

Making Third-Party Sellers More Attractive—The Case of Amazon

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Abstract

We provide an analysis of third-party sellers on Amazon’s online marketplace from a customer’s viewpoint. While Amazon as a retailer sometimes directly competes with third-party sellers, Amazon is also interested in making the Amazon marketplace attractive for third-party sellers and making third-party sellers attractive to customers. Based on a large-scale survey (n=772) of Amazon customers in the U.S., we examine how much they like to buy from the different seller types (Amazon itself, third-party sellers with/without the Prime logo, i.e., with/without Fulfillment by Amazon). Among other results, we can show that the Prime logo on the seller side combined with a Prime subscription on the customer side significantly increases trust in a third-party seller, ultimately increasing third-party sales on Amazon’s online marketplace. Furthermore, third-party sellers are implicitly incentivized to use the Fulfillment by Amazon service, which generates additional logistics service revenue for Amazon.

Keywords: B2C e-commerce, online marketplace, third-party seller, Amazon

1. Introduction

In 2021, the total gross merchandise volume (GMV), including sales from Amazon itself and the marketplace, was more than \$600 billion, adding nearly \$120 billion in net growth. However, most of the growth came from third-party sellers, not Amazon as a retailer. Amazon’s retail sales grew 14%, while the marketplace grew nearly 30%. Amazon’s marketplace sales nearly doubled in two years, from \$200 billion in 2019 to \$390 billion in 2021, representing nearly 2/3 of Amazon’s retail revenue. Ten years ago, in 2011, third-party revenue only accounted for approximately 38% of all sales (Kaziukėnas, 2022). Indeed, in the “2018 Letter to Shareholders”, Amazon founder Jeff Bezos started with a list of the ever-growing share of third-party revenue and wrote, “*We helped independent sellers compete*

against our first-party business by investing in and offering them the very best selling tools we could imagine and build. There are many such tools, [...]. But of great importance are Fulfillment by Amazon and the Prime membership program. In combination, these two programs meaningfully improved the customer experience of buying from independent sellers.” (Bezos, 2019).

Amazon operates an online marketplace, where third-party sellers and Amazon itself offer products for sale. The relationship between Amazon and third-party sellers is ambivalent. On the one hand, Amazon has an incentive to offer products itself (i.e., to compete with third-party sellers) in order to capture the profit margins (Zhu & Liu, 2018). On the other hand, the attractiveness of the marketplace increases with the number of third-party sellers, a well-known part of the so-called Amazon flywheel. Additionally, Amazon generates profit through the sales commission fee that third-party sellers pay to Amazon. However, if customers do not like to buy from third-party sellers, a push for more third-party sales could backfire as a strategy. Therefore, Amazon is interested not only in the marketplace platform being attractive to third-party sellers but also in third-party sellers being attractive to customers.

The supposed ingenuity of combining the Fulfillment by Amazon (FBA) service and the Prime subscription is that Amazon not only increases the service quality of third-party sellers (3P sellers in the following) on Amazon’s marketplace but also extracts more service revenue from them, making it optimal for Amazon to cede more of the overall demand to 3P sellers (because the opportunity costs are smaller). The FBA service is an optional service where 3P sellers can send products to Amazon fulfillment centers, and when a customer makes a purchase, Amazon handles packing, shipping, customer service, and returns for those orders for a fee that is paid by the 3P seller (in addition to the sales commission). 3P offers with FBA have Prime service available, and thus customers with a Prime subscription not only receive fast and free delivery when they buy from Amazon itself but also when they buy 3P offers with FBA. An intriguing hypothesis is that the

combination of Prime subscription and FBA not only makes 3P offers with Prime service more attractive but possibly also makes 3P offers without Prime service less attractive, thus indirectly incentivizing 3P sellers toward the paid FBA service.

Our research is anchored in this context. The leading research questions were as follows:

- How much do customers like to buy from the different seller types (Amazon itself, 3P sellers with/without Prime/FBA)?
- What determines how much customers like to buy from the different seller types? We focus on the fulfillment processes (because of FBA) and the general trust in the different seller types (an important factor in B2C e-commerce in general).

We first present a systematic literature review of existing research addressing the Amazon marketplace. As we will show, not much research about these questions has been published. Following the literature review, we present the results of a survey of Amazon customers from the U.S. (n=772). Our survey provides insights into how important the FBA and Prime services are for the Amazon ecosystem.

2. A systematic literature review

2.1. Methodology

Our research focuses on Amazon’s online marketplace. Thus, to identify relevant articles, we initially used the search string (Title = “Amazon” AND Abstract/keywords = (“marketplace” OR “fulfillment” OR “prime” OR “third party”)) in four scientific databases, namely, Association for Information Systems eLibrary (AISeL), Business Source Ultimate via EBSCO, ScienceDirect (no title restriction), and Web of Science. Wildcard operators (*) were used where possible and sensible. The title restriction ensured that we only found articles explicitly focused on Amazon, similar to our study. The search was limited to articles in English published in scientific journals and conference proceedings. Altogether, 222 references were retrieved (see Tab. 1).

