

BLOCKCHAIN PRIMER PT. 2:

How Retail Can Benefit From Blockchain Technology

MAY 2018

FEATURING:





- **04** WHAT IS SHOPIN?
- **06** WHY WAS SHOPIN CREATED?
- 06 WHY RETAIL NEEDS BLOCKCHAIN NOW
- 07 HOW DOES SHOPIN WORK?
- **08** WHAT WILL IT LOOK LIKE?
- **09** WHY THE BLOCKCHAIN?
- 09 A NEW WAY TO ADVERTISE
- 11 WHAT IS THE SHOPIN TOKEN?
- 12 FINAL THOUGHTS
- 13 KEY INDUSTRY STATISTICS

OVERVIEW

he retail industry is already on track for a record-breaking year in 2018. Unfortunately, that record is for the amount of retail square footage that is expected to be vacated. As of April, more than 90 million square feet will be shuttered, easily surpassing the record set last year when 105 million square feet of retail space was vacated.

The companies that are facing the biggest challenges in the current retail environment are those that were late to implement technologies that aligned with shifting consumer preferences for omnichannel shopping experiences.

It is our view at TRAUB, that blockchain, a relatively new technology, will have similarly disruptive applications in our industry – the global consumer and retail industry. Rather than taking a wait-and see approach, as the retail industry did with ecommerce, we believe the time to adopt blockchain in retail is now. Taking a proactive approach to blockchain implementation presents the retail industry with an opportunity to change the narrative from retail apocalypse to retail innovation.

As a follow up to the initial blockchain primer we wrote last year which provided a high level overview of the technology and some of its key terms, we have written this second installment to profile a specific blockchain application within the retail industry – Shopin. Shopin sits at the forefront of using blockchain technology to revitalize the retail industry by putting the ownership and control of personal data back in the hands of the shopper.

We sat down with Eran Eyal, Shopin's CEO and cofounder, to discuss how Shopin came to be and why the retail industry needs Shopin.

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WHAT IS SHOPIN?

Shopin is the first universal shopper profile that delivers the most personal shopping experience on retailers' websites, apps, and stores based on shopper preferences and purchase history data. Shoppers are in full control of their data for the first time with a cryptocurrency to reward them when their attention is engaged with ads, content, and loyalty, and they are able to spend Shopin Tokens together with traditional currencies, also known as Fiat, at participating stores and websites.

Shopin empowers retailers to offer better product recommendations, easier and more secure transactions, and more valuable customer rewards using blockchain and Artificial Intelligence.

WHY DID YOU DECIDE TO CREATE SHOPIN?

Shopin was founded based on the realization that most retailers don't truly know the customers who visit their ecommerce sites, apps, and physical stores. Retailers are closing at a rapid rate for many reasons, and while some of these reasons are related to other external forces, real estate trends, shifting consumer preferences, etc., they tend to all share one basic foundation: low conversions.

Most stores have 10 walk-ins, and often only 1 out of 10 actually leaves the store with a purchased item. The lack of capital, due to the aforementioned challenges, has resulted in retailers' chronic inability to invest in technology to help increase their conversions. Even the most tech-savvy retailers and fashion brands lack the ability to understand the totality of their customers.

Case in point, if you love Brand X and have purchased shoes there for 20+ years, all that Brand X knows is that you like brown boots. They have no knowledge about what else might be of interest to you since they don't have access to your purchasing activity outside of Brand X. This cuts both ways. The consumer may have become brand loyal to Brand X, but only for brown boots, and Brand X isn't growing its share of that customer's closet since Brand X isn't recommending the proper complementary products to that shopper.

The rapid deterioration of so many incredible retail brands was the genesis of Shopin. Using next-gen Artificial Intelligence and blockchain technology, Shopin is helping to create a more sustainable retail economy where retailers become stronger by working together and shoppers get rewarded based on the value of the data that they own and control.



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- ERAN EYAL, SHOPIN'S CEO AND COFOUNDER

WHY DO YOU THINK RETAIL NEEDS BLOCKCHAIN NOW?

