Strategic configuration of platform functionalities in service-selling Platforms: The role of price position and reputation

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ABSTRACT

Retailers are increasingly employing platform functionalities to strengthen their competitive advantage in service-selling platforms. However, there is still a gap in research about how they strategically configure these functionalities to enhance performance. Drawing on configuration theory, we propose a framework that integrates platform functionalities with contingency factors (price position and reputation). Using fuzzy set qualitative comparative analysis (fsQCA), we analyze data from a leading Chinese service-selling platform to explore how, and under what conditions, platform functionalities enable retailers to improve performance. The results show that retailers should configure platform functionalities based on different conditions of price position and reputation, as these configurations play a crucial role in driving sales performance. Interestingly, this study reveals that retailers can still attain high performance without a high reputation by implementing guarantee-required schemes and solution exemplars. This study not only deepens the understanding of platform functionality configurations, but also challenges the conventional view that reputation is the determining factor for retailers to achieve high performance.

1. Introduction

Nowadays, service-selling platforms (SSPs) have become critical marketplaces for service transactions (Dong et al., 2024a; Hong and Shao, 2021). These platforms allow consumers to engage with retailers to contract diverse services, including software development, graphic design, branding solutions, etc. (Dong et al., 2024b; Zhong et al., 2025). To facilitate transactions, leading platforms (such as Freelancer and Zhubajie) equip retailers with IT-driven tools to customize their offerings. According to Li et al. (2019), these tools embedded within SSPs are called platform functionalities (PFs), which retailers can choose to enhance competitive advantage (Zeng et al., 2024). Given their importance, retailers are eager to explore how to effectively leverage these platform features to improve performance.

Existing research on SSPs has explored the impact of various PFs, such as marketing (Dong et al. 2024a, 2024b; Hong et al., 2021), guarantee service (Burtch et al., 2021; Hong et al., 2020; Li et al., 2021; Zheng et al., 2023), solution exemplar (Koh, 2019; Yang et al., 2023b), service diversity (Fu et al. 2021, 2022; Kokkodis, 2023), transaction mode (Hong et al., 2018). Following our review of the current literature, as illustrated in Appendix 1, we find that most research has focused on individual functionalities or their interactions with contingency factors. While these studies offer valuable insights, they neglect the synergistic effects of multiple PFs. This knowledge gap presents an opportunity to consider PFs as a configuration rather than in isolation. Thus, we put forward our first research question: *how can retailers strategically configure these functionalities to enhance performance in SSPs?*

When we delve deeper into this question, we should also consider

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under what conditions PFs can improve the performance of retailers. As Zeng et al. (2024) highlighted, there is no a single best solution for all retailers to achieve high performance. That is, retailers should employ PFs configurations based on their market position, rather than depending on a one-size-fits-all strategies (Dissanayake et al., 2024). In SSPs, we propose that price position and reputation are essential indicators of market position. Both of them can serve as important contingency factors for exploring the relationship between PF and performance, as indicated by prior research (Kokkodis and Ransbotham, 2023; Koshksaray et al., 2023; Sun et al., 2020; Zeng et al., 2024). Thus, we raise the second question: *How should retailers configure PFs to achieve better performance under different combinations of price position and reputation?*

In this study, we adopted a configurational perspective and use fsQCA as the analysis approach. FsQCA is an effective method that can identify multiple configurations of PFs that contribute to a specific outcome (Park et al., 2020a; Pflügner et al., 2024). By obtaining data from a Chinese leading service-selling platform, Zhubajie, we aim to uncover the configurations of PFs under different combinations of price position and reputation. This study has the following implications. First, this study is an important step toward understanding how platform functions work together as an interconnected system, rather than functioning independently. Second, we reveal that retailers can still attain high performance without a high reputation by strategically configurating PFs, thereby challenging the conventional view that reputation is the determining factor of high performance (Burtch et al., 2021; Kokkodis, 2021, 2023; Kokkodis and Ransbotham, 2023). Third, we offer practical guidance for retailers and platform operators on configuring PFs effectively.