The initial search results were refined using the following criteria. In the first step, articles that were

obviously not about the Amazon marketplace were excluded. These are, for example, articles about the biological ecosystem of the Amazon River and articles about the Amazon Mechanical Turk (MTurk) service. In the second step, we excluded articles that only discussed digital services or technical innovations—Amazon Prime Video, Amazon Web Services (AWS), Amazon Elastic Compute Cloud (EC2), Amazon Alexa, or Amazon Prime Air—and legal papers on Amazon’s product liability. These criteria were checked against the articles’ titles, abstracts, and keywords, narrowing the search results to 55 references. Next, we screened the articles based on their full text. Our intention was to identify articles that explicitly focused on the Amazon marketplace. Ultimately, 18 articles were classified as relevant.

Because we found relatively few articles relevant to our topic in our first literature search, we performed a second search for empirical research about Amazon in general with the following search string (Title = “Amazon” AND Abstract/keywords = (“questionnaire” OR “study” OR “experiment” OR “survey” OR “empiric” OR “case” OR “sample”)) in the same four scientific databases mentioned above. We restricted this second search to articles published after 2009 because the B2C e-commerce market has changed considerably in recent years. Altogether, 1350 references were found in this second search (see Tab. 1). The search results were refined with a process similar to the first literature search. In total, 22 articles were classified as relevant. Both searches were conducted independently by two researchers from February to May 2022. The first search yielded 18 relevant references. This number, however, includes some duplicates across the four databases. After removing these duplicates, 15 relevant articles remained. The second search yielded 22 relevant references. After removing duplicates, a total of 13 remained. However, six of these 13 articles were already found in the first search. Thus, in total 22 relevant articles were found.

To date, there seem to be very few scientific studies that focus explicitly on the Amazon marketplace. This is surprising since the Amazon marketplace, as the largest B2C e-commerce marketplace, is very well suited as the subject of a case study. The small number

Table 1. Search string results (incl. duplicates) for various databases and selection process

Selection:	Part I: Amazon marketplace and 3P sellers in general				Part II: empirical research (e.g., surveys) regarding Amazon			
	# initial	# first	# second	# relevant	# initial	# first	# second	# relevant
AISeL	23	15	9	6	23	12	8	8
Business Source Ultimate	39	35	17	4	136	22	15	9
ScienceDirect	96	19	7	1	165	9	4	1
Web of Science	64	42	22	7	1026	24	6	4
Subtotal	222	111	55	18	1350	67	33	22

of articles allows us to briefly address all the articles in the following. This is followed by a short discussion about how the existing studies relate to our research.

2.2. Literature review results and discussion

Two articles addressed the relationship between the book market and Amazon: Tan et al. (2005) discuss the competitive implications of Amazon's marketplace for both the primary (selling new books) and secondary (reselling used books) book market. Chen (2008) argue that with the emergence of e-books, this competition is expanding to the digital channel.

Two articles are about the Amazon buy box: This box summarizes the most important information about a product offer (price, delivery time, ..., of the "best" offer) and is usually used by customers to place items in their shopping cart. The findings of Chen et al. (2016) indicate that the price of the offer is a crucial variable for winning the buy box. Gómez-Losada and Duch-Brown (2019) used a longitudinal approach and also found that the offer price plays an important role.

Two articles focused on product prices on Amazon's marketplace: Xu (2019) found that price promotions positively affect sales in the short term and can also have a positive long-term effect. Trenz and Veit (2012) investigated whether offers listed on price comparison (meta-search) websites affect sales on Amazon's marketplace. Depending on the product category, such a relationship can indeed be observed.

Eight articles researched customer reviews on Amazon: Ivanova et al. (2013) show that positive reviews have a greater influence on consumers' purchase intentions than negative reviews. Bao and Chang (2014) findings indicate that a positive feedback loop (including increased sales) can occur between traditional media, social media, and Amazon customer reviews. Khern-am-nuai et al. (2017) analyzed Amazon's Q&A system. They found that unanswered questions about a product negatively impact sales. Jeong (2021) showed how an analysis of customer reviews can be used to identify product characteristics that likely lead to good product reviews. Similarly, Huang et al. (2020) used product reviews to better predict consumer purchase preferences. Wu (2019) found that extrinsic motivation (e.g., status recognition) can crowd out intrinsic motivation and the enjoyment of writing reviews in various scenarios. Jabr (2021) developed, tested, and validated an approach to quantify the credibility of reviews. Jin et al. (2013) found that customers respond positively to price cuts when writing reviews.

One article (Cui et al., 2019) researched whether real-time information about the availability of goods can influence consumer buying behavior. Their

findings indicate that a decrease in product availability (lower stock level) can have a signaling effect that increases sales.

Two articles used the so-called brand experience theory: Baswan and Farheen (2019) found that males and females perceive the Amazon brand differently. The emotional dimension of the brand is more important to females. Vakhariya (2020) identified important factors that influence the online shopping experience (namely, customer service, customer satisfaction, reliability, self-congruence, attractiveness, product variety, and affordability) and then compared the brand experience of Amazon to another online retailer.