Retailers are facing decreasing margins, more competition, and a loss of direct connection with their customers on Amazon, eBay, Jet. com, and other online retailers **N** 2017, more than 6,400 retail stores in American malls closed and another 3,600 are expected to close in 2018. The global retail industry is struggling as well. Across the board, retailers don't have enough first-party purchase data and shopper-verified preferences to fully understand shoppers and what products they want to buy. Retailers are facing decreasing margins, more competition, and a loss of direct connection with their customers on Amazon, eBay, Jet.com, and other online retailers.

Shopin is building a protocol for the web to engage with users and provide them with the most personal experience across every website and physical store, to exchange commensurate financial value for their time and attention, and to realize a profitable and sustainable future for retailers and brands

These ecommerce platforms provide a much better customer experience to their shoppers because they have a much more informed view of their customers. Rather than relying on a narrow data set formed from a customer's purchase history from a single brand or product category like most brands and retailers do, Amazon for example, has purchase history from its customers that cross a wide range of price points, brands, and product categories. Amazon can therefore build much more informed customer profiles and provide better product recommendations, leading to higher conversion rates.

Amazon accounted for 44% of ecommerce in 2017, according to eMarketer, up from 38% the year before. Needham predicts that Amazon will claim market share of more than half of all U.S. ecommerce by 2021.

As long as individual brands and retailers rely on just the purchase data they collect from their customers in their stores and on their apps and websites, they will never be as smart as ecommerce aggregators like Amazon and Jet. com.

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of e-commerce transactions in 2017 were accounted for by Amazon. 38%

increase in online shopping from 2016 3600

American Retail stores are expected to close in 2018.



HOW DOES SHOPIN WORK?

By setting up a Shopin Profile, consumers automatically store all their transaction and preference information on a secure blockchain database. They can keep the information completely private or choose to share it with their favorite retail brands in return for personalized recommendations and other incentives and rewards. Consumers also use their Shopin Profile to monitor shipments, initiate returns, and share their wish lists with friends and family.

The Shopin Profile is the first Federated, permissioned blockchain system that combines value (the Shopin Token) and data (preference and transaction information). Storage and distributed application processing nodes are provided by retail partners, while keys to the profile data are entirely controlled by consumers.

The Shopin Token is used to facilitate the mutually beneficial exchange of information between retailers and consumers for more personalized and efficient transactions. Retailers exchange tokens with consumers in return for access to their profile data, and for permission to send them marketing offers and rewards for loyalty. Consumers can exchange the tokens for merchandise at participating retailers or into direct monetary rewards.



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WHAT WILL IT LOOK LIKE?

All retailer/shopper transactions will continue to take place on retailers' sites, allowing them to control the user experience and build brand equity with their shoppers. However, via the Shopin app, wallet, and single sign-on, shoppers will be recognized across the open retail web via their historical purchase data. Retailers will be able to recognize Shopin users when they come back to their website or store and provide personalized product recommendations that align with that shopper's style preferences. These smarter product recommendations will lead to better conversion metrics and lower abandon rates. Additionally, retailers will be able to market directly to relevant customers through the Shopin's proprietary marketing platform.

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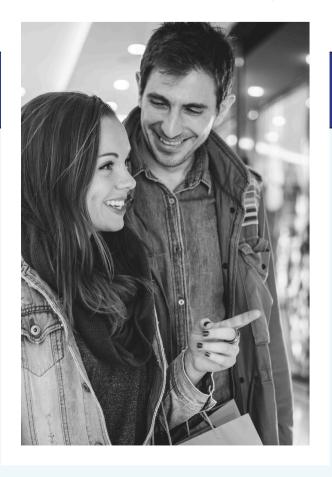
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To get started, shoppers are asked to participate in a fun, gamified Shopin Profile onboarding experience where they are asked questions about their styles preferences, fashion aspirations, sizes, style likes and dislikes. The more information they share with their Shopin Profile, the smarter our A.I.-powered recommendation engine becomes, and shoppers are encouraged on an ongoing basis to enrich their Profile by uploading photos of styles they see in magazines, on the street, in clothing stores online and offline.

