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RESEARCH
CENTER

E-tailing In The Age Of Platforms



Understanding How Consumers
Interact With Online Platforms —
And How Retailers Can Benefit

Consumer Data Allows Retailers To Understand The Value Of Multi-Sided Platforms (MSPs)

For centuries, retailers have joined one another in markets, malls, or other common locations to sell products to consumers. And for as long as this practice has been in place, there are questions that the retailers simply could not answer as they did not have access to consumer's purchase behavior at other competing retailers.

Retailers would be unable to know, for example, if a consumer shops at a retailer — let's say retailer A — is s/he then more likely to shop at another competing retailer B or a non-competing retailer C? Moreover, if retailers have similar product assortment, is it advantageous for them to be located in geographical proximity? If so, in the context of online MSPs, how does a retailer succeed by joining a network of retailers, and is its performance related to the presence of other competing retailers? Multi-side platforms (MSPs) allow us to answer questions related to consumer behavior across retailers.

MSPs are digital platforms that connect multiple groups of stakeholders, such as consumers and retailers, and facilitate direct interactions among them.

Spiegel Research Center conducted a study on MSPs using the data provided by ShopRunner, a U.S.-based MSP. The study analyzes consumer behavior to ultimately provide retailers answers to the questions they've never been able to answer before.

QUESTIONS WE ADDRESS

As we performed our analysis on the data, we honed in on these three questions:

- Are MSPs beneficial to both consumers and retailers?
- Are all retailers impacted the same way by being in an MSP?
- Do retailers benefit from being in an MSP with a direct competitor?

About The Research

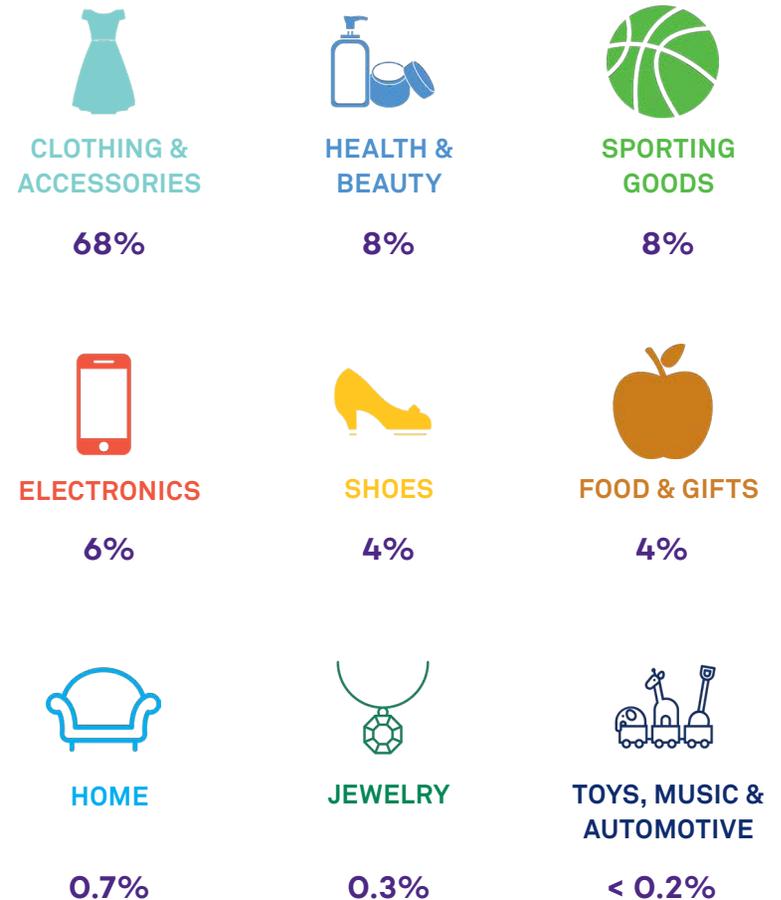
The data for this study is provided by ShopRunner, a U.S.-based MSP, launched in 2010. Since then it has hosted more than 10 million consumers and worked with more than 250 retailers including Neiman Marcus, Ann Taylor, and Chico's.

In total, the retailers on the MSP represent 11 different categories, from sports and electronics to jewelry and toys.

The data is from 2016 and 2017 and during that time, 68% of purchases were from the clothing and accessories category. ShopRunner does not feature a physical store, although its retailers may have their own brick-and-mortar stores.

ShopRunner offers a host of benefits to consumers, including free 2-day shipping and free returns on every purchase. Membership is \$79 per year, and consumers can also a benefit by signing up through an American Express and some other elite branded cards.

SHOPRUNNER CATEGORIES





Are MSPs Beneficial To Both Consumers And Retailers?