2. Theoretical background and research framework

In SSPs, platform functions have two important roles, such as visibility enhancement and quality signaling (Bockstedt and Goh, 2011). With respect to visibility enhancement, marketing, transaction mode, and service diversity are the most key concerns in e-marketplace PBFs (Dong et al., 2024a; Fu et al., 2022; Hong et al., 2018). Retailers often employ these functions to enhance visibility, and help them to stand out in a highly competitive marketplace. For example, marketing can help retailers attract more traffic and increase the awareness of their offerings (Sun et al., 2020). A diverse transaction mode can often increases the likelihood of matching between retailers and consumers (Hong and Pavlou, 2017; Tripathi et al., 2022). By offering a broader scope of service categories, retailers can attract a wider customer base (Fu et al., 2022; Greenwood et al., 2005; Kokkodis, 2023).

Regarding to quality signaling, retailers can potentially use platform functions to signal quality and trustworthiness to potential consumers (Bockstedt and Goh, 2011). A common practice is to provide consumer protection, such as guarantee-required scheme (Burtch et al., 2021; Hong et al., 2020). It requires retailers to provide after-sale services about the completion, service quality, and originality (Hong et al., 2020; Xu et al., 2023). Typically, customers perceive guarantees as a signal of service quality to reduce perceived risk (Du and Mao, 2018; Li et al., 2021; Zheng et al., 2023). In contrast, solution exemplars serve as a pre-sale signal by displaying prior works completed by the retailers (Koh, 2019; Yang et al., 2023b). Consumers rely on these observable cues to assess service quality (Lu and Chen, 2021), which facilitates transactions (Koh, 2019; Koh and Cheung, 2022). Table 1 summarizes the roles and types of PFs.

After reviewing the existing literature, as presented in Appendix 1, we find that current research on SSPs increasingly focuses on individual PFs or their interactions with contingency factors (Burtch et al., 2021; Dong et al., 2024a; Fu et al., 2022; Hong et al., 2020; Koh, 2019; Li et al., 2021). However, the configuration effects of multiple functionalities on performance remain unclear. Given that retailers are eager to understand how to achieve high performance in crowded e-marketing environments (Li et al., 2019; Zeng et al., 2024), it is meaningful to explore

Table 1
The roles and types of PFs.

Role (Bockstedt and Goh, 2011)	Type	Reference
Visibility Enhancement	Marketing (MAR)	(Bockstedt and Goh, 2011; Kuo and Chen, 2023; Sun et al., 2020; Zeng et al., 2024)
	Transaction Mode (TM)	(Hong and Pavlou, 2017; Tripathi et al., 2022; Zhu et al., 2019)
	Service Diversity (SD)	(Fu et al. 2021, 2022; Greenwood et al., 2005; Kokkodis, 2023)
Quality Signaling	Guarantee-Required Scheme (GRS)	(Hong et al., 2020; Li et al., 2021; Zheng et al., 2023)
	Solution Exemplar (SE)	(Koh, 2019; Koh and Cheung, 2022; Yang et al., 2023b)

the configuration effects of PFs. To fill this gap, we use configuration theory as the theoretical framework. Configuration theory is a common approach for identifying complementarities among elements understanding how these elements, as patterns, contribute to specific outcomes (Pflügner et al., 2024; Zeng et al., 2024; Zhao et al., 2025). Compared with regression models, this approach adopts a holistic perspective to simultaneously examine multiple elements and their synergistic effects (Park et al., 2020a).