All of this Shopper Profile data and the consumer's purchase history data (from the entire retail universe that they shop in) is completely private, owned, and controlled by the shopper.



WHEN A SHOPPER ENTERS A STORE, AN APP, OR A WEBSITE, AND THEY DECIDE TO LOG ON TO THEIR SHOPIN PROFILE, SEVERAL CRITICAL THINGS HAPPEN:

The Shopin A.I. gets temporary access to their profile

Product recommendations are produced in real-time

The Shopin A.I. pulls inventory data

Product recommendations are displayed on the retailer site/provided to the sales associate or stylist at the store

Instead of showing the shopper 300 different pairs of skinny jeans, they are only shown five pairs that are really relevant in terms of size, fit, style, & preference.



We are on the blockchain because it's the only solution

that offers decentralized and

secure data storage for users

Additionally, blockchain enables an environment where competing retailers can benefit from each other's purchase data without directly sharing it. This unique ability allows Shopin to power retailers' product recommendations in a way that truly rivals ecommerce aggregators such as Amazon



WHY THE BLOCKCHAIN?

Part of our mission is to revitalize the retail industry by re-establishing trust between consumers and retailers. Large-scale data breaches within the retail industry have become a recurring headline and have significantly eroded the trust between shoppers and retailers.

According to the results of a survey released in 2017, 49% of people said they are increasingly concerned about their privacy online, and lack of trust is the main issue keeping them from shopping online. The survey, conducted by Ipsos and the Centre for International Governance Innovation (CIGI), in collaboration with the United Nations Conference on Trade and Development (UNCTAD), highlights the concern that consumers have with retailers being able to protect their personal information.

We are on the blockchain because it's the only solution that offers decentralized and secure data storage for users. Additionally, blockchain enables an environment where competing retailers can benefit from each other's purchase data without directly sharing it. This unique ability allows Shopin to power retailers' product recommendations in a way that truly rivals ecommerce aggregators such as Amazon. Finally, blockchain allows us to offer a universal reward platform in the form of a cryptocurrency, the Shopin Token, which never expires.

A NEW WAY TO ADVERTISE

Over the last 24 years, digital advertising has become the largest medium in the media mix, and while it has been enormously effective, it also introduces a lot of complexity and risk, including non-human traffic/bots, viewability issues, brand safety, tracking and privacy, and GDPR compliance, to name just a few. And nearly all of retailer marketing investments flow out of the retail economy. But this must change.

Through the Shopin app, retailers will be able to identify relevant users who have raised their hand and are willing to engage with marketing messages, reducing the reliance on advertising with Amazon, Google, and Facebook, and instead allocating those budgets to what matters most: Shoppers!

This closed loop economy instead rewards your shoppers for their time, attention, and loyalty, enabling sophisticated targeting and dynamic storytelling based on their Shoppin Profile versus pushing one-size-fits-all messaging.

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Eran Eyal

Shopin's CEO & CoFounder

WHAT IS THE SHOPIN TOKEN?

The Shopin Token is our solution to incredibly inefficient loyalty systems that are in place today. It's clear that loyalty rewards programs aren't working, as \$100 billion in loyalty points went unredeemed in 2017. The Shopin Token will be used to facilitate the mutually beneficial exchange of information between retailers and consumers for more personalized and efficient transactions. Retailers exchange tokens with consumers when their attention is engaged via ads, content, and other programming. Consumers can then exchange the tokens for merchandise or services at any Shopin retail partner or redeem them directly as a monetary reward.