The Value Of Marketplaces

To understand whether MSPs are beneficial to both retailers and consumers, it first is essential to understand their history. MSPs, at their most basic level, are like marketplaces or Bazaars. Like marketplaces, MSPs are platforms where retailers can connect with consumers, and vice versa.

That definition illustrates a commonality between marketplaces and MSPs dating back thousands of years. Consider the ancient Agora of Greece, as far back as the 5th century BC. This marketplace in the city center was where merchants came together to sell products to local consumers. A shopping mall is a more recent example of a marketplace. It is a singular location where multiple retailers can interact with potential consumers.

MARKETPLACES GO DIGITAL

One difference between MSPs and shopping malls is that MSPs don't exist in a physical location. However, they function much like a Greek Agora or a shopping mall. Similar to Agoras and shopping malls, retailers of all types and categories reside in a singular location, providing them access to a host of potential consumers, while offering consumers a singular location to access a variety of products.

FROM THE AGORA TO YOUR LAPTOP

There are many differences between ancient Greece and today, but the benefits of an MSP is much like the ancient Agoras that existed nearly 3,000 years ago or even like the contemporary shopping malls. Each is an example of a marketplace — a singular location for retailers to connect with consumers, and for consumers to find a wide range of products.



What Makes MSPs Different

While there are many commonalities between MSPs of today and other marketplaces, there is a profound difference that sets them apart from their predecessors. MSPs have access to consumer's behavioral data across platforms, not just within a retailer. This allows MSPs to develop insights from consumer purchases across retailers that previous marketplaces had limited capability to track.

For example, shopping malls and the retailers within them have had little ability to know how consumers shop across retailers. MSPs, however, now have the data to track that information.

When a consumer purchases a product through ShopRunner on Saks Fifth Avenue, ShopRunner can track if that consumer also makes a purchase from Bloomingdales or Neiman Marcus. This knowledge enables ShopRunner to provide value to their retailers, as well as helps consumers in their shopping journey.

THE DIFFERENCES AMONG MSPs

An MSP has access to consumer's shopping data that indicates their shopping path. Some MSPs, like ShopRunner, take that information, secure and anonymize it before providing value-added insights to its retailers.

Amazon is surely among the most well-known marketplaces in the world, though it differs from ShopRunner in a number of ways. It does not facilitate direct connections between consumers and retailers, as ShopRunner does. Rather, with Amazon, consumers access retailers' products and retailers can access consumers' data only through them. In this way, Amazon does not operate like a networked platform like ShopRunner. Amazon also competes with its retailers since it is a seller — and sometimes a competitor with their marketplace partner.

The Network Effect In The MSPs

MSPs are beneficial for both retailers and consumers because of the network that exists on the platform.

BENEFIT FOR RETAILERS

The fundamental principle behind network theory states that there is an exponential value added whenever there is an addition to a network. When a consumer buys a product from a stand-alone retailer, that adds value to the retailer, but it's not an exponential increase. When a retailer joins ShopRunner, though, not only do they have access to their own consumers, but they also gain access to every other consumer who entered the network with a different retailer, or who makes a purchase through another retailer. That is an exponential increase in value.

BENEFIT FOR CONSUMERS

ShopRunner offers great benefits to consumers like free shipping and two-day delivery, but the reality is those deals can also be offered by individual retailers. The way ShopRunner delivers value to consumers is that they provide an easy-to-access subset of retailers where consumers know shipping will be fast and free with a standard checkout process.

REVENUE RISES FOR RETAILERS

When a retailer joins the ShopRunner network, the other retailers in the network see an increase in their sales. The extent of this increase is dependent on the retailer that enters and the consumer segment it serves. But more often than not, a win for one retailer is a win for the network.

The individual retailer's revenue rises because the new retailer is exposed to new consumers who value the network benefits. As for the other retailers in the network, they also experience an increase in sales because the new retailer's pre-existing consumers tend to follow it to the MSP. As a result, those consumers are exposed to a new network of shopping opportunities.



A high-angle photograph of a person's hands using a silver laptop. The person is wearing a red sweater and blue jeans. Their right hand is on the keyboard, and their left hand is holding a grey credit card, which is being inserted into a slot on the laptop's keyboard. The background is a wooden desk with a yellow folder and a pair of red glasses. A large, semi-transparent yellow graphic overlay covers the top right portion of the image, containing the main title text.

Do MSPs Impact All Retailers In The Same Way?

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Determining Network Position And How It Impacts A Retailer

A retailer's network position in a shopping mall can be understood as its proximity — where it geographically is located related to other retailers. In an MSP, however, a retailer's network position is not related to its geographical location. In the case of ShopRunner, that position is related to consumer's shopping paths, based on their shopping patterns. These paths and patterns create the network.

