

# How Platform Endorsement Shapes Consumer Search and Choice in Online Retail

Markus Lill<sup>1</sup>   Nastasia Gallitz<sup>2</sup>   Lucas Stich<sup>3</sup>   Martin Spann<sup>4,\*</sup>

<sup>1</sup>Ludwig-Maximilians-Universität München ([ml.ecm.ex@som.lmu.de](mailto:ml.ecm.ex@som.lmu.de))

<sup>2</sup>Ludwig-Maximilians-Universität München ([n.gallitz@lmu.de](mailto:n.gallitz@lmu.de))

<sup>3</sup>Julius-Maximilians-Universität Würzburg ([lucas.stich@uni-wuerzburg.de](mailto:lucas.stich@uni-wuerzburg.de))

<sup>4</sup>Ludwig-Maximilians-Universität München ([spann@lmu.de](mailto:spann@lmu.de))

April 1, 2026

## Abstract

Platform endorsement badges (e.g., Amazon’s Choice) are widely believed to shape consumer decisions, yet their effectiveness in complex retail environments—where endorsements compete with rankings, ratings, and other signals—remains not well understood. This article examines Amazon’s product-level endorsements using a multi-method approach combining (1) a 50-day large-scale audit of more than 200,000 search results spanning over 90,000 products and (2) a lab-in-the-field experiment that manipulates badge visibility and placement in consumers’ natural shopping context. The audit reveals that endorsements are rare (~1.3% of products) and disproportionately assigned to products with lower prices, higher ratings, and those sold or fulfilled by Amazon; receiving a badge is associated with greater search visibility and improved sales performance. The experiment shows that displaying the badge tends to increase click-through and add-to-cart likelihoods, whereas reassigning or masking it tends to reduce these behaviors; however, these effects—while economically meaningful—are estimated with uncertainty, consistent with a multi-cue environment in which endorsement competes with other signals such as search rank and Prime eligibility. Together, the findings indicate that platform endorsement badges shape consumer search and choice behavior even in information-rich retail settings. Implications are discussed for platform design, seller strategy, and regulatory oversight.

**Keywords:** Platform endorsements; consumer decision-making; product badges; multi-cue environments; e-commerce experimentation

---

\*Corresponding author. The authors gratefully acknowledge funding from the German Research Foundation CRC TRR 190 (project number 280092119).

Digital platforms shape how consumers discover, evaluate, and purchase products online. Through search rankings, recommendation algorithms, and endorsement badges, platforms guide consumer search and choice (Chen and Tsai 2024; Farronato et al. 2023), influencing both consumer behavior and seller visibility (Dinerstein et al. 2018; Jürgensmeier and Skiera 2025).

Among these tools, platform endorsement—the selective highlighting of offerings or sellers via salient badges (e.g., Amazon’s Choice, Etsy’s Pick, Airbnb’s Superhost)—has emerged as particularly prominent (Cheng et al. 2020; Elfenbein et al. 2015; Hui et al. 2025). Endorsement badges can signal value and reduce quality uncertainty, stimulating sales for both endorsed and unendorsed products (Bairathi et al. 2025), enabling price premiums (Elfenbein et al. 2015), and altering choice set formation (Broniarczyk and Griffin 2014; Ghiassaleh et al. 2020; Goodman et al. 2013). Given these benefits, sellers actively pursue platform endorsements, viewing badges as assets that increase visibility, boost conversions, and enhance credibility.<sup>1</sup> Importantly, unlike advertising, sellers cannot directly purchase endorsement, rendering it a non-contractible platform-controlled signal.

Although prior research documents substantial endorsement effects, important questions remain. First, little is known about how endorsement competes with other platform cues—rankings, reviews, and other badges. This gap is consequential: emerging evidence suggests competing cues attenuate endorsement effects. Hui et al. (2016) find that eBay’s buyer protection program reduced endorsement-related price premiums; Rietveld et al. (2021) report that additional badges mitigated a lender badge’s influence. These findings suggest endorsement effects may be context-dependent, yet this possibility has received limited systematic attention.

Second, existing research focuses on seller-related endorsement in consumer-to-consumer (C2C) markets (e.g., eBay, Taobao) or experience/credence goods contexts where quality uncertainty is inherently high (Cheng et al. 2020; Elfenbein et al. 2015; Rietveld et al. 2021). Whether product-related endorsement retains its signaling value in business-to-consumer (B2C) settings with physical goods—where product information is readily available—remains unclear.

---

<sup>1</sup>See, e.g., <https://www.junglescout.com/blog/amazons-choice>, <https://www.youtube.com/watch?v=rySxC9Q7Gds>, and <https://www.sellerapp.com/amazon-choice.html>.

Third, experimental evidence isolating endorsement effects in multi-cue environments remains limited. Much of the existing causal evidence relies on platform-driven policy changes or badge eligibility thresholds. Although informative, these approaches limit the ability of researchers to manipulate endorsement independently of surrounding market cues. Consequently, innovative approaches that experimentally vary endorsement within the complex, multi-cue environments characteristic of online retail platforms are needed to complement and extend existing research.

To address these gaps, we adopt a multi-method approach on Amazon, combining a large-scale audit study with a lab-in-the-field experiment that manipulates badge visibility on live search results pages. We investigate how product-related endorsement shapes consumer search and choice when it competes with rankings, reviews, and other badges for consumer attention.

This paper makes two contributions to research on digital platforms and consumer behavior. First, we contribute to a growing literature on the interplay between endorsement cues and other platform-generated signals. Prior research, largely conducted in settings where endorsement operates in relative isolation, documents strong and consistent effects. We study endorsement in a multi-cue retail environment—where badges coexist with search rankings, ratings, delivery signals, and other marketplace cues—and show that platform endorsements retain economically meaningful influence even in the presence of competing signals. To identify these effects, we develop a browser extension that manipulates badge visibility on live Amazon search results pages, enabling controlled experimentation in a setting where platforms do not grant researchers direct access.

Second, we provide experimental evidence on product-related platform endorsement in B2C markets for physical goods—the dominant form of online retail. Prior work focuses on C2C markets and on experience or credence goods, where quality uncertainty is high. We extend endorsement research to a setting in which product information is readily available and the signaling value of endorsement is therefore likely attenuated.

The remainder of the paper proceeds as follows. We first review prior literature on digital platform endorsements, then present an audit study on the prevalence and distribution of badges. Next, we report an experiment examining the causal impact of endorsement badges on consumer

search and choice. We conclude with theoretical, managerial, and regulatory implications and directions for future research.

## Related Literature

Platform endorsement has emerged as a key lever through which digital platforms shape consumer behavior and seller outcomes. Early research conceptualizes endorsement badges as seller certification or quality signals that mitigate information asymmetry in online marketplaces, thereby increasing demand for endorsed sellers and enabling price premiums (Elfenbein et al. 2015; Hui et al. 2016; Cheng et al. 2020). These studies, primarily situated in C2C marketplaces such as eBay and Taobao, document positive effects of endorsement on sales outcomes, with particularly strong effects for sellers with limited reputation or in highly competitive environments. Table 1 summarizes key studies, highlighting variation in methods, platforms, and outcome measures; we position our contribution in the final row.

More recent work has begun to examine more nuanced effects both on the seller and consumer side of platforms using a wider array of methodological approaches. For instance, Bairathi et al. (2025) provide experimental evidence showing that platform endorsement increases search activity and purchases not only for endorsed services but also for unendorsed ones, suggesting that endorsement can stimulate broader on-platform consumer search and choice. Hui et al. (2025) leverage a platform-wide policy change to show that the informational content and noise embedded in endorsement badges influence seller incentives, certification outcomes, and sales concentration, highlighting how endorsement signals interact with consumer-rating-related cues rather than operating in isolation. Zhan et al. (2025) provide quasi-experimental evidence from an online health-care platform documenting detrimental effects of platform endorsement on consumers. They find that platform endorsement shifts supply toward paid services and crowds out the provision of free services for underprivileged patients, thereby reducing access to care, though endorsed providers nevertheless maintain or even improve service quality across multiple dimensions.