Four articles addressed the relationship between Amazon and 3P sellers: Ritala et al. (2014) framed the Amazon marketplace as a co-competition-based business model. Co-competition refers to the phenomenon of simultaneous cooperation and competition (Nalebuff & Brandenburger, 1996). On the one hand, there is a collaboration with the 3P sellers by providing them the infrastructure and technical means to market their products online. On the other hand, as a retailer on the marketplace, Amazon directly competes with 3P sellers for customer orders (Ritala et al., 2014). The authors conclude that the Amazon marketplace is a win-win situation. Amazon can reduce operating costs because fewer products must be stored. In particular, however, Amazon can generate sales commission fees at negligible additional cost. On the other hand, the Amazon marketplace gives 3P sellers the opportunity to offer their products to millions of potential customers. Croitor and Werner (2021) investigated how "input control" (i.e., the mechanisms that screen 3P sellers before they can enter the Amazon marketplace) affects sellers' performance. For the Amazon marketplace, 3P sellers must, for example, prove the legality of their products, adhere to predefined product categories, and provide images that match specific attributes (Amazon, 2022). Based on survey results of 3P sellers on Amazon, Croitor and Werner (2021) conclude that 3P sellers have reduced motivation and thus a reduced performance if they find the input controls unfairly. Sun et al. (2020) analyze the choice between possible Fulfillment by Amazon (FBA) and Fulfillment by Seller (FBS). 3P sellers can fulfill demand through inventory stored in Amazon's distribution centers or through their own warehouse infrastructure. Using data from an e-retailer of wedding dresses in China to analyze the differences between these fulfillment options, the authors develop a decision model for choosing the right distribution channel based on predictive analytics. Zhu and Liu (2018) examined Amazon's entry patterns into 3P product spaces. If a 3P seller is successful with a product, Amazon may decide to offer the same or a similar product, potentially lowering the profit of the 3P

seller. Using data from Amazon.com, the authors find that while Amazon is more likely to target successful product spaces, it is less likely to enter product spaces that require significant effort from the seller to grow. The authors recommend that 3P sellers should offer niche products on the marketplace and/or focus on products that require significant sales growth effort.

One article focused on the Amazon Prime subscription: It is well known that Prime members spend more money on Amazon.com than regular customers. However, the behavior and attitudes of shoppers in such programs have not yet been fully explored. Ramadan et al. (2021) show in their study that programs such as Amazon Prime reinforce impulsive behavior while giving shoppers a false sense of self-control.

Discussion: The literature review shows that our research questions have likely not been addressed in the literature thus far. Of the articles found, the ones about the relationship between Amazon and 3P sellers and the Amazon Prime subscription are probably closest to our research questions. Ramadan et al. (2021) found in their study that Prime subscribers, on average, feel emotionally more attached to Amazon than customers without a Prime subscription, which leads to more impulsive buying behavior from Prime subscribers on Amazon's marketplace. We also study the differences between customers with or without Prime subscriptions, but with a focus on the perceptual and behavioral differences depending on the different seller/offer types on Amazon's marketplace. Our study also has implications for coopetition between Amazon and 3P sellers (Ritala et al., 2014). A core hypothesis of our study is that the Prime subscription combined with FBA makes 3P offers with FBA more attractive to customers. This seems (and probably is) favorable to 3P sellers, but this also means that 3P sellers have an incentive to use the paid FBA service, thus influencing models about the choice between FBA and FBS, such as the one from Sun et al. (2020).

3. A Survey of Amazon customers

3.1. Hypotheses underlying the models

While we can draw some inspiration from our literature review, it is also expedient to consider literature that does not explicitly focus on Amazon. There is already plenty of literature on B2C e-commerce in general and some literature on online marketplaces. For our survey, we note in particular that there is already well-cited and impactful research about trust in online retailing from the early 2000s (e.g., Gefen, 2000). It is generally accepted that trust plays an important role in customers' purchase intentions. Moreover, Gefen

(2000) found that familiarity with an online retailer and its processes creates trust. It is easy to see how this logic could be applied to online marketplaces. However, although there are some similarities, the situation is also distinctively different. Many different 3P sellers are active on an online marketplace, and customers are often unfamiliar with these 3P sellers and do not build any lasting relationships with them. Thus, it was argued that in the case of online marketplaces, trust is created through so-called institutional mechanisms (Pavlou & Gefen, 2004). Institutional mechanisms are "soft" promises (e.g., the so-called Amazon A-to-Z guarantee) or "strong", legally binding mechanisms (e.g., all payments on Amazon.com are confidently processed by Amazon and not by 3P sellers) introduced by the marketplace operator and aimed at reducing risk and/or increasing trust. Several articles about this topic exist, predominantly about auction marketplaces such as eBay or the Amazon auction marketplace, which is no longer active (e.g., Pavlou & Gefen, 2004). To the best of our knowledge, there has been no such study (at least recently) that focuses on the Amazon retail marketplace and the differences in perception between Amazon itself and the 3P sellers on Amazon's online marketplace.

We largely follow the theory and logic used in Pavlou and Gefen (2004) for our survey and regression models and refer to their article for the relevant references. However, in addition to the trust differences between the different seller/offer types, our study has an additional focus on the combination of the Prime subscription and FBA. We, therefore, expand the theme of trust with questions about trust in the delivery and returns processes because, in the case of FBA, Amazon is responsible for these important processes (Nguyen et al., 2018).

Our model is logically relatively straightforward. We hypothesize that: Trust when buying from Amazon itself > Trust when buying from a 3P seller with Prime service > Trust when buying from a 3P seller without Prime service.