As discussed previously, there is no single combination of PFs works universally for all retailers (Sun et al., 2020; Zeng et al., 2024). This implies that when considering PF configurations, the market position of retailers should not be overlooked. In this regard, price position and reputation are considered key factors of market position. Price position explains how the retailers can strategically position themselves to attract consumers (Guchhait et al., 2024; Zeng et al., 2024). Often, consumers regard price as the importance cues to make decision (Ou and Chan, 2014). Thus, retailers often strategically set their prices based on market demand to indicate their service quality and expertise (Geng et al., 2022; Luo et al., 2012; Shin et al., 2023). Reputation reflects one's reliability and helps differentiate them in competitive online markets (Kokkodis, 2021, 2023; Xu et al., 2023). In most online e-marketplaces, a strong reputation enhances transaction efficiency between consumers and retailers. Typically, consumers find reputation is a useful cue for making informed judgments (Lin et al., 2018). As a result, retailers with strong reputations often gain higher visibility, which in turn can enhance their performance (Guo et al., 2020; Sun et al., 2020; Tripathi et al., 2022). Fig. 1 shows our research framework, which includes five PFs and two contingency factors.

3. Methodology

3.1. Data collection

Our study focused on Zhubajie (ZBJ), a leading SSP established in 2006, which boasted over 34.6 million registered members as of June 2023. ZBJ was selected as the research context for several reasons: (1) it ranks among the largest SSPs in China; (2) it hosts many retailers and covers multiple service categories; and (3) it is a highly competitive marketplace that promotes retailers to adopt multiple PFs to make strategic actions (Dong et al., 2024a). We acquired a proprietary database from the ZBJ platform, which documented the comprehensive historical records from the retailer perspective, such as transaction history, usage of PFs, review information, and retailer profile information.

To minimize potential biases, we adopted a stratified random sampling method to ensure the representativeness of our sample (Dong et al., 2024b). Specifically, to reduce the influence of the service categories, we selected 3000 retailers from 20 service categories, such as software development, logo design, marketing, writing, and translation etc. The dataset covers a 14-month period, from March 1, 2018, to May 1, 2019. Since retailers often offer services across multiple service
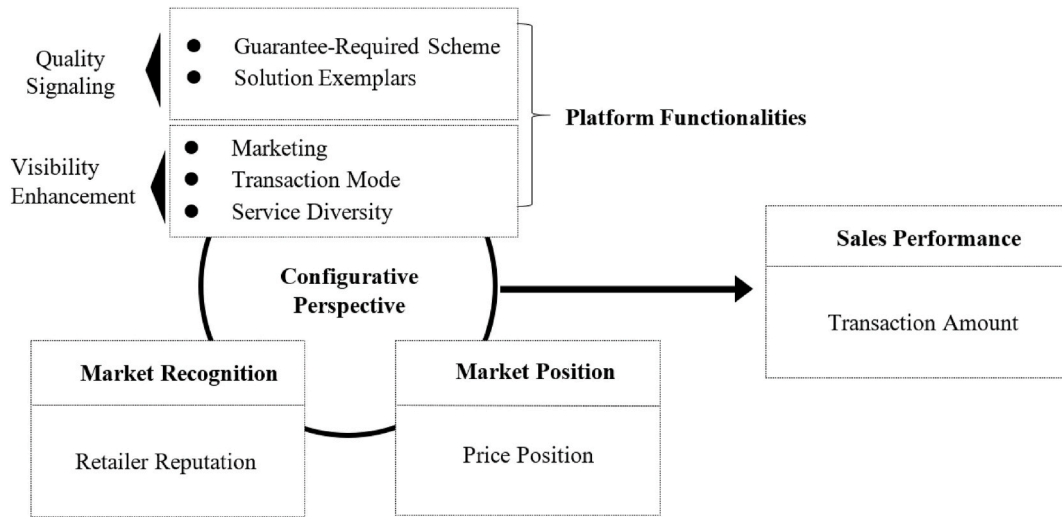
Fig. 1. Research model.

categories, we removed duplicate entries and ensured that each retailer was counted only once. To ensure that the retailers were not "zombie" retailers, we excluded those who had no service transactions or updates during the observation period (Zheng et al., 2019). After data cleaning, 1532 retailers remained in our final sample. Fig. 2 illustrates the process of data collection and cleaning.