**Table 1: Prior Research on Platform Endorsement**

Reference	Method	Examined Badge (Endorsement Type)	Platform (Industry)	Outcome Variables	Examined Contextual Cues	Market Setting
Elfenbein et al. (2015)	Quasi-experiment	eBay Top Rated Seller (eTRS) (seller-related)	eBay (e-commerce)	Sales, quantity sold	eTRS + seller characteristics (size), market concentration, product price	C2C; various goods (new & used)
Hui et al. (2016)	Quasi-experiment	eBay Top Rated Seller (eTRS) (seller-related)	eBay (e-commerce)	Price, quantity sold	eTRS + price, product characteristics (FE), seller characteristics (size + FE), buyer protection program	C2C; various goods (new & used)
Cheng et al. (2020)	Observational dataset	Gold Medal Seller (GMS) (seller-related)	Taobao (e-commerce)	Sales	GMS + badge retention, seller characteristics (reputation, age & no. of favorites), market concentration, price	C2C; search goods (electronics)
Rietveld et al. (2021)	Quasi-experiment	Family and Community Empowerment (FCE) badge (lender-related)	Kiva (microfinance & social lending)	Female borrower ratio (portfolio reorientation)	FCE badge + additional badges received, portfolio concentration, microfinance institution characteristics (FE), platform-level trends	C2C; credence goods (microloans)
Bairathi et al. (2025)	Field experiment	Platform's Choice (PFC) (service-related)	Undisclosed (online labor market, online freelancing)	Impressions, clicks, orders	PFC Badge + category control (FE), user characteristics, proximity of unendorsed to endorsed product, price similarities	B2C; experience services (freelancing)
Hui et al. (2025)	Quasi-experiment	eBay Top Rated Seller (eTRS) (seller-related)	eBay (e-commerce)	Seller certification, seller effort, sales concentration	eTRS + input vs. output measures in certification, consumer ratings, seller characteristics (FE)	C2C; various goods (new & used)
Zhan et al. (2025)	Quasi-experiment	Doctor endorsement badge (provider-related)	Haodf (online healthcare)	Price, quantity consultations (paid/free), service quality	Endorsement badge + doctor prosociality, capacity constraints, service type (paid vs. free), re-endorsement	B2C; credence services (healthcare)
<b>This Study</b>	<b>Multi-Method: Audit, Field experiment</b>	<b>Amazon's Choice (AC) (product-related)</b>	<b>Amazon (e-commerce)</b>	<b>Clicks, add-to-carts</b>	<b>AC + multiple other badge types, product characteristics (price, ratings, FE), user characteristics</b>	<b>B2C; search goods (physical products)</b>

Our study differs from prior work in three key respects. First, we examine endorsement in a multi-cue environment in which it coexists with rankings, reviews, and competing badges rather than in isolation. This is important because cue interference and redundancy may attenuate or amplify endorsement effects in ways that single-cue studies cannot detect. Second, we extend from C2C markets and experience goods to B2C settings involving physical goods, where quality uncertainty is typically lower and product information richer. This distinction matters because endorsement signals may function differently—or carry less weight—when consumers already have access to alternative, credible quality cues. Third, we provide experimental evidence through a browser-based methodology that enables controlled manipulation of live platform interfaces. This addresses a persistent tension in the literature between internal and ecological validity, yielding causal estimates in actual consumer decision environments.

Our study also relates to a broader literature on platform design, which examines how platforms shape consumer behavior through the design of search environments (Dukes and Liu 2016; Honka et al. 2024). This stream of research emphasizes that platforms influence outcomes not only through prices or access fees (Hagiu 2009; Rochet and Tirole 2003; Weyl 2010), but also through information disclosure, salience, and the structuring of attention. Design elements such as rankings, recommendations, and badges affect how consumers search, form consideration sets, and ultimately make choices, often by altering perceived quality or steering attention toward selected alternatives (Dinerstein et al. 2018; Goodman et al. 2013; Li et al. 2022; Ursu 2018). Within this literature, platform endorsement can be understood as a salient form of platform recommendation.

Our findings also connect to the literature on consumer attention, which emphasizes that consumers rely on salient signals to navigate complex choice environments (Iyengar and Lepper 2000; Jerath and Ren 2021). Platform endorsement can be interpreted as a signal that reallocates attention and reduces processing costs. The context-dependent effects we observe—where endorsement’s influence competes with the surrounding information architecture—are consistent with attention-based accounts of consumer decision-making.

# **Study 1: Audit of Prevalence and Correlates of Platform Endorsement**

## **Badges on Amazon**

### *Method*

The aim of the audit study is to analyze the prevalence of the platform endorsement badge, and how its assignment correlates with search and sales rank, in a large sample of observational Amazon data. To this end, we collected data from Amazon Germany using a custom web-scraping algorithm. Over a period of 50 days, we analyzed search results and product detail pages for 1,000 search terms. To build the sample, we identified 10 product categories (e.g., Beauty, Books, Electronics) and derived 100 search terms for each category to capture the breadth of offerings. The list of terms was first generated with the assistance of ChatGPT and then manually reviewed to remove duplicates and ensure alignment with the designated categories. Because some terms could belong to multiple categories, we resampled overlapping entries to preserve data quality and category relevance (see Table A1 in the Web Appendix).

Our algorithm simulated consumer searches by randomly selecting terms from our list, with each simulated search constituting a “scraping session”. Each term triggered the opening of an automated browser window that navigated to the corresponding search results page on Amazon. To maintain anonymity, the algorithm rotated user agents with each request, and all cookies were cleared when the web page was closed. For each search term, the algorithm extracted data from the first search results page, including the search layout design (list or grid) and product-specific attributes such as average ratings, prices, and badges per product. This approach is consistent with established methods in the field ([Boegershausen et al. 2022](#); [Peng and Liang 2023](#)).

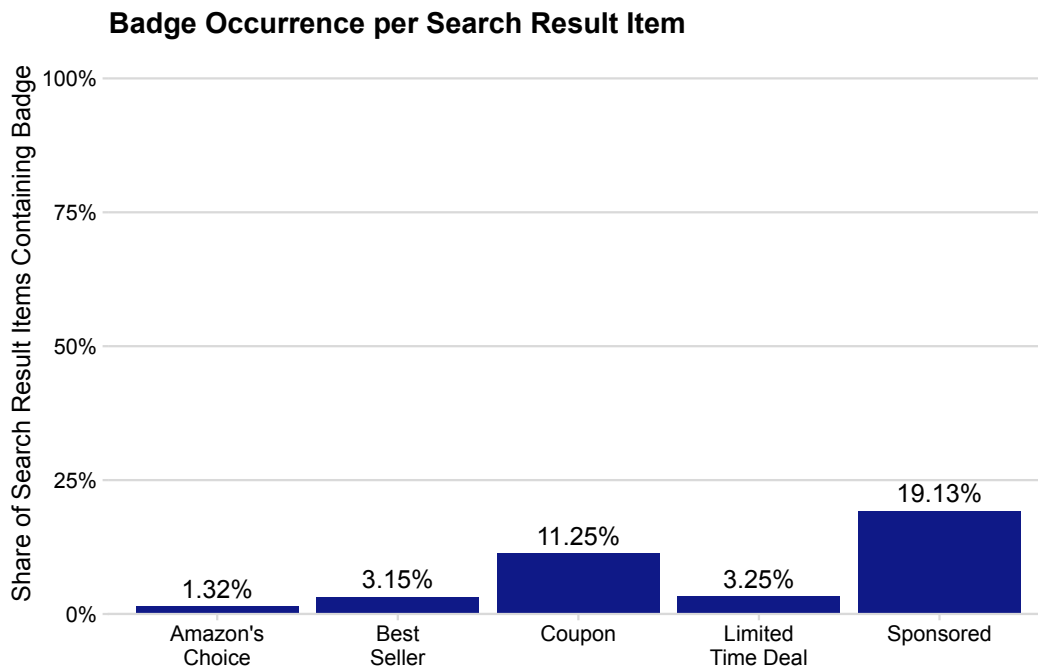
We downloaded the product images displayed on the search results page, associated each with its Amazon Serial Identification Number (ASIN) to ensure uniqueness, and linked the images to their respective product attributes. Our algorithm also extended the scraping to the product detail pages for each search result, extracting granular product data such as seller information, fulfillment details, sales rank, rating distribution, and top comments. To avoid overloading Amazon’s

servers and to adhere to good research practices, we included a 15-second delay between each page scrape.<sup>2</sup>

## Results

### *Prevalence of the platform endorsement badge*

Our data collection yielded a dataset of 231,547 search result entries covering 92,228 unique products. We begin by examining the frequency and patterns of platform endorsement badge assignments across unique products (i.e., individual search results), compared to selected other badges on Amazon (see Figure 1).



**Figure 1:** Badge Occurrence across Products (Study 1)

Only 1.32% of products receive the Amazon’s Choice platform endorsement badge. This relative scarcity, compared to other badge types, underscores the competitive nature of the Amazon’s Choice badge. Table 2 compares the average prices, average ratings, and average rank of Amazon’s Choice products with those that do not bear that badge, along with the number of products

---

<sup>2</sup>Data and code to replicate all analyses are available at [https://osf.io/g62bf/?view\\_only=030b3fcdec904030b5b1a53f2448d594](https://osf.io/g62bf/?view_only=030b3fcdec904030b5b1a53f2448d594).

in each category. In addition, we distinguish between products sold by Amazon and those sold by third-party sellers.

Our results show that products with the Amazon’s Choice badge are consistently less expensive than unbadged products within the same categories. In addition, these badged products have higher average ratings and better ranks. Notably, products sold by Amazon have an average price premium of 8.81€ (23.66%) compared to products sold by third-party sellers. In addition, we find that products sold by Amazon are disproportionately represented among endorsed offerings: While 38.5% of Amazon’s Choice products are sold by Amazon, only 23.5% of all products are sold by Amazon.

**Table 2:** Descriptive Statistics for Platform Endorsement Badge Prevalence (Study 1)

	Amazon’s Choice (AC)	Non-AC products in categories with at least one AC product	All products
<i>Mean price (€)</i>	40.64	49.34	47.42
Vendor: Amazon (€)	46.05	59.66	54.44
Vendor: Other (€)	37.24	46.43	45.20
<i>Mean rating</i>	4.45	4.35	4.35
Vendor: Amazon	4.50	4.43	4.44
Vendor: Other	4.42	4.33	4.32
<i>Mean rank</i>	11.41	34.49	33.20
Vendor: Amazon	9.67	33.16	30.13
Vendor: Other	12.49	34.85	34.15
<i>No. of products</i>	3,055 (100%)	174,716 (100%)	231,547 (100%)
Vendor: Amazon	1,176 (38.5%)	37,619 (21.5%)	54,475 (23.5%)
Vendor: Other	1,879 (61.5%)	137,097 (78.5%)	177,072 (76.5%)

*Note:* Comparison of mean prices, ratings, and ranks, and prevalence of products (not) labeled as Amazon’s Choice.