Note that we asked most questions in our survey two times, one time with "Prime service" and a second time with "shipped from Amazon itself". These two are almost always the same in practice because usually, the Prime logo is only awarded to offers shipped by Amazon (i.e., offers from Amazon itself or 3P seller offers with the FBA service). However, a customer without a Prime subscription is probably (we asked this in our survey) not paying much attention to the Prime logo/service and is instead paying more attention to whether a 3P offer is shipped from the 3P or Amazon.

Based on the existing research (Gefen, 2000, Pavlou & Gefen, 2004), we further assume that trust in the different buying options influences how much customers like to buy from the different sellers. Thus,

we hypothesize the following: Like to buy from Amazon itself > Like to buy from a 3P with Prime service > Like to buy from a 3P without Prime service.

Note that other studies (e.g., Pavlou & Gefen, 2004) asked questions about a customer's purchase intention depending on the seller type. However, such a question is only of limited use in our context because, logically and *ceteris paribus*, a customer would always buy from their preferred seller type if possible. Questions about general purchase intentions are therefore not expedient. Instead, we used scenarios (e.g., Amazon itself does not offer the product) and asked the survey takers to estimate what they would do in such a scenario. There are more details about this at the end of this subsection.

However, other factors in addition to trust also influence how much a customer likes to buy from the different seller types. For our study, we focused on selected factors that are related to trust/familiarity and the Prime/FBA service.

Unlike 3P sellers, Amazon can build familiarity with customers (Ramadan et al., 2021). However, this familiarity could also be detrimental. Amazon is a very public company, and some people do not like Amazon as a company, perhaps because they have seen documentaries about demanding working conditions in Amazon's fulfillment centers. This could influence not only how much a customer likes to buy from Amazon itself but also how much a customer likes to buy from 3P sellers with Prime/FBA service or generally from the Amazon marketplace.

Amazon is generally known for its comparatively fast delivery times, and one of the most prominent features of the Prime subscription is that the fast "premium" shipping is free for offers with Prime service. Thus, we hypothesize that customers who like or need fast delivery would rather buy from Amazon itself or 3P sellers with Prime/FBA service.

Because fulfillment is so important in B2C e-commerce (Nguyen et al., 2018), we also asked how much customers trust the delivery and returns process when they order from a 3P seller with or without Prime/FBA service. The hypothesis is, of course, that trust in the different types of 3P offers is dependent on trust in the delivery/returns process. However, while the FBA service decreases the delivery/returns risk (Amazon also processes the returns for the 3P sellers when they use the FBA service), it is still possible that the 3Ps sell counterfeit products. Therefore, we also asked the customers about their trust in not receiving a counterfeit product when buying from a 3P seller. Logically, this trust should be largely independent of the Prime/FBA service.

We also asked the survey respondents whether they knew some of the institutional mechanisms of Amazon. We asked about the soft "Amazon A-to-Z guarantee"

and the strong mechanism that all payments on the marketplace are exclusively processed by Amazon. We also asked whether the respondents trust that Amazon takes their side in a dispute with a 3P seller.

Amazon's strategy of using the Prime subscription and FBA service to generate additional service revenue and make 3P offers more trustworthy and attractive seems to be a good concept. However, it also makes the marketplace as a whole more complex. Some customers may find this exhausting and prefer a conventional online store instead. We asked about this in our survey.

Our model concludes with a question about what percentage of their online shopping the respondents do on Amazon.com and two scenarios about what they would do (on average) when Amazon itself does not offer a product (scenario 1) or when neither Amazon itself nor a 3P seller with Prime/FBA service offers the product (scenario 2). Do they think they would buy from a 3P seller with Prime/FBA service, from a 3P seller without Prime/FBA service, from another online shop, from a brick-and-mortar store, not buy at all, or choose another alternative? We hypothesize that the factors mentioned thus far directly or indirectly influence customer behavior with regard to these scenarios. The behavior indicated in these scenarios probably also influences what percentage of their online shopping the respondents do on Amazon.com. Last but not least, the answer to many of our questions probably also depends on whether the customer has a Prime subscription or not.

3.2. Data collection and analysis methodology

The survey was conducted in May 2022 using the SurveyMonkey survey tool. The survey was targeted at Amazon customers from the U.S. using the SurveyMonkey Audience panel. This service is used both by companies, for example, for market research purposes, and by academia for research (e.g., Hall et al., 2017). A slight bias is introduced because the respondents answer many surveys online and are, therefore, probably more open to online shopping than the general population. However, this is not a problem *per se* because people who like to shop online are also the most important customer group for Amazon. The panel makes it possible to survey people from all age groups (≥ 18 years), income groups, and of all employment statuses. We used the census option, and therefore, our sample mirrors the actual USA census with some margin of error. For more details, see our digital appendix:

→ <https://doi.org/10.6084/m9.figshare.20043131.v3>

The digital appendix contains additional statistics, our models, and our survey questions. The survey consisted mainly of 7-point Likert scale questions (from strongly disagree to strongly agree), some percentage

drop-downs and sliders, and single-choice questions (knowledge questions).

We were able to survey $n=1070$ people (complete answers) who answered that they had ordered something from Amazon at least once during the last 12 months (screening question). The SurveyMonkey Audience respondents are experienced survey takers and have a monetary incentive to speed through the survey. Thus, we excluded answers that were given faster than even an experienced survey taker could have done in a thoughtful manner. We also had some control questions, which we used to check the quality of the answers. After our quality checks, $n=772$ remained.