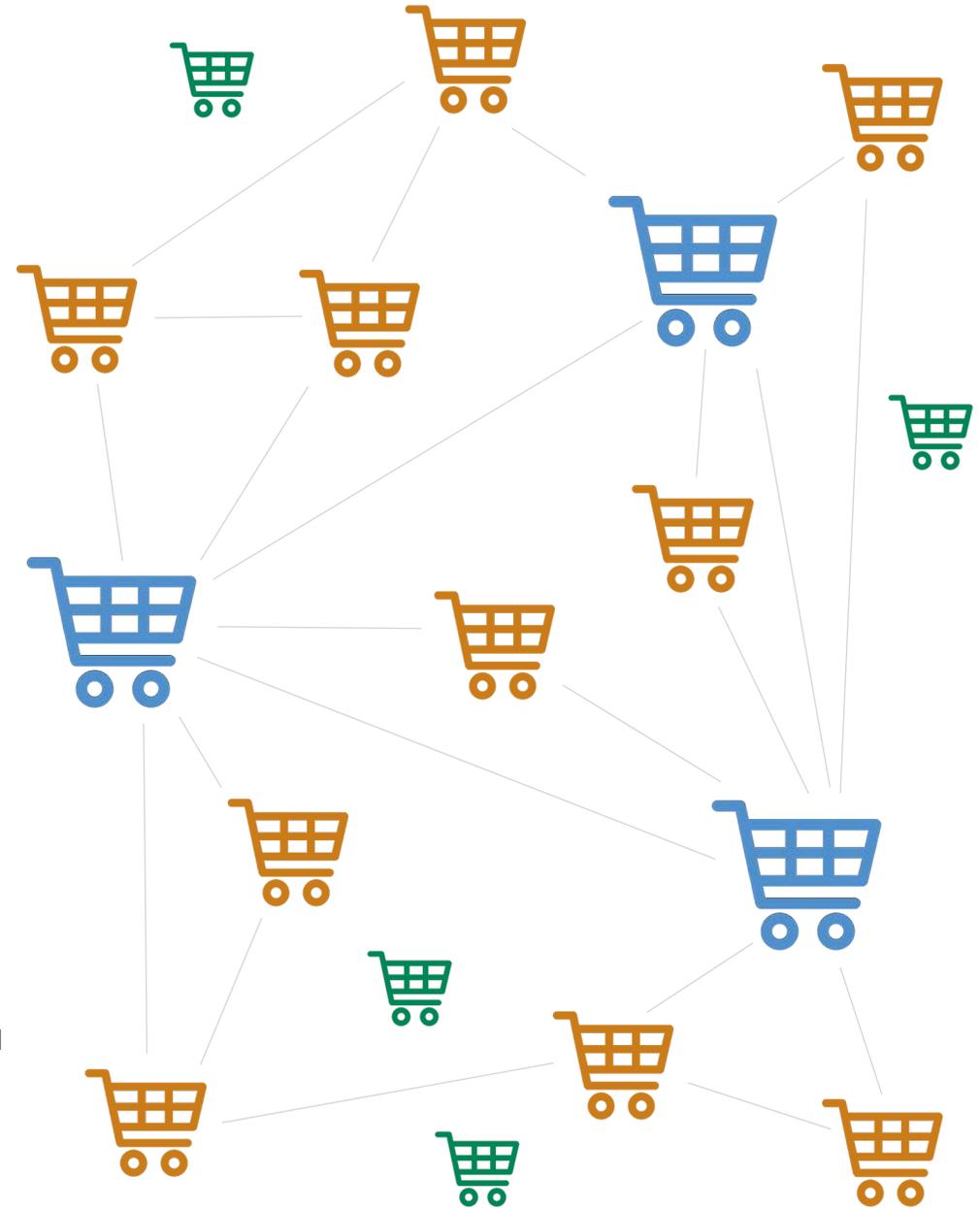
We found a retailer's position in the network is driven by two variables: the shared consumers it has to other retailers in the network, and the shared consumers it receives from other retailers in the network.

POSSIBLE NETWORK POSITIONS

Each retailer's network position can be determined by comparing the number of outbound consumers to the number of inbound consumers. The possible combinations can be:

- Strong outbound, strong inbound
- Strong outbound, weak inbound
- Weak outbound, strong inbound
- Weak outbound, weak inbound

Retailers with strong outbound and inbound influences benefit the most from being a part of an MSP. For ShopRunner, large department stores have the best ratio of outbound to inbound consumers.



\ Do MSPs Impact All Retailers In The Same Way?

The Value That Comes With Being A Strong Outbound Influencer

Using the data from ShopRunner, the Spiegel Research Center developed an index that calculates a retailer's movement similarity score (MSS). This MSS index simplifies the relative influence and similarity of a retailer in the network based on consumer purchase patterns. This index highlights which individual retailers are the largest contributors to the network.

A higher MSS means more benefits to other retailers in the MSP network.