Investigating the factors associated with badge assignment, we estimate a linear probability model to assess the correlational patterns between whether a product receives the Amazon’s Choice badge and various product- and badge-related factors. We find a positive correlation between the badge and whether a product is sold by Amazon ( $\beta = 0.006$ ,  $p = 0.007$ ). See Table A2 in the Web Appendix for details.

### *Association between platform endorsement badge, search visibility, and sales performance*

We investigate whether badge allocation is associated with improvements in product visibility (measured by search rank) or sales performance (measured by log-transformed sales rank).<sup>3</sup> To this end, we examine the temporal dynamics surrounding the Amazon’s Choice badge allocation. Thereby, we leverage the temporal nature of our scraped data, which comprises multiple scraping sessions per search term ( $M = 4.94$ ,  $SD = 1.03$ ,  $\min = 1$ ,  $\max = 7$ ), enabling us to also observe temporal patterns.

We estimate two linear models (see Equation 1), examining how the presence of the Amazon’s Choice badge in the preceding and current observation (i.e., scraping session) affects search rank and log-transformed sales rank, respectively.

$$\begin{aligned} y_{ijt} = & \beta_0 + \text{PRC}_{ijt} + \text{amazonschoice}_{ijt} + \text{amazonschoice}_{ij(t-1)} + \text{badges}_{ijt} \\ & + \text{FBA}_{ijt} + \text{soldbyamzn}_{ijt} + \mu_i + \nu_j + \delta_t + e_{ijt} \end{aligned} \quad (1)$$

with  $y_{ijt} \in \{\text{searchrank}_{ijt}, \log(\text{salesrank}_{ijt})\}$ .

The variable  $\text{searchrank}_{ijt}$  denotes the search rank that product  $i$  received among the search results for search term  $j$  during scraping session  $t$ . Analogously, the variable  $\log(\text{salesrank}_{ijt})$  denotes the log-transformed sales that product  $i$  received among the search results for search term  $j$  during scraping session  $t$ .

$\text{PRC}_{ijt}$  denotes a vector of product-related characteristics, in particular, rating information (volume and average star ratings), (list) prices, and search and sales rank of product  $i$  for search term  $j$  during scraping session  $t$ . Sales rank enters as control in the search rank model and vice versa.  $\text{amazonschoice}_{ijt}$  and  $\text{amazonschoice}_{ij(t-1)}$  denote binary variables indicating whether a product  $i$  for search term  $j$  received the Amazon’s Choice badge during the current scraping session  $t$  and the previous scraping session  $t - 1$ , respectively.  $\text{badges}_{ijt}$  denotes a vector of binary variables indicat-

---

<sup>3</sup>In line with prior research, we apply a logarithmic transformation to the “Bestseller Rank,” i.e., sales rank, displayed on a product’s detail page on Amazon. This serves as a proxy for sales (cf. [Chevalier and Goolsbee 2003](#); [Chevalier and Mayzlin 2006](#)).

ing the presence of various badges (Sponsored badge, Limited Time Deal, Amazon Prime badge, and coupons) for product  $i$  under search term  $j$  during scraping session  $t$ .  $FBA_{ijt}$  denotes a binary variable indicating whether a product  $i$  for search term  $j$  during scraping session  $t$  is delivered by Amazon, i.e., whether it participates in the Fulfillment By Amazon (FBA) program.  $soldbyamzn_{ijt}$  denotes a binary variable indicating whether Amazon itself constitutes the default seller per the Buy Box algorithm. Finally, we include product ( $\mu_i$ ), search term ( $v_j$ ), and time fixed effects ( $\delta_t$ ), and cluster standard errors at the product level ( $e_{ijt}$ ).

Table 3 summarizes the results. We begin our analyses by examining the effects of Amazon’s Choice badge allocation on product visibility (product search rank). Our analyses indicate a negative relationship between current badge presence and search rank ( $\beta = -3.096$ ,  $p < 0.001$ ), suggesting that products displaying the badge are associated with a 3.1-position improvement in search rank, improving product visibility. In addition, we observe a negative association between badge presence in the preceding scraping session and current search rank ( $\beta = -1.575$ ,  $p < 0.001$ ), suggesting that products which previously held the badge retain some of the visibility benefit even after the badge is no longer present—in particular, an improvement in search rank by 1.6 positions. These findings suggest that the Amazon’s Choice badge not only provides an immediate boost to product visibility but also leaves a persistent trace: products that were recently endorsed continue to rank higher than products that were never endorsed, even after the badge is removed.

With respect to sales performance, we find that the presence of the Amazon’s Choice badge in the current period is associated with a substantial improvement in sales rank ( $\beta = -0.115$ ,  $p < 0.001$ ). In particular, current badge assignment is associated with an 11.5 percentage point decrease in sales rank, indicating improved sales performance. However, unlike the persistent visibility effect, the sales benefit does not carry over to the subsequent period: badge presence in the preceding scraping session is not meaningfully associated with sales rank ( $\beta = 0.008$ ,  $p = 0.655$ ).

These findings suggest that the Amazon’s Choice badge has a direct, contemporaneous effect on both product visibility and sales performance. The positive association between search

**Table 3:** Effects of Amazon’s Choice Badge Assignment on Search and Sales Rank (Study 1)

Dependent Variable	Search Rank	Log(Sales Rank)
Avg. Rating	<b>-0.035</b> (0.045)   <i>0.435</i>	<b>-0.026</b> (0.004)   <i>&lt;0.001</i>
Total Ratings	<b>2.852e-05</b> (1.910e-05)   <i>0.135</i>	<b>-6.723e-06</b> (2.887e-06)   <i>0.020</i>
Product Price	<b>2.069e-04</b> (6.967e-05)   <i>0.003</i>	<b>8.508e-05</b> (1.004e-05)   <i>&lt;0.001</i>
Amazon’s Choice	<b>-3.096</b> (0.291)   <i>&lt;0.001</i>	<b>-0.115</b> (0.022)   <i>&lt;0.001</i>
Amazon’s Choice at $t - 1$	<b>-1.575</b> (0.319)   <i>&lt;0.001</i>	<b>0.008</b> (0.019)   <i>0.655</i>
List Price	<b>-0.603</b> (0.132)   <i>&lt;0.001</i>	<b>-0.063</b> (0.011)   <i>&lt;0.001</i>
Sponsored	<b>-17.840</b> (0.270)   <i>&lt;0.001</i>	<b>0.141</b> (0.007)   <i>&lt;0.001</i>
Limited Time Deal	<b>0.537</b> (0.188)   <i>0.004</i>	<b>-0.349</b> (0.016)   <i>&lt;0.001</i>
Amazon Prime	<b>-1.202e-04</b> (0.128)   <i>0.999</i>	<b>0.020</b> (0.010)   <i>0.044</i>
Coupon	<b>-0.177</b> (0.160)   <i>0.269</i>	<b>0.005</b> (0.011)   <i>0.676</i>
Delivered by Amazon	<b>-0.797</b> (0.272)   <i>0.003</i>	<b>-0.150</b> (0.021)   <i>&lt;0.001</i>
Sold by Amazon	<b>-0.498</b> (0.313)   <i>0.112</i>	<b>0.050</b> (0.024)   <i>0.040</i>
Log(Sales Rank)	<b>2.643</b> (0.067)   <i>&lt;0.001</i>	
Search Rank		<b>0.009</b> (2.392e-04)   <i>&lt;0.001</i>
Product FE	Yes	Yes
Search Term FE	Yes	Yes
Time FE	Yes	Yes
$N$	100,603	100,603
$R^2$	0.826	0.962
$R^2$ Adj.	0.754	0.946

Note: Coefficients in bold. Clustered standard errors (by product ID (ASIN)) in parentheses.  $p$ -values italicized.

rank and sales rank ( $\beta = 0.009, p < 0.001$ ) indicates that search visibility is also linked to sales outcomes, though the direction of causality cannot be determined from the observational data. Notably, the persistence pattern differs across outcomes: the visibility benefit of the badge carries over to the next period, while the sales benefit does not. This asymmetry may reflect the fact that sales rank responds to actual purchase behavior, which requires the badge to be currently visible, whereas search rank may be influenced by algorithmic factors that incorporate historical badge status. However, we cannot rule out alternative explanations based on the collected data.

### ***Discussion***

Our findings indicate that the platform endorsement badge (Amazon's Choice) is allocated very selectively, with only 1.32% of products in our sample receiving it. This high degree of selectivity, coupled with the fact that Amazon's Choice products tend to have lower prices and higher ratings, suggests that earning the badge is highly competitive. The exclusivity of the platform endorsement badge may therefore help explain why sellers actively pursue it. Moreover, our data indicate that the badge is associated with favorable seller outcomes: products displaying the badge exhibit both higher search ranks and improved sales performance. Products that previously displayed the badge continue to exhibit higher search visibility after its removal, whereas improvements in sales performance are observed only while the badge is present. However, because Study 1 is correlational, these associations do not establish causality. To examine the causal effect of the platform endorsement badge on consumers' search and choice behavior, we conduct an experimental investigation in Study 2.