We use structural equation modeling (SEM) to test our hypotheses. Because of the complexity of our model and the number of questions necessary, we opted against a dedicated measurement model (confirmatory factor analysis). With the usual >3 questions per factor, we would have needed a prohibitively long survey. Instead, we decided that the structure of the model was more important. Furthermore, we do not have many opaque concepts, and the concept of trust has been researched in the past. To reduce the measurement error, we gave extra explanations, for example, regarding what we mean when we ask about “trust in a good experience when buying from ...”.

We used the R package “lavaan” for our SEM models. We tested the survey answers on normality using the “mardia” test, and the data clearly showed nonnormality. Therefore, we used the robust “MLMV” estimator (mean and variance corrections) for our models. This estimator often produces the most accurate results (Gao et al., 2020). However, it may be noted that our models also produce acceptable to good results with other robust or even nonrobust estimators. We split our hypothesized model into two SEM models for better readability. For the same reason, the models reported within this article contain only significant regression paths. The digital appendix also contains models with insignificant paths and one large model. However, the results do not differ much. We used SEM as a confirmatory hypothesis testing method, meaning that all paths reported have an underlying grounding in the logic developed in the previous subsection. Fig. 1 contains descriptive results of our survey. Figs. 2 and 3 contain the SEM models and their fit estimates, indicating a good fit.

3.3. Survey results

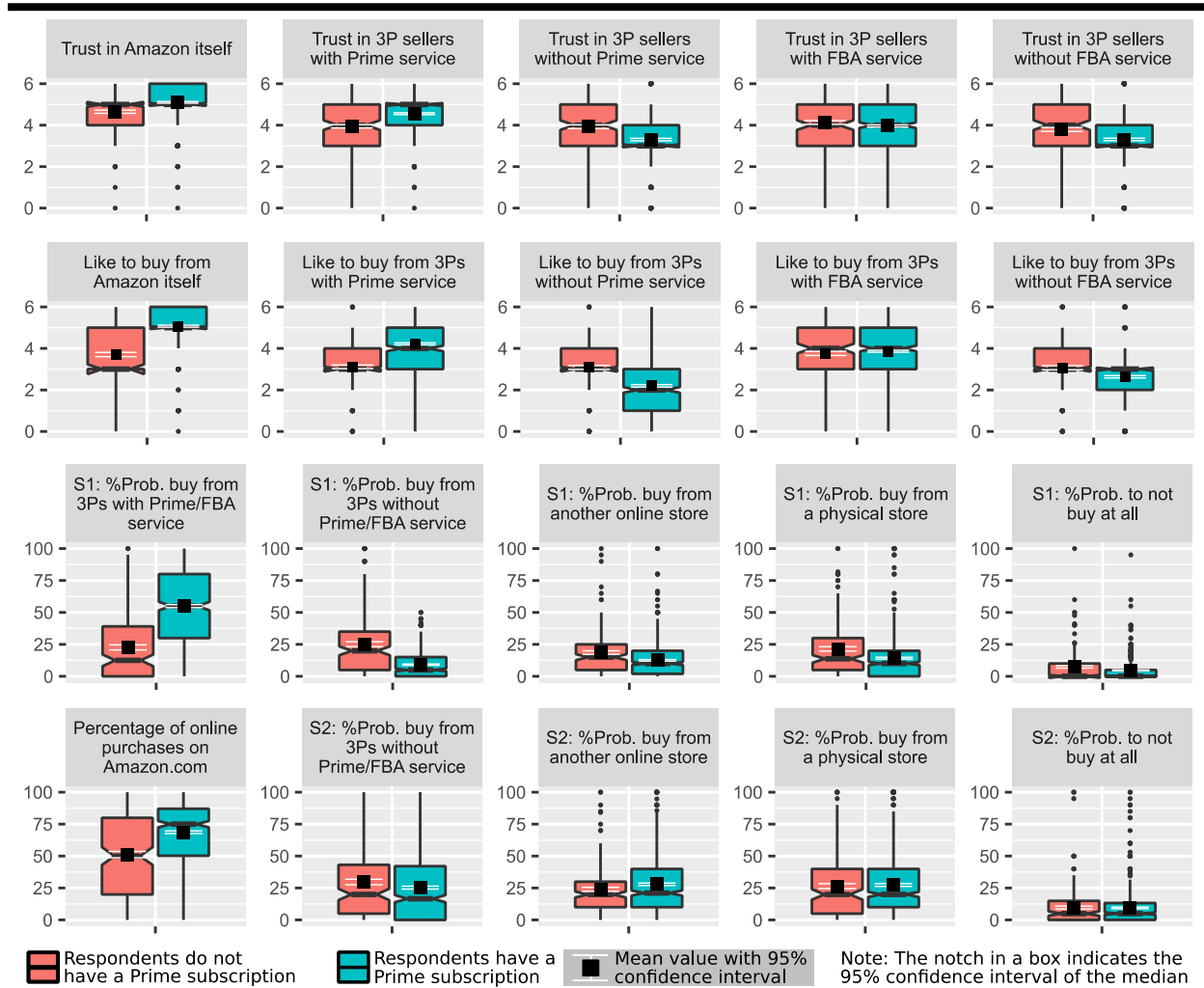
By and large, the data from our survey confirmed our hypotheses. Thus, we will not comment on every path modeled in the following and instead focus on highlights and perhaps less apparent results. Additionally, note that the demographics of the survey

participants had only limited effects in our models. Only the age and gender of the respondents had some significant effects. For example, males seem to like Amazon more and tend to buy more often from Amazon, supporting the results of Baswan and Farheen (2019).