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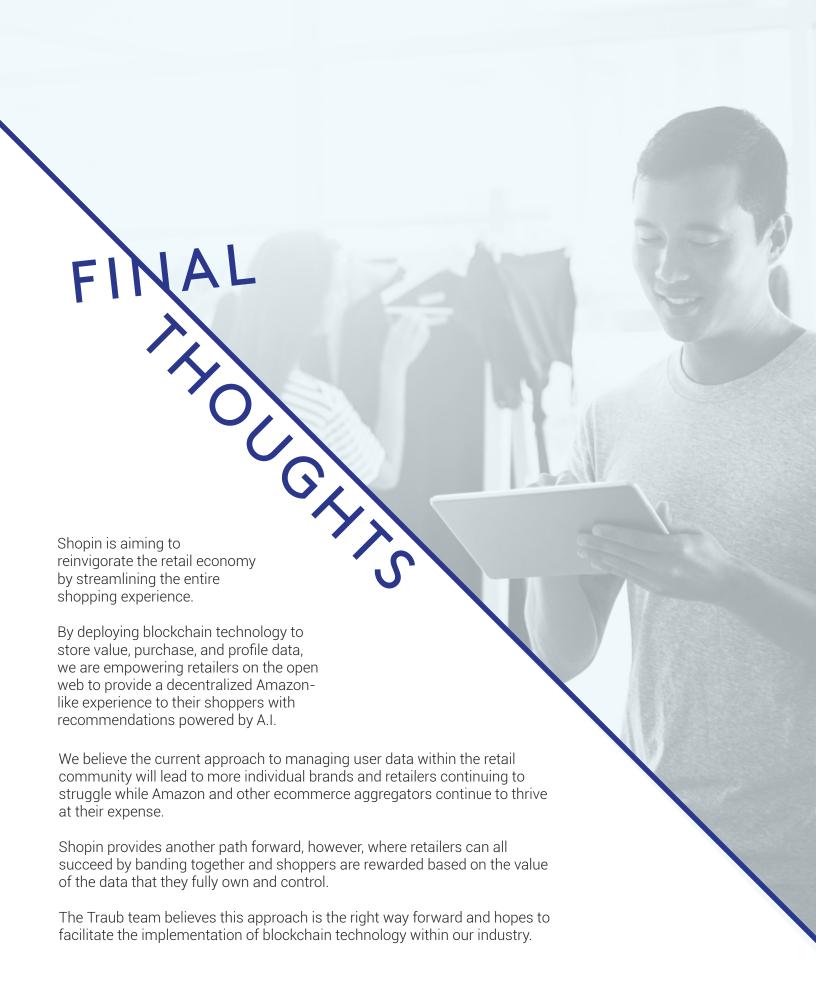


SHOPPER BENEFITS

High Customer Intelligence
Al Powered Product Recommendations
Strength in Numbers
Digital Tokens: A more Valuable Economy of Data
Higher Conversion Rates
Stronger Customer Relationships
GDPR Compliance

RETAILER BENEFITS

Full Transparency and Control of Data
Most Personal Shopping Experience
Shopin Tokens
Social Gifting
Single-click Checkout
The Best Shopin App
Fully Secure



KEY INDUSTRY STATISTICS

- As of April, more than 90 million square feet will be shuttered, easily surpassing the record set last year when 105 million square feet of retail space was vacated.
- Most stores have 10 walk-ins, and often only 1 out of 10 actually leaves the store with a purchased item.
- In 2017, more than 6,400 retail stores in American malls closed and at least another 3,600 are expected to close in 2018.
- Amazon accounted for 44% of ecommerce in 2017, according to eMarketer, up from 38% the year before. Needham predicts that Amazon will claim market share of more than half of all U.S. ecommerce by 2021.
- According to the results of a survey released in 2017, 49% of people said they are increasingly concerned about their privacy online, and lack of trust is the main issue keeping them from shopping online.
- Over the last 24 years, digital advertising has become the largest medium in the media mix, and while it has been enormously effective, it also introduces a lot of complexity and risk, including non-human traffic/bots, viewability issues, brand safety, tracking and privacy, and GDPR compliance, to name just a few.
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89%

Customers that switched to a competitor because of customer experience

63%

Customers Annoyed with Non-personalized, Repeated Ad Messages 99%

Customers that will share personal data for rewards **62**%

Consumers that think brands are not doing enough to reward loyalty

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