3.2. Data analysis: an fsQCA approach

fsQCA integrates qualitative and quantitative approaches to explore causal relationships (Park et al., 2020a). Unlike regression models that focus on linear relationships, it allows to explore multiple configurations that result in a specific outcome (Park et al., 2020a). The procedure for conducting fsQCA in this study is illustrated in Fig. 3.

Data preparation. The data preparation process includes variable measurement, data calibration, and multicollinearity analysis.

Specifically, we constructed the variables based on prior literature to ensure construct validity. Once the variables were established, we calibrated the raw data into fuzzy-set values (Park et al., 2020a; Pflügner et al., 2024). According to Yang et al. (2023a), we employed the direct method of calibration to transform the data of measurements into sets of memberships. As discussed in Section 2, the sales performance served as the outcome variable. The configuration conditions included five PFs and two contingency factors, such as price position and retailer reputation. The calibration converts the data values into membership scores based on three anchors, where 0 as full non-membership, 1 as full membership, and 0.5 as the crossover point (Pappas and Woodside, 2021; Ragin and Fiss, 2008). The same calibration was applied to all variables. To ensure the validity of the data analysis, we checked for multicollinearity using Stata 18.0 (Dong et al. 2024a, 2024b).

Data analysis. According to Pflügner et al. (2024), we followed the standard procedures in the fsQCA software to perform data analysis.
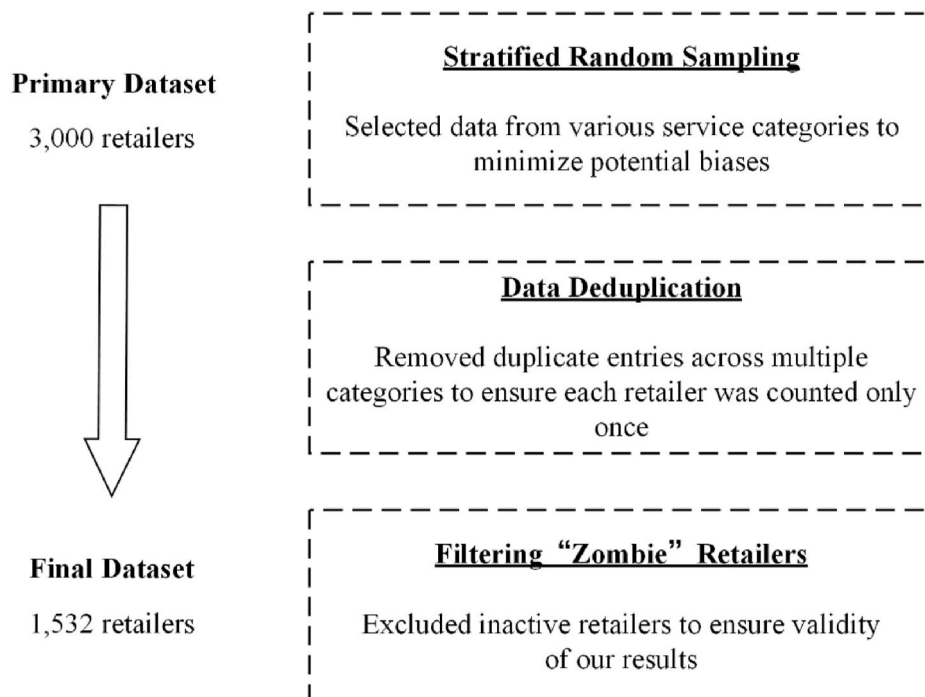