Results of model 1: This model (see Fig. 2) contains paths leading from the ‘Trust in ...’ variables to the ‘Percentage of online shopping on Amazon’ variable. The model contains our “Trust in ...” and “Like to buy from ...” questions about 3P sellers with or without Prime service. However, a similar model with our questions regarding FBA can be constructed (\rightarrow digital appendix). Both models are similar; however, the model that focuses on the Prime service is more fitting for Prime subscribers, and a focus on FBA is more fitting for customers without a Prime subscription, as these customers do not pay much attention to the Prime service (see Fig. 1).

The model shows that trust in a good experience when buying from a certain seller type indeed has the strongest effect on how much the surveyed customers like to buy from these seller types. Furthermore, whether a customer has a Prime subscription or not has the second strongest effect for all three seller types in our model. If customers dislike Amazon as a company, this has, on average, a negative impact on both how much they like to buy from Amazon itself (strongly) and from 3Ps with Prime service available (weakly). This makes sense because Amazon is usually involved in Prime delivery through its FBA service. This result is rather important because it implies that Amazon must be careful not to spread its unpopularity (among some customers), through the FBA service, into 3P offers. It also becomes clear that some customers find the Amazon marketplace, with its different seller types, too complex and therefore tend to dislike ordering from 3P sellers. Additionally, note that ‘Trust in a good experience when buying from Amazon itself’ also affects ‘Like to buy from 3Ps without Prime service available’. This is an indication that trust differences, in addition to absolute trust levels, influence how much customers like to buy from which seller type.

Similar effects can be observed for scenario 1. As a reminder, in scenario 1, we asked what the respondent would do (on average) when Amazon itself does not offer a product the respondent wants to buy. Also, note that the trust in the different seller types also directly affects the answers to the questions of scenario 1. Many of the variables have direct and indirect effects. The digital appendix contains the respective calculations. Finally, note that we also tested for moderation effects, especially dependent on whether a customer has a Prime subscription or not. However, few moderation effects exist. This also means that the negative effect of ‘The



Variable	Respondent has a Prime subscription			Respondent does not have a Prime sub.		
	Mean	CI-	CI+	Mean	CI-	CI+
Pays attention to whether an offer on Amazon.com has Prime service available or not	4.65	4.52	4.78	1.82	1.55	2.09
Pays attention to whether an offer is from Amazon itself or from a 3P seller	4.13	4.00	4.26	3.90	3.68	4.13
Pays attention to whether a 3P offer is shipped from the 3P or from Amazon itself	4.09	3.95	4.22	3.81	3.57	4.05
Fast delivery is important when buying online	4.76	4.66	4.85	3.98	3.78	4.18
With its different seller types, the Amazon marketplace is too complex	2.03	1.91	2.16	2.49	2.28	2.71
Trust in a good experience when buying from an online store in general	4.16	4.07	4.25	4.27	4.13	4.41
Trust in the delivery process when buying from a 3P with shipping from Amazon itself	4.57	4.48	4.67	4.54	4.39	4.69
Trust in the delivery process when buying from a 3P with shipping from the 3P	3.60	3.49	3.71	4.00	3.82	4.18
Trust in the returns process when buying from a 3P with shipping from Amazon itself	4.40	4.29	4.51	4.22	4.03	4.41
Trust in the returns process when buying from a 3P with shipping from the 3P	3.27	3.15	3.39	3.58	3.38	3.77
Trust that I will not receive fake products from 3P sellers	3.50	3.37	3.63	3.78	3.57	3.99
Trust that Amazon will take my side in a dispute with a 3P seller	4.39	4.27	4.51	4.26	4.07	4.45
Do not like Amazon as a company	2.01	1.85	2.18	2.52	2.23	2.81
Knows the "Amazon A-Z guarantee" (0 = no knowledge, 1 = knowledgable)	0.29	0.27	0.32	0.20	0.16	0.25
Knows that all payments are exclusively processed by Amazon (same scale as above)	0.46	0.42	0.49	0.39	0.33	0.45
Knows the details of the Fulfillment by Amazon service (same scale as above)	0.48	0.45	0.52	0.42	0.36	0.48
Knows the details of the Prime service (same scale as above)	0.88	0.86	0.90	0.77	0.73	0.82

Figure 1. Descriptive statistics

Amazon marketplace is too complex' on 'S1: %Prob. buy from 3Ps with Prime/FBA' is largely independent of whether the respondent has a Prime subscription or not. This indicates that some Prime subscribers also prefer to buy solely from Amazon itself.

Results of model 2: This model (see Fig. 3) contains the paths leading to the different 'Trust in ...' Variables. The model paints a fairly clear picture. All three measured factors, 'delivery trust', 'returns trust', and 'product/counterfeit trust', are significant for trust in the different seller types (descending in importance). Furthermore, our second model shows that the trust in Amazon itself spreads through the FBA service into the 3P offers with Prime service. Amazon has excellent logistics, and the respondents seem to be aware of this. However, trust in Amazon's excellent fulfillment capabilities is not the only type of trust that spreads through the model. It is also evident that if the customers trust that Amazon takes their side in a dispute with a 3P seller, then this increases their trust in the Amazon marketplace as a whole.