By studying which retailers share consumers who have similar spending behavior, the MSP can make informed decisions of which retailers to retain. For example, some retailers might act as intermediaries in connecting consumers from one retailer to another retailer in the MSP network. Such retailers are crucial in generating exponential growth for the MSP.

Similarly, if the MSP acquires new consumers when a new retailer enters the MSP, an exponential value is created when these consumers buy at other retailers in the network.

NUMBER TO KNOW

Within six months, ShopRunner can measure if a new business is adding or subtracting from the network's overall business.



A photograph of a person's hands using a laptop. One hand is typing on the keyboard, while the other is holding a credit card and inserting it into the laptop's card reader. The person is wearing a blue sweater and blue jeans. The background is a blurred office or home desk setting. A large green semi-transparent overlay covers the top half of the image, containing the title text.

Should Retailers Be In An MSP With A Direct Competitor?

Why It Is Advantageous For Retailers To Be In A Network With Their Competitors

One of the important questions in the retail industry is if retailers who are direct competitors of each other should coexist in close proximity of one another or not. In other words, is it beneficial for two department stores to be located in the same shopping mall, or do they compete for consumers because of their presence in a singular location?

Based on the analysis, we find that within an MSP, it is actually advantageous for competitors to be in the same MSP network.

For example, when a new department store A is listed on an MSP, the revenue of another department store B in the MSP shows an increase. Therefore, for direct competitors that are on the same MSP, the positive impact of being in the network outweighs the presumed disadvantages of being closely linked with the competitor.



ShopRunner Case Study: Department Store Competitors

When department store X entered ShopRunner, ShopRunner saw a financial benefit, as the entry accelerated ShopRunner's cumulative revenue.

The positive impact from the entry of X is due to the network effects that occur when newly acquired consumers buy at multiple retailers on the MSP. Further, more surprising is the effect that the new listing has on the existing direct competitors on the MSP.

While the MSP saw an increase in its revenue, direct competitors, including another department store — Y — saw an increase in revenue, too.

BENEFITING FROM A NEW DEPARTMENT STORE

Having a new department store X join ShopRunner is found to be financially beneficial to many of the retailers already in the network.

Those retailers with similar product assortment were the ones that saw the most benefit.

In Review

E-tailing In The Age Of Platforms

Thanks to consumer data provided by ShopRunner, Spiegel Research Center was able to analyze how consumers shop within the ShopRunner network and answer questions that retailers and marketplaces had limited ability to answer.

ARE MSPs BENEFICIAL TO BOTH CONSUMERS AND RETAILERS?

- Consumers get:
 - Access to membership benefits
 - Access to participating retailers
 - Benefits of shopping at retailers from multiple categories
- Retailers get:
 - New consumers
 - Increased sales from loyal consumer base
 - Consumer shopping data from across the MSP network

DO MSPs IMPACT ALL RETAILERS IN THE SAME WAY?

- Retailers are impacted by being in an MSP in different ways, and the difference is primarily dependent on the retailer's network position
- Network position is calculated based on outbound and inbound consumers of the retailer
- Retailers with strong outbound and inbound consumers benefit the most

DO RETAILERS BENEFIT FROM BEING IN AN MSP WITH A DIRECT COMPETITOR?

- In the case of ShopRunner, the answer is a resounding "Yes"
- When department store X joined the ShopRunner network, another department store Y — one of the biggest competitors — saw its revenue increase
- X's revenue increased just eight weeks after joining ShopRunner

E-tailing In The Age Of Platforms: Review The Research

LEARN MORE about Spiegel Research Center research-driven insights on marketing communications by visiting: spiegel.medill.northwestern.edu

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Social Media Contests

Do consumers who engage in social media contests buy more?



Online Negative Word-of-Mouth

Do negative posts in a social media environment impact purchase behavior?



Mobile Apps

Do consumers who engage with a brand on their mobile phone buy more?



Loyalty Programs

Do instant rewards drive purchase in a loyalty program?



Online Reviews

How do star ratings and review content influence purchase?



Multi-Platform Engagement

How does multi-channel engagement affect purchase behavior?

About The Spiegel Research Center

Understanding Customer Engagement That Drives Business Performance

The Medill IMC Spiegel Digital & Database Research Center is the first research center at the Medill School of Journalism, Media, Integrated Marketing Communications. It was founded in 2011 by a generous gift from the late Professor Emeritus Edward J. “Ted” Spiegel and his wife Audrey and fortified by the support of corporations, alumni, and friends. The center is part of Northwestern’s long tradition of applied research about advertising and marketing. The focus of the Spiegel Research Center is evidence-based, data-driven analysis that proves the relationship between customer engagement and purchase behavior. The center’s research focuses on consumer behavior with digital platforms, social media and mobile devices.

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