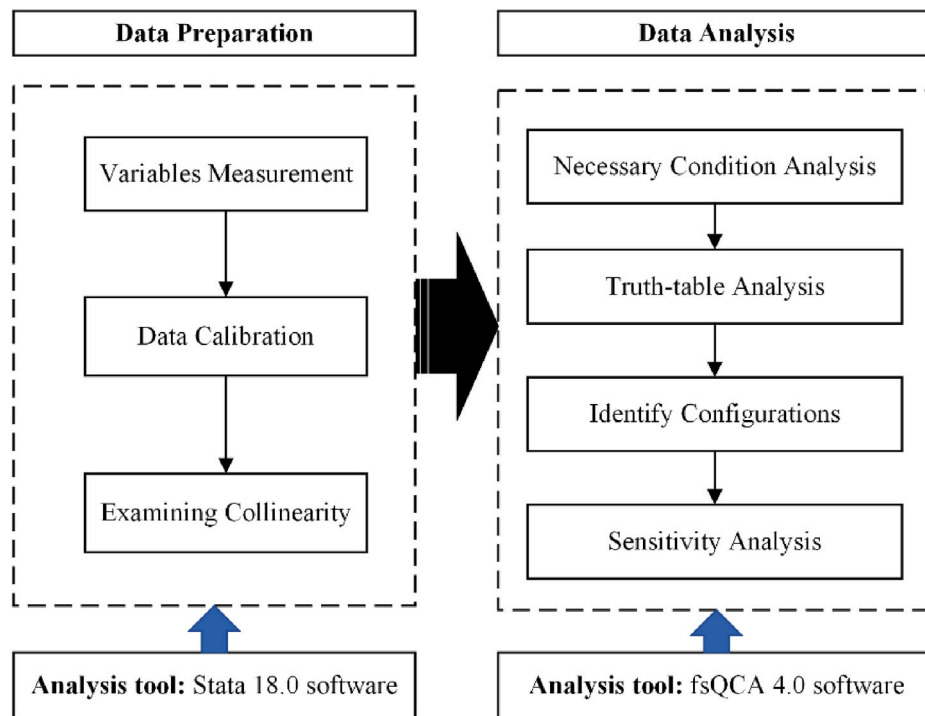**Fig. 2.** Data collection and cleaning.

Fig. 3. The fsQCA analysis procedures.

Before conducting the configuration analysis, it is necessary to determine whether any single condition is essential for achieving high sales performance (Park et al., 2020a). We then applied the truth-table algorithm to examine the relationships between configurations of elements and the outcome (Yang et al., 2023a). Since we have seven causal conditions for the outcome variable, there are $2^7 = 128$ possible configurations in the truth-table. To minimize the effects of insignificant cases, we set the case number threshold at 1 % of the total sample (Zeng et al., 2024). In our study, this threshold corresponded to 15 cases out of 1,532, which means that only cases with at least 15 occurrences were included in the subsequent truth-table analysis. The truth-table analysis involves setting outcome variables to 1 or 0 based on the raw consistency cutoff. According to Ragin and Fiss (2008), the raw consistency threshold was set at 0.80, while the PRI consistency threshold was set at

Table 2
The measurement of each variable.