We also tested a model that included our questions about how familiar customers are with the Amazon A-to-Z guarantee and the payment mechanism on Amazon. However, these variables have no significant effect, indicating that institutional mechanisms may be less important than previously thought. The very soft concept of trusting that the marketplace operator sides with the customer seems to be much more important.

In general, the customers of the Amazon marketplace do not seem to know much about the

behind-the-scenes operations. Fig. 1 contains some descriptive statistics of the knowledge questions we asked (0 = no knowledge, 0.5 = some idea, 1 = knew the details). Only the features of the "premium" Prime shipping are known by the majority of the respondents. The FBA service is much less known. This seems to be a missed opportunity by Amazon, as many customers appreciate it when Amazon ships the goods. Amazon should therefore communicate better that the Prime service almost always means that Amazon ships the product.

Overall, the survey results permit the conclusion that the combination of the FBA service with its superior logistics and the Prime subscription (flat-rate premium shipping) is a very successful mechanism for Amazon. Fig. 1 shows that on average, customers with a Prime subscription like to buy from Amazon itself and 3P sellers with Prime service more than customers without a Prime subscription do. Fig. 2 shows that this leads to increased sales for the Amazon marketplace. Furthermore, Amazon receives additional revenue from 3P sellers because they need FBA for the Prime service.

4. Conclusion, limitations, and outlook

Our systematic literature review revealed that not many studies exist that explicitly focus on the Amazon marketplace. While the competition between Amazon and 3P sellers was already identified as important (e.g., Ritala et al., 2014), no article we found had examined the relationship between the various 3P offer types, the

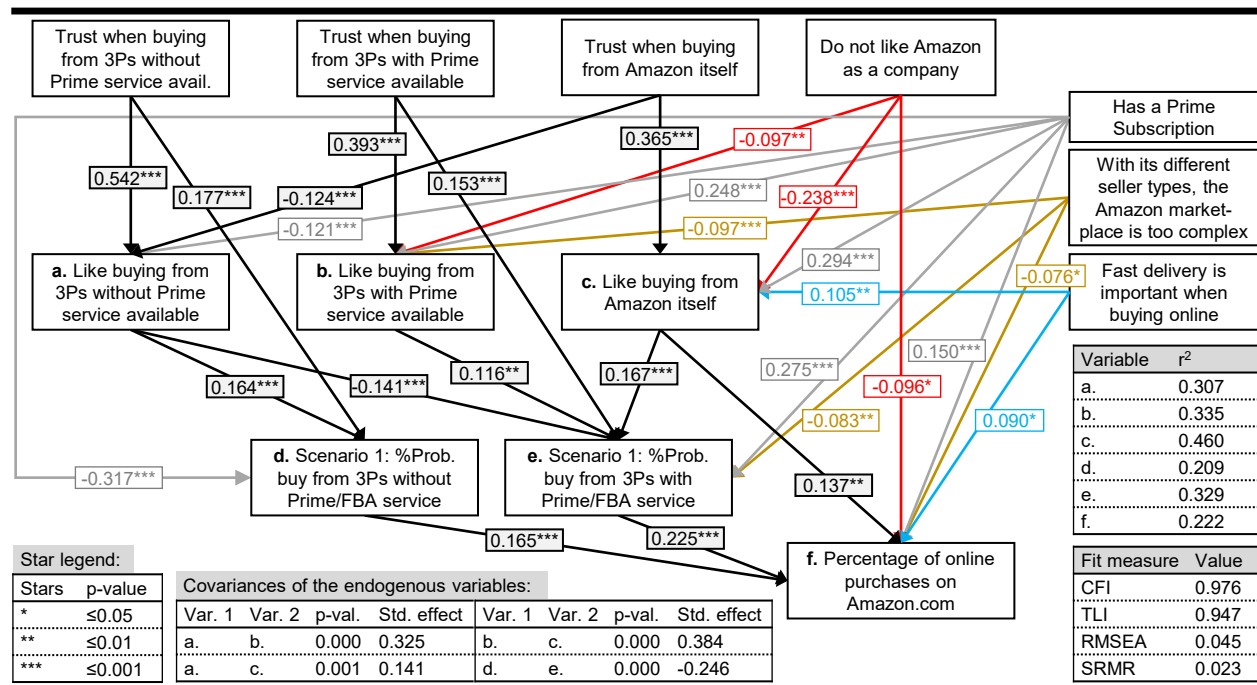


Figure 2. Path model 1 with significant correlations (standardized) and key estimates

Prime subscription, and the FBA service. In particular, until now, the well-studied theory around trust in B2C e-commerce does not seem to have been researched within this context.

Our survey confirmed that trust differences between the different seller types (Amazon itself, 3P offers with/without Prime/FBA service) indeed play a very important role in how much customers like buying from the Amazon marketplace. Interestingly, however, it seems that concrete institutional mechanisms, soft or hard, are not as important as previously thought (see, e.g., Pavlou & Gefen, 2004). Instead, the vague trust that Amazon takes the customer's side in a dispute with a 3P is probably more important for a customer when buying from 3P sellers.