## **Study 2: Experimental Analysis of Behavioral Effects of Platform Endorsement Badge**

In this section, we examine the impact of the platform endorsement badge on consumers' search and choice behavior. Specifically, we analyze how both the visual cue and the position of the Ama-

zon’s Choice badge influence consumer search and choice in an environment filled with numerous other badge-, search-, and product-related information cues. To address this, we implemented a three-group, between-participants design using a custom-developed browser extension.

## ***Method***

### *Data collection tool: Chrome browser extension*

A persistent challenge in platform research is that researchers cannot experimentally manipulate platform features without platform cooperation. To overcome this barrier, we developed a Chrome extension (“Product Navigator”) that dynamically modifies the appearance of Amazon search results pages while collecting user interaction data. The extension can add, remove, or reassign product badges, enabling controlled experimentation on live platforms—capturing the full complexity of real-world retail search environments.

The extension can also randomly assign participants to different experimental groups, allowing the presentation of search results to be tailored to the objectives of each specific study. The tracking methodology is highly granular, capturing page views and individual interactions with each search result. This includes verifying that a product from the Amazon search result page is fully visible in the participant’s viewport, ensuring that the participant can view all available product information. Additionally, the tool differentiates between direct product clicks and those that open in a new tab, providing insight into the participant’s level of engagement with the platform. All information displayed is collected consistently and in real time.

Our data collection respects the privacy of all participants. All personal information collected through cookies is deleted once a participant completes a session by adding a product to their shopping cart. Participants are also instructed to uninstall the extension upon completion of the study to ensure the end of data tracking. In all studies, participants gave their consent to the experimental procedure.

### *Experimental method*

To investigate the effects of platform endorsements in multi-cue retail search environments on consumer search and product choice, we conducted a three-group, between-participants lab-in-the-field experiment on Amazon UK. As part of the study, participants were required to install the Product Navigator extension from the Google Chrome Web Store. After verifying successful installation, participants were randomly assigned to one of three experimental conditions.

Figure 2 illustrates the three experimental treatments. In the default condition, participants viewed a search results page with the Amazon’s Choice badge visible alongside the product originally endorsed by Amazon (hereinafter referred to as the “default AC product”). In the second condition, the extension randomly reassigned the Amazon’s Choice badge to one of the products displayed on the search results page. Finally, in the third condition, the Amazon’s Choice badge was masked entirely. As our extension logged both the default Amazon’s Choice placement and any subsequent on-page modifications, we were able to track interactions with the default AC product in every group and perform counterfactual analyses. Furthermore, across all experimental groups, we masked recommendation carousels and ads, and limited results to the first search page to render the groups as comparable as possible. Importantly, however, participants were not required to view the entirety of the search results page. Consequently, our study adheres to an intention-to-treat design.

Our experimental setup is informed by the findings from our audit study. Since our analyses indicate that the Amazon’s Choice badge tends to appear alongside top-ranked products, we theorize two distinct mechanisms through which the badge could influence consumer behavior: 1) visual salience induced by the badge cue and 2) enhanced visibility due to higher search rank. By comparing default, randomized, and masked badge placement while controlling for a wide array of product-, search-, and user-specific characteristics, our design isolates these two potential drivers from each other.

Following the randomized group assignment, participants were instructed to browse the Amazon UK search results page for the keyword “steam iron” and add the product they were most likely

to buy to their shopping cart. We chose steam irons as the focal product for our experiments based on the notion that, in the context of low-cost, utilitarian goods, such as steam irons, consumer decisions are less likely to be influenced by any strong brand preferences. We provided a direct link to the specific Amazon search results page to ensure consistency in the browsing experience and reduce individual task completion errors (e.g., searching “steam iron” rather than “steam irons”). To maintain the integrity of participant tracking and group assignment, the Amazon search results page URL included two custom query parameters to capture the unique user ID and the group assignment.

When the Amazon search results page was opened, the Product Navigator extension automatically read the custom query parameters embedded in the URL. This allowed the Amazon search results page to be immediately modified according to the predefined group characteristics. Therefore, we ensured that the web page and group modifications were loaded after the group assignment was read from the extension, eliminating any risk of crossover effects that might have resulted from inadvertent exposure to other group configurations.

Participants were given up to an hour to complete the task and were able to browse the search results at their own pace, using standard browser features, such as backward navigation. They could view product details by clicking on the product from the search results list. From the product detail page, participants could use either the add-to-cart button or the buy-now button. In both cases, a pop-up notification appeared indicating successful completion of the task.




Participants were compensated a total of £1.50 at the end of the experiment for their participation. In addition, we implemented an incentive alignment mechanism similar to Häubl and Trifts (2000). Specifically, participants were informed that if they successfully completed the study, they would enter a lottery in which three randomly selected participants would win their chosen product as well as a voucher for the difference between £60 and the value of the chosen product.<sup>4</sup>

We filtered out participants who did not follow the experimental instructions, e.g., by searching for products other than the one specified. We also excluded participants for whom we did not record




---

<sup>4</sup>After the completion of the study, the winners were given the choice between the announced lottery prize and a £60 bonus payment via Prolific. This choice was not disclosed to other study participants.

### (a) Group 1: Default AC (Control)

<p><b>Best Seller</b></p> 	<p>Russell Hobbs Steam Iron [3100W, 210 g/min extra steam boost, 70 g/min steam] Power Steam (350ml, ceramic soleplate, self-cleaning &amp; spray water function, anti-limescale, drip stop) 20630</p> <p>★★★★★ (v 38,407) 10K+ bought in past month</p> <p><b>£34<sup>99</sup></b> RRP: £69.99</p> <p>FREE delivery <b>Sat, 8 Mar</b> on your first eligible order to UK or Ireland Or fastest delivery <b>Tomorrow, 6 Mar</b></p> <p><a href="#">Add to basket</a></p>
<p><b>Amazon's Choice</b></p> 	<p>Russell Hobbs Supreme Steam Iron, Powerful vertical steam function, Non-stick stainless steel soleplate, Easy Fill 300ml Water Tank, 110g Steam Shot, 40g Continuous steam, 2m Cord, 2400W, 23060</p> <p>★★★★★ (v 26,982) 5K+ bought in past month</p> <p><b>£21<sup>99</sup></b> RRP: £49.99</p> <p>Save 5% on any 4 qualifying items FREE delivery <b>Sat, 8 Mar</b> on your first eligible order to UK or Ireland Or fastest delivery <b>Tomorrow, 6 Mar</b></p> <p><a href="#">Add to basket</a></p> <p>More buying choices £12.26 (7+ used &amp; new offers)</p>
	<p>Russell Hobbs Supreme Steam Iron, Powerful vertical steam function, Non-stick stainless steel soleplate, Easy Fill 300ml Water Tank, 110g Steam Shot, 40g Continuous steam, 2m Cord, 2400W, 23061</p> <p>★★★★★ (v 7,636) 4K+ bought in past month</p> <p><b>£14<sup>99</sup></b></p> <p>Save 5% on any 4 qualifying items FREE delivery <b>Sat, 8 Mar</b> on your first eligible order to UK or Ireland Or fastest delivery <b>Tomorrow, 6 Mar</b></p> <p><a href="#">Add to basket</a></p> <p>More buying choices £13.01 (24+ used &amp; new offers)</p>

### (b) Group 2: Randomized AC

<p><b>Best Seller</b></p> 	<p>Russell Hobbs Steam Iron [3100W, 210 g/min extra steam boost, 70 g/min steam] Power Steam (350ml, ceramic soleplate, self-cleaning &amp; spray water function, anti-limescale, drip stop) 20630</p> <p>★★★★★ (v 38,407) 10K+ bought in past month</p> <p><b>£34<sup>99</sup></b> RRP: £69.99</p> <p>FREE delivery <b>Sat, 8 Mar</b> on your first eligible order to UK or Ireland Or fastest delivery <b>Tomorrow, 6 Mar</b></p> <p><a href="#">Add to basket</a></p>
	<p>Russell Hobbs Supreme Steam Iron, Powerful vertical steam function, Non-stick stainless steel soleplate, Easy Fill 300ml Water Tank, 110g Steam Shot, 40g Continuous steam, 2m Cord, 2400W, 23060</p> <p>★★★★★ (v 26,982) 5K+ bought in past month</p> <p><b>£21<sup>99</sup></b> RRP: £49.99</p> <p>Save 5% on any 4 qualifying items FREE delivery <b>Sat, 8 Mar</b> on your first eligible order to UK or Ireland Or fastest delivery <b>Tomorrow, 6 Mar</b></p> <p><a href="#">Add to basket</a></p> <p>More buying choices £12.26 (7+ used &amp; new offers)</p>
<p><b>Amazon's Choice</b></p> 	<p>Russell Hobbs Supreme Steam Iron, Powerful vertical steam function, Non-stick stainless steel soleplate, Easy Fill 300ml Water Tank, 110g Steam Shot, 40g Continuous steam, 2m Cord, 2400W, 23061</p> <p>★★★★★ (v 7,636) 4K+ bought in past month</p> <p><b>£14<sup>99</sup></b></p> <p>Save 5% on any 4 qualifying items FREE delivery <b>Sat, 8 Mar</b> on your first eligible order to UK or Ireland Or fastest delivery <b>Tomorrow, 6 Mar</b></p> <p><a href="#">Add to basket</a></p> <p>More buying choices £13.01 (24+ used &amp; new offers)</p>