Variable	Measurement Items		Description	References
Sales Performance	Transaction Volume		The average monthly transaction volume.	(Yang et al., 2023b; Zeng et al., 2024)
PFs	Marketing (MAR)	PC Store Interface	Utilize the customized desktop store interface offered by ZBJ.	(Li et al., 2019; Zeng et al., 2024)
		Mobile Store Interface	Leverage the tailored mobile store interface provided by ZBJ.	
		SEO Configuration	Configure search engine optimization settings for the store.	
		Advertising Services	Utilize advertising services offered by the ZBJ.	
		Category Attribute Configuration	Set category-specific attributes to streamline product organization.	
	Guarantee-Required Scheme (GRS)	Performance Guarantee	Provides a commitment to compensate consumers if the promised performance metrics are not fulfilled.	(Hong et al., 2020; Li et al., 2021)
		Completion Guarantee	Confirms that all tasks and deliverables are fully completed as agreed.	
		Maintenance Assurance	Provides ongoing maintenance after service completion.	
		Originality Guarantee	Guarantees that all deliverables are original and unique.	
		Source Code Assurance	Delivers the complete source code for digital projects.	
		Fixed Price Guarantee	Ensure that the agreed price remains fixed throughout the service process.	
	Transaction Mode (TM)	Service Shopping	Consumers visit an online store to browse and purchase services.	(Yang et al., 2023b; Zhu et al., 2019)
		Subcontracting	A large and complex task is divided into smaller sub-tasks and assigned to different retailers.	
		Auctions	Consumers post project requirements, and retailers submit bids outlining their solutions and pricing.	
		Crowdsourcing Contest	Consumers post their needs and offer compensation to the retailers who deliver the best solution (Dissanayake et al., 2024; Sanyal and Ye, 2024).	
	Solution Exemplars (SE)		The number of selected service cases showcased by the retailer.	(Koh, 2019; Yang et al., 2023b)
	Service Diversity (SD)		The number of service categories offered by the retailer.	(Fu et al. 2021, 2022; Kokkodis, 2023)
Market Position	Price Position (PP)		The average price of all successfully completed transactions.	(Kokkodis, 2023; Sun et al., 2021)
Market Recognition	Retailer Reputation (RR)		The average rating graded from previous transactions.	(Fu et al., 2022; Kokkodis, 2023)

0.70.

Following these steps, the truth-table analysis generated three solutions: complex, intermediate, and parsimonious. The core and peripheral conditions were identified through parsimonious and intermediate solutions. Conditions that appear in both solutions are classified as core conditions. Those that appear only in the intermediate solution are considered peripheral conditions (Lu et al., 2024; Pflügner et al., 2024). This classification helps clarify which conditions are most influential in driving the desired outcome and which play a secondary role (Fiss, 2011). After identifying the core and peripheral conditions, we could identify multiple platform functionality configurations that can achieve high sales performance. Finally, we conducted a sensitivity analysis to ensure the robustness of the results.

3.3. Measurement and calibration

We followed with Zeng et al. (2024) to calculate the monthly average for each variable. This approach summarized the data into monthly averages, making it easier to analyze and compare in a standardized way. Table 2 illustrates the measurement of each variable.

Sales performance was assessed using the retailers' monthly transaction volumes recorded during the observation period. According to Yang et al. (2023b) and Zeng et al. (2024), sales performance was measured as the average monthly transaction volume.

PFs are classified into five distinct categories: marketing, guarantee-required schemes, transaction modes, solution exemplars, and service diversity. The first three variables were measured as the average monthly tools utilized (Li et al., 2019; Zeng et al., 2024). For instance, as shown in Table 2, the marketing includes five tools (e.g., PC store interface, mobile store interface, SEO configuration, advertising services, and category attribute configuration). If a retailer uses one tool, the marketing value is 1; if all five tools are used, the value is 5. In addition, the remaining two variables were measured as the average number of instances recorded per month. Specifically, solution exemplars were measured by the number of exemplars displayed by retailers (Koh, 2019; Yang et al., 2023b). Similarly, service diversity was quantified by the number of service categories offered by retailers (Fu et al. 2021, 2022; Kokkodis, 2023).

Price position refers to the average transaction price of a retailer's services (Kokkodis, 2023; Sun et al., 2021). According to Sun et al. (2021), we measured price position as the average price of all successfully completed transactions for a retailer.

Reputation was assessed through a comprehensive user-generated rating, such as work speed, service attitude, and quality performance. In alignment with Burtch et al. (2021) and Dong et al. (2024b), we measured reputation by the average rating that a retailer's service products have received from previous transactions.

Table 3 provides the descriptive statistics and calibration anchors. Prior to configuration analysis, the multicollinearity was checked by examining the variance inflation factors (VIFs). As demonstrated in Table 4, all VIF values are <5, which indicates that multicollinearity is not an issue (Dong et al. 2024a, 2024b).

