. The credit card company then usually refunds the amount without asking many questions.

And because some charge claims are sincere, it can be difficult for huge credit card companies to separate the fraudulent and from the innocent. Things are even more difficult for merchants—small merchants do not have the resources to investigate properly, while larger merchants usually have other priorities.

But due to a general lack of awareness as to what the issues plaguing credit card transactions are, the impetus for change hasn't quite existed, despite the system's evident vulnerabilities. Ashe Pay aspires to correct for these weaknesses by overhauling the system and seeing it a new way. "Today when you make a payment... It's slow and it puts the customer in a vulnerable position," Shim explained.

Ashe Pay completely circumvents the existing structure by ensuring that the merchant involved receives the money immediately, eliminating the need for third-party fees and rendering chargebacks ineffective. The company makes money by charging a low monthly fee to merchants — just \$10 per month — while the service remains free for customers. Given the fact that any major credit retailer, like Visa, usually charges 1.51% + \$0.10 per transaction of the merchant, the \$10 fee is novel.

Ashe Pay's structure today is clear, but it has been a long time coming to actually establish the system as legitimate. Establishing the new player in an old industry meant a lot of determination and many phone calls from Pham and Shim. "We didn't start by having a vision of what Ashe Pay was going to be. We started by seeing a flawed system, and built a new system from the ground up," Pham said.

Pham believes Ashe Pay works because he and Shim built it to be more convenient, and cheaper than any existing service. They've also prioritized security by generating individual transaction IDs that allow users to "push" money by typing in the exact number associated with the relevant account and transaction. After five minutes, the ID expires, reducing the risk of exposure—at the very least when compared to physical cards with static numbers.

"Rather than merchants and credit cards being authorized to pull money from someone's account, customers push their money towards the merchant via the transaction ID," Shim said. And it's all paying off—since its early fall

release, Ashe Pay has garnered much attention. Still, Pham and Shim have elected to keep things on a manageable scale in order to ensure product quality. "If things went down quickly, we'd rather work out the kinks with a small base of users," Pham said.

2,500 consumers and businesses are currently on the system, but as the Yalies look to expand, they are targeting two specific markets: online auction seller sites like Ebay and Etsy and markets for Bitcoin and other, increasingly popular virtual currencies.

Much work remains to be done, with Pham and Shim noting it has been quite a ride since they started the company. "Payment isn't sexy," Shim said with a laugh.

The lack of innovation the industry has experienced in past years is because young entrepreneurs and computer scientists are not going towards payment when they go to Silicon Valley. Facebook, Twitter, Slack, etc – these are the platforms that garner young minds. Payment, unfortunately, has not been, but Pham and Shim are optimistic for what the future of Ashe Pay holds.