### (c) Group 3: Masked AC




<p><b>Best Seller</b></p> 	<p>Russell Hobbs Steam Iron [3100W, 210 g/min extra steam boost, 70 g/min steam] Power Steam (350ml, ceramic soleplate, self-cleaning &amp; spray water function, anti-limescale, drip stop) 20630</p> <p>★★★★★ (v 38,407) 10K+ bought in past month</p> <p><b>£34<sup>99</sup></b> RRP: £69.99</p> <p>FREE delivery <b>Sat, 8 Mar</b> on your first eligible order to UK or Ireland Or fastest delivery <b>Tomorrow, 6 Mar</b></p> <p><a href="#">Add to basket</a></p>
	<p>Russell Hobbs Supreme Steam Iron, Powerful vertical steam function, Non-stick stainless steel soleplate, Easy Fill 300ml Water Tank, 110g Steam Shot, 40g Continuous steam, 2m Cord, 2400W, 23060</p> <p>★★★★★ (v 26,982) 5K+ bought in past month</p> <p><b>£21<sup>99</sup></b> RRP: £49.99</p> <p>Save 5% on any 4 qualifying items FREE delivery <b>Sat, 8 Mar</b> on your first eligible order to UK or Ireland Or fastest delivery <b>Tomorrow, 6 Mar</b></p> <p><a href="#">Add to basket</a></p> <p>More buying choices £12.26 (7+ used &amp; new offers)</p>
	<p>Russell Hobbs Supreme Steam Iron, Powerful vertical steam function, Non-stick stainless steel soleplate, Easy Fill 300ml Water Tank, 110g Steam Shot, 40g Continuous steam, 2m Cord, 2400W, 23061</p> <p>★★★★★ (v 7,636) 4K+ bought in past month</p> <p><b>£14<sup>99</sup></b></p> <p>Save 5% on any 4 qualifying items FREE delivery <b>Sat, 8 Mar</b> on your first eligible order to UK or Ireland Or fastest delivery <b>Tomorrow, 6 Mar</b></p> <p><a href="#">Add to basket</a></p> <p>More buying choices £13.01 (24+ used &amp; new offers)</p>

Figure 2: Experimental Treatments in Study 2

an add-to-cart event, as well as participants for whom we recorded multiple add-to-cart events for different products. In the case of multiple add-to-cart events for the same product, we filtered out all events registered after the first add-to-cart event. Finally, we excluded participants with missing data.

### *Model*

Our data includes all participant interactions with the Amazon search results page and product detail pages at the event level, identifying unique participants by their (Prolific) user ID.<sup>5</sup> In addition, our dataset contains information on product attributes displayed and removed, including badge details.

To estimate the likelihood of consumers clicking on a product or adding it to their cart, we use linear probability models and control for various product and search characteristics (see Equation 2).

$$y_{ij} = \beta_0 + \text{condition}_i + \text{badges}_{ij} + \text{condition}_i \times \text{badges}_{ij} + \text{PRC}_{ij} + \text{URC}_i + \mu_i + e_{ij} \quad (2)$$

with  $y_{ij} \in \{\text{click}_{ij}, \text{addToCart}_{ij}\}$ .

The dependent variables  $\text{click}_{ij}$  and  $\text{addToCart}_{ij}$  denote binary vectors indicating whether participant  $i$  clicked on product  $j$  or added it to their cart. The variable  $\text{condition}_i$  denotes the treatment condition, indicating whether participant  $i$  was assigned to an experimental group with a default, randomized, or masked Amazon’s Choice badge. The variable  $\text{badges}_{ij}$  represents a vector of dummy variables indicating whether participant  $i$  viewed product  $j$  labeled with the respective badge. The variable  $\text{PRC}_{ij}$  denotes a vector of product-related control variables, the variable  $\text{URC}_i$  a vector of user-related control variables, while  $\mu_i$  represents product fixed effects and  $e_{ij}$  the error term, clustered at the participant level. To examine the individual badge-specific effect and to disentangle the direct badge effect from product characteristics, we compute interaction effects

---

<sup>5</sup>Data and code to replicate all analyses are available at [https://osf.io/g62bf/?view\\_only=030b3fcdec904030b5b1a53f2448d594](https://osf.io/g62bf/?view_only=030b3fcdec904030b5b1a53f2448d594).

condition<sub>*i*</sub> × badges<sub>*ij*</sub> between the user-specific treatment and the examined badges.

### *Sample and model-free results*

We recruited  $n = 600$  participants from Prolific UK and asked them to install the Product Navigator extension from the Chrome Web Store. We randomly assigned participants to one of the aforementioned three experimental groups. After excluding 32 users who did not add a product to their cart, one participant who added more than one product to their cart, and 53 users with incomplete data, we obtained a sample of  $n = 514$  participants ( $M_{\text{age}} = 39.53$ , female = 53.1%,  $M_{\text{duration}} = 6 \text{ min } 40 \text{ s}$ ). We did not find any substantial relationship between the filtering criteria and the experimental treatments, with 38 users filtered out in the default AC condition and 24 users filtered out in the randomized and masked AC conditions, respectively.

### **Results**

Table 4 presents descriptive statistics and model-free results pertaining to overall views, clicks, and time-to-cart as well as clicks and add-to-carts specific to the default Amazon’s Choice product across experimental conditions. Using a series of Kruskal-Wallis and  $\chi^2$ -tests, we find minuscule differences in views ( $H = 1.68$ ,  $p = 0.432$ ), clicks ( $H = 1.04$ ,  $p = 0.595$ ), and time-to-cart ( $H = 0.29$ ,  $p = 0.867$ ) across experimental conditions. Qualitatively, users appear to view slightly more products in the default AC group, whereas, on average, they click on fewer products compared to the randomized and masked AC groups. Similarly, the share of users clicking on the default AC product somewhat declines across experimental conditions, with users in the default AC condition exhibiting a click rate of 24%, users in the randomized AC condition a click rate of 19%, and users in the masked AC condition a click rate of 18% ( $\chi^2 = 2.32$ ,  $p = 0.313$ ). The share of users adding the default AC product to their cart follows the same pattern, with the add-to-cart share being the highest in the default AC condition at 21% ( $\chi^2 = 2.57$ ,  $p = 0.276$ ).

Next, we estimate the linear probability models of participants’ search and choice behavior. A click on a product in the search results leads users to the corresponding product details page

**Table 4: Model-Free Results (Study 2)**

	Default AC (Control)		Randomized AC		Masked AC		Test statistic ( $p$ -value)
	$M(\sigma)$	[min;max]	$M(\sigma)$	[min;max]	$M(\sigma)$	[min;max]	
Views	15.98 (8.94)	[0;44]	15.67 (9.92)	[1;68]	14.65 (8.92)	[0;56]	$H = 1.68$ ( $p = 0.432$ )
Clicks	1.49 (1.19)	[0;8]	1.69 (1.86)	[0;15]	1.61 (1.54)	[0;16]	$H = 1.04$ ( $p = 0.595$ )
Time-to-cart (in s)	96.23 (111.93)	[2;1225]	101.46 (113.28)	[10;750]	94.20 (99.78)	[10;987]	$H = 0.29$ ( $p = 0.867$ )
AC: Click	0.24	–	0.19	–	0.18	–	$\chi^2 = 2.32$ ( $p = 0.313$ )
AC: Add-to-cart	0.21	–	0.16	–	0.15	–	$\chi^2 = 2.57$ ( $p = 0.276$ )
Observations	162		176		176		

Note:  $H$  denotes the Kruskal–Wallis test statistic;  $\chi^2$  denotes the Pearson chi-square statistic.

and constitutes our measure of search activity. In addition, we estimate the probability that a participant will add a product to their cart depending on several product and search environment characteristics, namely the products’ average rating, number of ratings, search rank, price, Amazon Prime delivery, and a variety of product badges.

Table 5 summarizes the regression results with respect to users’ click behavior. Compared to the default AC condition, assigning the Amazon’s Choice badge to a randomly selected product yields a 1.8 percentage point higher click likelihood for non-AC products (Model 3:  $\beta = 0.018$ ,  $p = 0.069$ ). Similarly, masking the Amazon’s Choice badge results in a 1.3 percentage point increase in click likelihood for these products (Model 3:  $\beta = 0.013$ ,  $p = 0.095$ ). These estimates suggest that non-AC products receive slightly more clicks when the Amazon’s Choice badge is either randomized or masked, consistent with the directional patterns observed in our descriptive analysis.

Controlling for product and user characteristics as well as product fixed effects, the default AC product shows a 15.8 percentage point higher click likelihood compared to non-AC products (Model 3:  $\beta = 0.158$ ,  $p = 0.092$ ). This advantage diminishes under the alternative conditions: in the randomized AC condition, the click likelihood of the default AC product decreases by 6.8 percentage points (Model 3:  $\beta = -0.068$ ,  $p = 0.187$ ), and in the masked AC condition, by 7.4 percentage points (Model 3:  $\beta = -0.074$ ,  $p = 0.151$ ). These findings indicate that the AC badge exerts an economically meaningful effect on consumers’ search behavior, though the estimates are accompanied by statistical uncertainty—consistent with a multi-cue environment where endorse-

ment competes with other signals for consumer attention. Marginal effects across experimental conditions are reported in Web Appendix B (Table B1).