4. Results

4.1. Necessary condition analysis

In fsQCA, a condition is considered necessary if it consistently appears whenever the outcome occurs (Ragin and Fiss, 2008). Consistency is the primary metric for identifying necessary conditions, with a threshold of 0.90 indicating necessity (Ragin and Fiss, 2008). Table 5 presents the consistency values ranging from 0.56 to 0.88 for high sales performance, which are below the consistency threshold of 0.90. The results suggest that we need to consider multiple factors rather than focusing on any single condition to explain high performance. Thus, a configurational approach is adopted to better understand how multiple factors interact to drive high performance.

4.2. Configuration analysis

Table 6 presents the configurations of elements sufficient for high sales performance by using Boolean expressions. Each configuration highlights how these elements work together to drive sales performance under different conditions.

Table 7 graphically presents the configurations. We analyzed the results by the two measures: coverage and consistency. The former is similar in concept to the R-squared value in regression, while the latter is analogous to the concept of statistical significance (Pflügner et al., 2024; Zeng et al., 2024). As shown in Table 7, the overall solution coverage is 0.551, suggesting a large percentage of sales performance can be explained by the proposed combination of solutions. The raw coverages for high sales performance are greater than 0, which indicates each configuration can lead to high sales performance (Pflügner et al., 2024).

Each column denotes a distinct combination of conditions that act as a solution contributing to high performance. Each configuration is presented using the notation of Park et al. (2020b). In line with the core and peripheral conditions (Fiss, 2011), we found four first-order configurations (S1, S2, S3 & S4), which indicate the presence of four distinct core conditions. It is worth noting that the S3 type includes second-order configurations (S3a and S3b). This implies that multiple configurations share the same core element (i.e., marketing) but differ in peripheral elements may result in the same outcome.

4.3. Sensitivity analysis

To ensure the robustness of the results, we used the outcomes from Table 7 as a baseline for comparison. According to Park et al. (2017, 2020a), we adopted two sensitivity analyses. **First**, we increased the raw consistency threshold from 0.8 to 0.9. As demonstrated in Table 8, the results suggested that the pathways influencing sales performance remained consistent, with no differences observed in the consistency or coverage values for any configuration or the overall solution. **Second**, we increased the PRI consistency threshold from 0.70 to 0.75, and the configurations closely aligned with those presented in Table 7.

Table 3
Descriptive statistics of variables.

Variable	Mean	Std. Dev.	Range	Calibration anchors		
				Full non-membership	Crossover	Full membership
TV	26.65	193.06	[0.07, 2980.57]	0.09	0.36	67.77
MAR	3.51	1.34	[0.11, 5]	1	4	5
GRS	1.34	1.52	[0, 6]	0	0.5	4
TM	1.37	0.52	[1, 4]	1	1.15	2.33
SE	11.18	16.83	[0, 137]	0	5.86	42.81
SD	11.57	12.98	[1, 82]	1.05	6.96	36.37
PP	5797.78	8303.07	[2.86, 54225.02]	213.20	2706.76	24414.36
RR	4.75	0.692	[0.36, 5]	3.55	4.72	5

Table 4
Matrix of correlations.

Variable	V0	V1	V2	V3	V4	V5	V6	V7	VIF
(1) *TV*	1.00								
(2) *MAR*	0.13	1.00							1.51
(3) *GRS*	0.10	0.41	1.00						1.35
(4) *TM*	0.36	0.28	0.35	1.00					1.35
(5) *SE*	0.16	0.41	0.34	0.41	1.00				1.44
(6) *SD*	0.23	0.39	0.32	0.37	0.40	1.00			1.38
(7) *PP*	−0.04	0.18	0.12	0.02	0.09	0.15	1.00		1.05
(8) *RR*	0.05	0.32	0.20	0.11	0.15	0.17	0.06	1.00	1.13
Mean VIF									1.31

Table 5
Necessary condition analysis.