Another important finding of our survey is that it is probably no longer sufficient to merely provide a general, vague feeling of trust in 3P sellers. Amazon has set new standards in fulfillment quality and especially delivery speed. For many customers, fast delivery is important (see also Fig. 1). However, from a logistics standpoint, for many 3P sellers it is simply impossible to provide fast delivery. The FBA service, in combination with the Prime subscription, seems to be very well suited to solve several problems in this context. The FBA service enables 3P sellers to compete logistically with offers from larger retailers, making the

Amazon marketplace more attractive for them. Moreover, it also increases general trust and delivery trust in particular. Last but not least, customers with a Prime subscription on average actually dislike buying offers without Prime service (see Fig. 1). The 3P sellers, therefore, have a strong incentive to use FBA (and pay logistics fees to Amazon) to obtain the Prime logo/service for their offers.

Coming back to our research questions and the title of our article, the core question is, therefore perhaps, not only about how Amazon makes 3P offers more attractive but also about how Amazon makes certain 3P offers (those without Prime service) less attractive and thus incentivizes 3P sellers to use the paid FBA service. However, such a strategy can, of course, only work if there are enough offers with Prime service.

Certainly, our study also has limitations. For example, the percentage answers in our survey are self-reported estimates from memory or self-predicted behavior. This introduces random errors and perhaps biases. However, while it was not the goal of our survey, it may be noted that the r^2 values of our models are, despite these random errors, moderate to high, given that they predict human feelings, opinions, and behavior. Finally, it is worth mentioning that some of the concepts covered in our models are diluted by the "chicken or the egg" problem or other factors such as

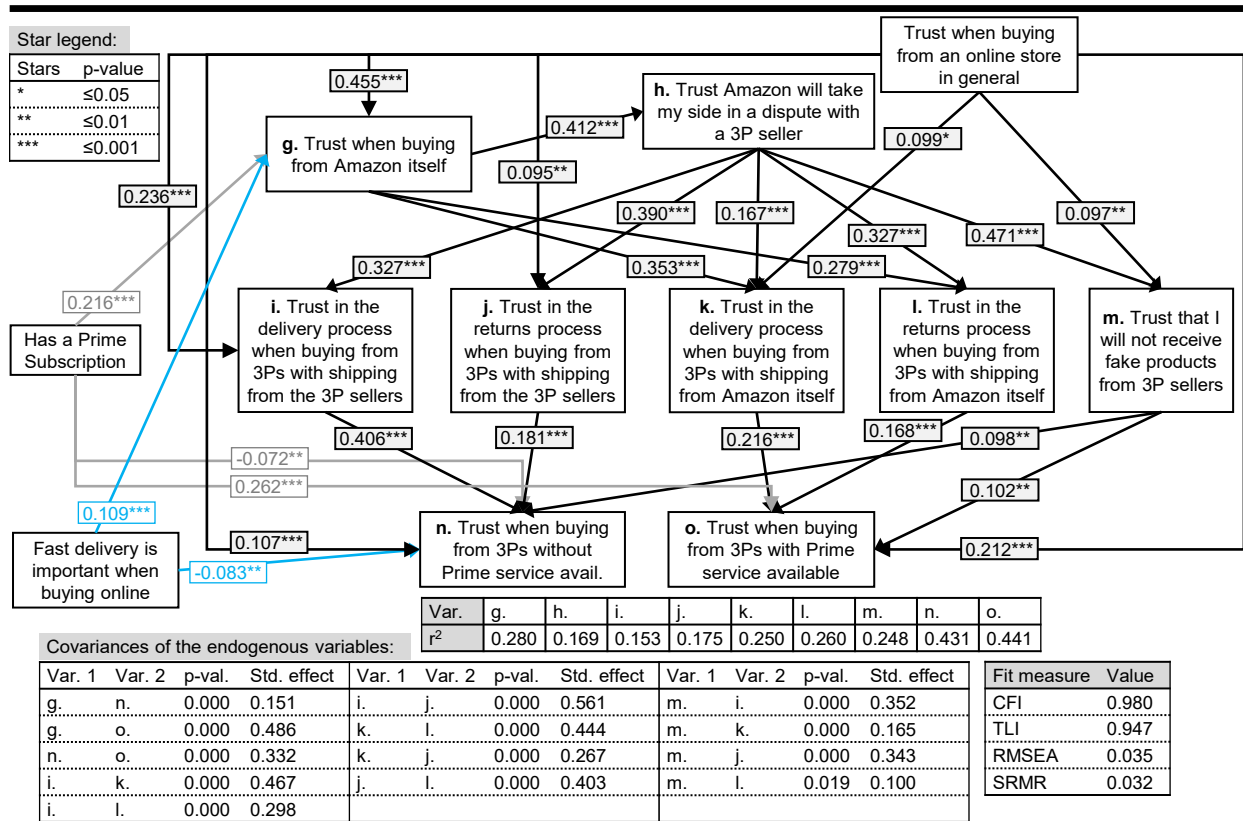


Figure 3. Path model 2 with significant correlations (standardized) and key estimates

the Amazon Prime Video service, which is nowadays one of the more prominent reasons why Amazon customers have the Prime subscription. Does a customer who has a Prime subscription because of the streaming service also buy more from the Amazon marketplace? Future research could try to disentangle these effects.

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