To contextualize the magnitude of endorsement effects: a one-position improvement in search rank increases click likelihood by 0.3 percentage points (Table 5, Model 3), implying that the estimated click reduction from masking the badge (7.4 percentage points) is equivalent to approximately a 25-position improvement in search rank. Similarly, Prime eligibility increases clicks by 2.0 percentage points, making the masking effect roughly 3.7 times as large. These comparisons indicate that endorsement, while variable across contexts, is among the more impactful cues available on the platform.

Table 6 summarizes the regression results pertaining to users' add-to-cart behavior. Compared to the default AC condition, reassigning the Amazon's Choice badge to a random product increases the add-to-cart likelihood of non-AC products by 0.5 percentage points (Model 3:  $\beta = 0.005$ ,  $p = 0.336$ ), while masking the badge increases it by 0.7 percentage points (Model 3:  $\beta = 0.007$ ,  $p = 0.105$ ). These effects are small in size and, particularly in the randomized AC condition, estimated with considerable uncertainty.

The default AC product does not appear to influence users' product selection behavior quite as strongly as it affects their search behavior. The estimate suggests an 11.6 percentage point increase in add-to-cart likelihood relative to non-AC products (Model 3:  $\beta = 0.116$ ,  $p = 0.212$ ). Analyzing the interaction effects between the default AC product and the experimental conditions, we find that the add-to-cart likelihood for the default AC product decreases by 5.9 percentage points when the badge is reassigned to another product (Model 3:  $\beta = -0.059$ ,  $p = 0.229$ ) and by 6.7 percentage points when the badge is masked (Model 3:  $\beta = -0.067$ ,  $p = 0.164$ ).

Consistent with our analysis of click likelihood, we observe a reduction in the default AC product's likelihood of being added to users' carts when the badge is randomized or masked. However, the effect sizes are smaller for consumers' choice than for search behavior: 6.7 percentage points when the AC badge is completely removed and 5.9 percentage points when it is reassigned to another product. Again, these estimates involve some statistical uncertainty. Marginal effects across

**Table 5: Linear Probability Model – Click Likelihood (Study 2)**

Model	(1)	(2)	(3)
Randomized AC	<b>0.014</b> (0.008)   0.098	<b>0.012</b> (0.009)   0.159	<b>0.018</b> (0.010)   0.069
Masked AC	<b>0.009</b> (0.007)   0.192	<b>0.007</b> (0.007)   0.288	<b>0.013</b> (0.008)   0.095
Avg. Rating		<b>0.036</b> (0.052)   0.487	<b>0.035</b> (0.052)   0.495
Total Ratings		<b>-6.348e-06</b> (8.307e-06)   0.445	<b>-6.239e-06</b> (8.303e-06)   0.453
Search Rank		<b>-0.003</b> (0.001)   0.002	<b>-0.003</b> (0.001)   0.002
Price		<b>-2.973e-06</b> (8.413e-06)   0.724	<b>-3.011e-06</b> (8.457e-06)   0.722
Default AC Product		<b>0.108</b> (0.088)   0.219	<b>0.158</b> (0.093)   0.092
Randomized AC Product		<b>-0.109</b> (0.097)   0.263	<b>-0.091</b> (0.100)   0.359
Best Seller Product		<b>0.032</b> (0.114)   0.780	<b>0.032</b> (0.115)   0.779
Sponsored		<b>0.040</b> (0.019)   0.035	<b>0.040</b> (0.019)   0.035
List Price		<b>0.016</b> (0.036)   0.663	<b>0.016</b> (0.036)   0.667
Amazon Prime		<b>0.021</b> (0.009)   0.021	<b>0.020</b> (0.009)   0.023
User Age		<b>-0.001</b> (2.600e-04)   0.036	<b>-0.001</b> (2.601e-04)   0.035
User Female		<b>0.002</b> (0.007)   0.764	<b>0.002</b> (0.007)   0.763
Amazon Usage (Frequency)		<b>0.003</b> (0.004)   0.516	<b>0.003</b> (0.004)   0.514
Randomized AC × Default AC Product			<b>-0.068</b> (0.052)   0.187
Masked AC × Default AC Product			<b>-0.074</b> (0.051)   0.151
Product FE	Yes	Yes	Yes
<i>N</i>	6,684	6,179	6,179
<i>R</i> <sup>2</sup>	0.049	0.048	0.049
<i>R</i> <sup>2</sup> Adj.	0.041	0.038	0.038

Note: Coefficients in bold. Clustered standard errors (by User ID) in parentheses. *p*-values italicized.

experimental conditions are reported in Web Appendix B (Table B2).

### ***Discussion***

Our findings indicate that the Amazon’s Choice badge primarily influences consumer search behavior and, to a lesser extent, their product choices. In particular, we find that users, on average, click substantially more often on the default Amazon’s Choice product (15.8 percentage points higher click likelihood) compared to non-“Amazon’s Choice” (non-AC) products when the badge is visible on the default product. By contrast, the effect of the default Amazon’s Choice product is comparatively smaller (11.6 percentage points higher add-to-cart likelihood) and accompanied by greater statistical uncertainty when considering users’ add-to-cart behavior ( $p = 0.092$  vs.  $p = 0.212$ ). For sellers, this distinction is noteworthy: the Amazon’s Choice badge appears more effective in enhancing product visibility than in driving conversions.

Beyond its effect on the default Amazon’s Choice product, we also observe that non-AC products tend to receive more clicks on average when the badge is either randomized or removed. Together with descriptive evidence suggesting slightly broader overall search activity in the randomized and masked conditions, this pattern implies that when the AC badge is not allocated to an already popular product, consumers may shift attention toward competing listings. Sellers whose products are not endorsed may therefore experience a modest benefit in terms of search visibility when the AC badge is either absent or assigned to a less dominant competitor.

While these redistribution effects are modest, the impact on the endorsed product itself is substantial: manipulating the badge reduces click and add-to-cart likelihoods considerably. Yet the accompanying statistical uncertainty indicates that endorsement does not dominate other cues. Product attributes such as search rank (click:  $\beta = -0.003$ ,  $p = 0.002$ ; add-to-cart:  $\beta = -0.003$ ,  $p < 0.001$ ) or the availability of Prime delivery (click:  $\beta = 0.020$ ,  $p = 0.023$ ; add-to-cart:  $\beta = 0.014$ ,  $p = 0.032$ ) exert smaller but more precisely estimated effects, suggesting that consumers integrate multiple signals when navigating multi-cue environments.

To summarize, removing the platform endorsement badge from its default placement decreases

**Table 6: Linear Probability Model – Add-to-Cart Likelihood (Study 2)**

Model	(1)	(2)	(3)
Randomized AC	<b>0.001</b> (0.003)   <i>0.811</i>	<b>1.934e-05</b> (0.003)   <i>0.996</i>	<b>0.005</b> (0.005)   <i>0.336</i>
Masked AC	<b>0.004</b> (0.003)   <i>0.309</i>	<b>0.002</b> (0.004)   <i>0.536</i>	<b>0.007</b> (0.005)   <i>0.105</i>
Avg. Rating		<b>0.046</b> (0.051)   <i>0.367</i>	<b>0.046</b> (0.051)   <i>0.373</i>
Total Ratings		<b>-6.853e-06</b> (8.122e-06)   <i>0.399</i>	<b>-6.757e-06</b> (8.117e-06)   <i>0.406</i>
Search Rank		<b>-0.003</b> (0.001)   <i>&lt;0.001</i>	<b>-0.003</b> (0.001)   <i>&lt;0.001</i>
Price		<b>1.186e-05</b> (1.462e-05)   <i>0.418</i>	<b>1.183e-05</b> (1.467e-05)   <i>0.421</i>
Default AC Product		<b>0.072</b> (0.088)   <i>0.412</i>	<b>0.116</b> (0.093)   <i>0.212</i>
Randomized AC Product		<b>-0.105</b> (0.096)   <i>0.273</i>	<b>-0.091</b> (0.098)   <i>0.352</i>
Best Seller Product		<b>0.015</b> (0.115)   <i>0.898</i>	<b>0.015</b> (0.116)   <i>0.896</i>
Sponsored		<b>0.021</b> (0.017)   <i>0.204</i>	<b>0.021</b> (0.017)   <i>0.204</i>
List Price		<b>0.108</b> (0.081)   <i>0.185</i>	<b>0.107</b> (0.081)   <i>0.187</i>
Amazon Prime		<b>0.014</b> (0.006)   <i>0.030</i>	<b>0.014</b> (0.006)   <i>0.032</i>
User Age		<b>-4.199e-04</b> (1.105e-04)   <i>&lt;0.001</i>	<b>-4.222e-04</b> (1.107e-04)   <i>&lt;0.001</i>
User Female		<b>-0.007</b> (0.003)   <i>0.019</i>	<b>-0.007</b> (0.003)   <i>0.019</i>
Amazon Usage (Frequency)		<b>-0.001</b> (0.002)   <i>0.754</i>	<b>-0.001</b> (0.002)   <i>0.758</i>
Randomized AC × Default AC Product			<b>-0.059</b> (0.049)   <i>0.229</i>
Masked AC × Default AC Product			<b>-0.067</b> (0.048)   <i>0.164</i>
Product FE	Yes	Yes	Yes
<i>N</i>	6,684	6,179	6,179
<i>R</i> <sup>2</sup>	0.048	0.048	0.049
<i>R</i> <sup>2</sup> Adj.	0.040	0.038	0.038

Note: Coefficients in bold. Clustered standard errors (by User ID) in parentheses. *p*-values italicized.

search behavior by up to 7.4 percentage points (reducing the click advantage to 53% of its original level) and choice behavior by up to 6.7 percentage points (reducing the add-to-cart advantage to 42% of its original level). These economically meaningful effects are estimated with uncertainty, consistent with the multi-cue retail environment in which endorsement competes with other signals for consumer attention.

## **General Discussion**

Our analyses jointly illuminate how platform endorsement operates in retail search environments characterized by numerous competing cues. By combining observational and experimental evidence, we triangulate the effect of the Amazon's Choice badge on consumer search and choice.

Our audit study reveals that Amazon awards endorsement badges to only 1.32% of products, disproportionately to those with lower prices, higher ratings, and Amazon as the seller. Badge allocation is associated with contemporaneous improvements in both search and sales rank, and the visibility benefit persists even after badge removal, suggesting endorsement may reinforce pre-existing competitive advantages.

Our experiment demonstrates that the Amazon's Choice badge influences both search and choice, with economically meaningful effects on click and add-to-cart likelihoods. Manipulating badge placement reduced engagement with the default endorsed product, leaving only 53% of the original click advantage and 42% of the original add-to-cart advantage intact. These effects are estimated with uncertainty, while competing cues such as search rank and Prime eligibility exert smaller but more precisely estimated effects. This pattern suggests consumers integrate multiple signals when navigating platform search environments.

Our central finding is that platform endorsement generates economically meaningful behavioral effects in complex, multi-cue retail environments. In these settings, endorsement competes with product attributes and search features for consumer attention. Understanding how platform-generated and product-driven signals jointly shape consumer behavior is essential for marketing theory, platform design and governance, and seller strategy.

### ***Theoretical Implications***

Our findings yield two theoretical implications. First, we extend endorsement research to B2C environments with physical goods—the dominant form of online retail. Prior work in high-uncertainty C2C and experience goods settings may overstate endorsement’s effectiveness relative to online B2C retail of physical goods, where quality information is more readily available. We find that manipulating the badge reduces the endorsement advantage to 53% (clicks) and 42% (add-to-carts) of its original level, even in this lower-uncertainty context, although the magnitude varies with the information environment.

Second, consistent with [Hui et al. \(2016\)](#) and [Rietveld et al. \(2021\)](#), our results suggest that endorsement effects in multi-cue environments are shaped by competing signals. The pattern we observe—large but uncertain endorsement effects alongside smaller but precisely estimated effects of search rank and Prime—is consistent with consumers integrating multiple cues rather than relying on any single signal. This underscores the need for future research to model the joint influence of marketplace cues, rather than estimating endorsement effects in isolation.

Together, these results reframe platform endorsement from a uniformly powerful signal to one whose effectiveness is contingent on the informational context—a distinction with direct implications for both theory development and empirical design in platform research.

### ***Managerial & Regulatory Implications***

For sellers, our findings suggest pursuing platform endorsement with calibrated expectations. The badge generates meaningful lifts in visibility and conversions, but access is highly selective—favoring products with pre-existing advantages such as high rankings and Amazon fulfillment. Moreover, endorsement effects are less consistent than those of product attributes like search rank or Prime eligibility. Sellers should therefore balance endorsement pursuit with investments in organic visibility through quality improvements, reviews, and search relevance. Consistent with [Cheng et al. \(2020\)](#), maintaining a badge matters for sustained visibility, as the search rank benefit persists beyond the period of badge display.

For platforms, our findings point to an important design tension: endorsement badges can direct consumer attention, yet their impact may be attenuated in information environments crowded with competing cues. This suggests that the effectiveness of endorsements may depend on how they are embedded within the broader information architecture of the marketplace. Moreover, because endorsements are associated with meaningful visibility benefits, badge allocation may represent a consequential governance tool—potentially reinforcing marketplace dynamics tied to fulfillment quality or customer satisfaction.

From a regulatory perspective, our study does not provide definitive evidence of competitive distortions, as we lack direct access to Amazon’s endorsement algorithms and seller-level data. Nevertheless, the observed correlation between badge allocation and whether a product is sold by Amazon—combined with the limited predictive power of consumer-relevant variables such as price or ratings—raises potential concerns. Combined with the meaningful behavioral effects we document, this pattern suggests that regulatory scrutiny of endorsement allocation practices may be warranted.

### ***Limitations and Future Research***

Our study has limitations. First, we focus on Amazon; while its dominance motivates this choice, its regulatory scrutiny and brand salience may limit generalizability. Second, Amazon’s undisclosed algorithms mean that platform endorsement allocation remains poorly understood. Third, our experiment used informed participants, which may attenuate effects relative to fully naturalistic browsing. Importantly, however, the audit study’s observational design complements the experiment by documenting endorsement patterns without these demand characteristics, and the convergent results across methods strengthen our conclusions.

Several directions for future research emerge. First, identifying mechanisms—particularly how search costs and category expertise moderate badge reliance—would clarify when endorsement is most effective. Second, examining endorsement across platforms and product categories would establish the generalizability of context-dependent effects. Third, analogous settings such as review

sites, streaming platforms, and search engines employ similar visual indicators; studying these contexts may reveal common mechanisms or boundary conditions. In summary, our findings highlight that platform endorsement effects in multi-cue environments are economically meaningful and warrant further investigation across settings, mechanisms, and methodological approaches.

## References

- Bairathi, M., Zhang, X., and Lambrecht, A. (2025). The value of platform endorsement. *Marketing Science*, 44(1):84–101.
- Boegershausen, J., Datta, H., Borah, A., and Stephen, A. T. (2022). Fields of gold: Scraping web data for marketing insights. *Journal of Marketing*, 86(5):1–20.
- Broniarczyk, S. M. and Griffin, J. G. (2014). Decision difficulty in the age of consumer empowerment. *Journal of Consumer Psychology*, 24(4):608–625.
- Chen, N. and Tsai, H.-T. (2024). Steering via algorithmic recommendations. *RAND Journal of Economics*, 55(4):501–518.
- Cheng, H. K., Fan, W., Guo, P., Huang, H., and Qiu, L. (2020). Can “gold medal” online sellers earn gold? The impact of reputation badges on sales. *Journal of Management Information Systems*, 37(4):1099–1127.
- Chevalier, J. and Goolsbee, A. (2003). Measuring prices and price competition online: Amazon.com and BarnesandNoble.com. *Quantitative Marketing and Economics*, 1(2):203–222.
- Chevalier, J. A. and Mayzlin, D. (2006). The effect of word of mouth on sales: Online book reviews. *Journal of Marketing Research*, 43(3):345–354.
- Dinerstein, M., Einav, L., Levin, J., and Sundaresan, N. (2018). Consumer price search and platform design in internet commerce. *American Economic Review*, 108(7):1820–1859.
- Dukes, A. and Liu, L. (2016). Online shopping intermediaries: The strategic design of search environments. *Management Science*, 62(4):1064–1077.
- Elfenbein, D. W., Fisman, R., and McManus, B. (2015). Market structure, reputation, and the value of quality certification. *American Economic Journal: Microeconomics*, 7(4):83–108.

- Farronato, C., Fradkin, A., and MacKay, A. (2023). Self-preferencing at Amazon: Evidence from search rankings. *AEA Papers and Proceedings*, 113:239–43.
- Ghiassaleh, A., Kocher, B., and Czellar, S. (2020). Best seller!? Unintended negative consequences of popularity signs on consumer choice behavior. *International Journal of Research in Marketing*, 37(4):805–820.
- Goodman, J. K., Broniarczyk, S. M., Griffin, J. G., and McAlister, L. (2013). Help or hinder? When recommendation signage expands consideration sets and heightens decision difficulty. *Journal of Consumer Psychology*, 23(2):165–174.
- Hagiu, A. (2009). Two-sided platforms: Product variety and pricing structures. *Journal of Economics & Management Strategy*, 18(4):1011–1043.
- Häubl, G. and Trifts, V. (2000). Consumer decision making in online shopping environments: The effects of interactive decision aids. *Marketing Science*, 19(1):4–21.
- Honka, E., Seiler, S., and Ursu, R. (2024). Consumer search: What can we learn from pre-purchase data? *Journal of Retailing*, 100(1):114–129.
- Hui, X., Jin, G. Z., and Liu, M. (2025). Designing quality certificates: Insights from eBay. *Journal of Marketing Research*, 62(1):40–60.
- Hui, X., Saeedi, M., Shen, Z., and Sundaresan, N. (2016). Reputation and regulations: Evidence from eBay. *Management Science*, 62(12):3604–3616.
- Iyengar, S. S. and Lepper, M. R. (2000). When choice is demotivating: Can one desire too much of a good thing? *Journal of Personality and Social Psychology*, 79(6):995–1006.
- Jerath, K. and Ren, Q. (2021). Consumer rational (in)attention to favorable and unfavorable product information, and firm information design. *Journal of Marketing Research*, 58(2):343–362.
- Jürgensmeier, L. and Skiera, B. (2025). Measuring self-preferencing on digital platforms. *Journal of Marketing*.

- Li, X., Grahl, J., and Hinz, O. (2022). How do recommender systems lead to consumer purchases? A causal mediation analysis of a field experiment. *Information Systems Research*, 33(2):620–637.
- Peng, J. and Liang, C. (2023). On the differences between view-based and purchase-based recommender systems. *MIS Quarterly*, 47(2):875–900.
- Rietveld, J., Seamans, R., and Meggiorin, K. (2021). Market orchestrators: The effects of certification on platforms and their complementors. *Strategy Science*, 6(3):244–264.
- Rochet, J.-C. and Tirole, J. (2003). Platform competition in two-sided markets. *Journal of the European Economic Association*, 1(4):990–1029.
- Ursu, R. M. (2018). The power of rankings: Quantifying the effect of rankings on online consumer search and purchase decisions. *Marketing Science*, 37(4):530–552.
- Weyl, E. G. (2010). A price theory of multi-sided platforms. *American Economic Review*, 100(4):1642–1672.
- Zhan, J., Zhang, X., and Fu, H. (2025). Information disclosure via platform endorsement in online healthcare. *Journal of Marketing Research*.

# **Web Appendix:**

## **How Platform Endorsement Shapes Consumer Search and Choice in Online Retail**

### **Contents**

<b>Web Appendix A: Study 1 – Search Terms and Additional Results</b>	<b>2</b>
<b>Web Appendix B: Study 2 – Marginal Effects</b>	<b>5</b>

## Web Appendix A: Study 1 – Search Terms and Additional Results

Table A1 provides exemplary search terms used in our study on badge prevalence on Amazon (see the main paper for a detailed description of the data collection process). All search terms were initially generated using OpenAI’s ChatGPT (GPT-4, October 2023 version) and subsequently manually reviewed and curated by the authors. Duplicate terms were removed and replaced to ensure category relevance and data quality. The complete list of search terms is available on OSF.

**Table A1:** Exemplary Search Terms Used in the Data Collection Process for Study 1

Category	Example Search Terms
Beauty	aftershave for men, foot cream, hair dye, eye cream dark circles, manicure kit, body butter, tanning lotion, foundation makeup, facial roller, hair volumizer spray, rosehip oil, essential oils set, retinol serum, bath bombs, makeup sponge
Books	space exploration, archaeology, memoirs, cultural studies, historical fiction, suspense thrillers, biography, psychology, true crime, war stories, play scripts, educational, modern history, home decor books, craftsmanship
Clothing, Shoes & Jewelry	sports bras, kids’ sneakers, diamond bracelets, cowboy boots, men’s suits, floral dresses, summer hats, pearl necklaces, boots, satchel bags, sneakers, beach dresses, handbags, evening gowns, women’s dresses
Computer	dual monitor stand, graphics card, hard drive, laptop stand, desktop organizer, macbook air, notebook cooler, gaming mouse pad, touchscreen monitor, streaming camera, ssd enclosure, cable management, printer, windows laptop, memory card reader
Electronics	action camera, smart lock, desktop pc, cd player, cordless mouse, camera lens, printers, 3d printer, home theater system, thermostat, wireless charger, portable charger, wireless printer, external hard drive, vr headset
Grocery	organic rice, raw honey, gourmet rice, gourmet coffee blends, specialty sugars, ancient grains, dried fruits, vegan sausages, quinoa products, vegan cookies, pasta sauces, gluten-free flours, protein bars, organic tea, vegan pastas
Health	potty training seat, weight scale, organic hand soaps, baby safety gates, baby bibs, power toothbrush, menstrual cups, multivitamin for women, baby carriers, pain killers, herbal teas, essential oils, facial tissue, natural remedies, glucose meter
Home & Kitchen	coffee maker, storage shelves, wall decals, grill pan, bar stools, kitchen island, bedspread, glassware, throw pillows, bathroom accessories, rugs, cake stand, floor lamp, wine opener, can opener
Sports & Outdoor	roller skates, gym supplements, badminton shuttlecock, mountain bike, climbing gear, running shoes, hiking boots, snowboard, rugby ball, bicycle, camping chair, tennis racket, camping tent, table tennis paddle, gym bag
Toys & Games	novelty toys, puzzles, miniature playsets, wooden toys, outdoor toys, drawing kits, learning toys, spinning tops, skateboards, video games, clay modeling, role play costumes, magic cubes, robotic toys, sports toys

Table A2 presents correlational patterns between platform endorsement and product characteristics. The results suggest that Amazon’s Choice badge assignment is associated with several observable product characteristics. While these patterns are purely correlational and should not be interpreted as causal, they provide insight into the types of products more likely to receive platform endorsement.

There is a positive association between badge assignment and whether a product is sold by Amazon ( $\beta = 6.36 \times 10^{-3}$ ,  $p = 0.007$ ). This corresponds to the descriptive results in Table 2 of the main paper, which show that products sold by Amazon are disproportionately represented among Amazon’s Choice offerings compared to third-party sellers.

The coefficient for product price (in cents) is positive but small ( $\beta = 2.61 \times 10^{-7}$ ,  $p = 0.630$ ). However, this estimate is accompanied by statistical uncertainty and therefore does not provide reliable evidence that price is associated with badge assignment—nor does it support Amazon’s claim that the badge designates “well-priced” products.

Other variables that consumers might intuitively associate with the badge show only very small associations with badge assignment in our data. These include average customer rating ( $\beta = 1.48 \times 10^{-4}$ ,  $p = 0.468$ ), total number of ratings ( $\beta = 2.78 \times 10^{-7}$ ,  $p = 0.541$ ), Prime eligibility ( $\beta = 2.23 \times 10^{-3}$ ,  $p = 0.082$ ), coupon presence ( $\beta = -1.80 \times 10^{-3}$ ,  $p = 0.254$ ), the Limited Time Deal badge ( $\beta = 2.62 \times 10^{-3}$ ,  $p = 0.319$ ), delivery by Amazon ( $\beta = -7.36 \times 10^{-4}$ ,  $p = 0.649$ ), whether a list price is displayed ( $\beta = 3.15 \times 10^{-4}$ ,  $p = 0.799$ ), and Sponsored status ( $\beta = -7.96 \times 10^{-4}$ ,  $p = 0.449$ ).

**Table A2:** Characteristics and Co-occurring Badges of Amazon’s Choice Products (Study 1)

DV: Amazon’s Choice	
Avg. Rating	<b>1.476e-04</b> (2.035e-04)   <i>0.468</i>
Total Ratings	<b>2.780e-07</b> (4.550e-07)   <i>0.541</i>
Product Price	<b>2.610e-07</b> (5.430e-07)   <i>0.630</i>
List Price	<b>3.146e-04</b> (1.238e-03)   <i>0.799</i>
Sponsored	<b>-7.956e-04</b> (1.050e-03)   <i>0.449</i>
Limited Time Deal	<b>0.003</b> (0.003)   <i>0.319</i>
Amazon Prime	<b>0.002</b> (0.001)   <i>0.082</i>
Coupon	<b>-0.002</b> (0.002)   <i>0.254</i>
Delivered by Amazon	<b>-0.001</b> (0.002)   <i>0.649</i>
Sold by Amazon	<b>0.006</b> (0.002)   <i>0.007</i>
Product Fixed Effects	Yes
Search Term Fixed Effects	Yes
Time Fixed Effects	Yes
Num. Obs.	174,936
R <sup>2</sup> Adj.	0.377

*Note:* Linear probability model estimating associations between product characteristics and Amazon’s Choice badge assignment (Amazon’s Choice = 1 if badge is present). Coefficients in bold. Clustered standard errors (by ASIN) in parentheses. *p*-values italicized.

## Web Appendix B: Study 2 – Marginal Effects

Table B1 reports the marginal effect of the default Amazon’s Choice (AC) product on users’ click likelihood across the three experimental conditions (default AC badge, badge randomly reassigned, badge masked). Table B2 reports the corresponding marginal effect on users’ add-to-cart likelihood across the same conditions.

**Table B1:** Marginal Effects of the Default Amazon’s Choice Product on Users’ Click Likelihood Across Experimental Conditions (Study 2)

Condition	Marginal effect (SE)   <i>p</i> -value	Null hypothesis	<i>z</i>   <i>p</i> -value [95% CI]
<i>Default AC Product vs. non-AC Products</i>			
Default AC	0.158 (0.093)   0.092		
Randomized AC	0.090 (0.091)   0.327	Default AC – Randomized AC = 0	1.32   0.186 [–0.033; 0.169]
Masked AC	0.084 (0.092)   0.363	Default AC – Masked AC = 0	1.44   0.150 [–0.027; 0.174]

**Table B2:** Marginal Effects of the Default Amazon’s Choice Product on Users’ Add-to-Cart Likelihood Across Experimental Conditions (Study 2)

Condition	Marginal effect (SE)   <i>p</i> -value	Null hypothesis	<i>z</i>   <i>p</i> -value [95% CI]
<i>Default AC Product vs. non-AC Products</i>			
Default AC	0.116 (0.093)   0.211		
Randomized AC	0.057 (0.091)   0.529	Default AC – Randomized AC = 0	1.21   0.228 [–0.037; 0.154]
Masked AC	0.049 (0.092)   0.596	Default AC – Masked AC = 0	1.39   0.164 [–0.028; 0.162]