Conditions Tested	High Sales Performance	
	Consistency	Coverage
MAR	0.72	0.61
~ *MAR*	0.63	0.47
GRS	0.88	0.60
~ *GRS*	0.70	0.65
TM	0.85	0.74
~ *TM*	0.56	0.40
SE	0.75	0.67
~ *SE*	0.67	0.47
SD	0.77	0.68
~ *SD*	0.66	0.47
PP	0.63	0.58
~ *PP*	0.76	0.53
RR	0.82	0.51
~ *RR*	0.56	0.60

Note: ~ denotes a negative condition.

Table 6
Configurations of elements sufficient for high sales performance.

Configurations of high sales performance	
S1	MAR * **GRS** * **TM** * SE
S2	**GRS** * **SE** * ~ SD * PP *~RR
S3a	**MAR** * TM * SD * **~PP** * RR
S3b	**MAR** * GRS * TM * **~PP** * RR
S4	~ MAR * **GRS** * ~SD * PP * RR

Note. The configurations consist of core- (in bold) and peripheral conditions; * means AND, and ~means negation. MAR = marketing; GRS = guarantee-required scheme; TM = transaction mode; SE = solution exemplar; SD = service diversity; PP = price position; RR = retailer reputation.

5. Discussion and conclusion

5.1. Propositions

According to configuration results, we theoretically explain these key findings to develop four propositions under different conditions of price position and reputation (see Table 9).

In SSPs, low reputation is associated with low reliability and high uncertainty (Burtch et al., 2021; Kokkodis, 2023). Therefore, how to establish trust is critical for retailers in such situations. One effective approach is to combine solution exemplars with guarantee-required schemes. Solution exemplars are important in SSPs because consumers often assess service quality based on past successful work completed by retailers (Koh, 2019; Yang et al., 2023b). They provide an indication of the potential outcomes consumers can expect from a retailer. Unlike pre-sale quality signals provided by solution exemplars, guarantee-required schemes serve as post-sale quality signals designed to enhance trust (Hong et al., 2020; Zheng et al., 2023). With guarantee-required schemes, consumers have the right to seek compensation if the retailer fails to fulfill the promised commitment.

Table 7
Sufficient combinations of conditions for high sales performance.

Configuration Elements		Configurations of high sales performance				
		S1	S2	S3a	S3b	S4
PFs	MAR	●		⬤	⬤	⊗
	GRS	⬤	⬤		●	⬤
	TM	⬤		●	●	
	SE	●	⬤			
	SD		⊗	●		⊗
Contingency	PP		●	⊗	⊗	●
	RR		⊗	●	●	●
Raw coverage		0.478	0.304	0.293	0.203	0.374
Unique coverage		0.107	0.012	0.027	0.005	0.013
Consistency		0.950	0.986	0.992	0.986	0.979
Overall solution coverage		0.551				
Overall solution consistency		0.946				

Note: ● = presence, ⊗ = absence; large circles = core conditions, small circles = peripheral conditions; blank spaces = "don't care." MAR = marketing; GRS = guarantee-required scheme; TM = transaction mode; SE = solution exemplar; SD = service diversity; PP = price position; RR = retailer reputation.

Therefore, combining these two platform functionalities can effectively reduce the uncertainty and risks for consumers during transactions.

For retailers with low reputations, the configuration schemes between high- and low-price strategies differ slightly. Specifically, retailers adopting low-price positioning achieve high sales performance by expanding their customer base (Bockstedt and Goh, 2011; Luo et al., 2012). They often employ various transaction modes and marketing efforts to enhance visibility. However, in the case of high-price positioning, the situation changes. For retailers offering high-price positioning services, specialization is crucial for enhancing sales. If they offer a wide range of service categories, it may lead consumers to question their expertise and reduce the expectation of product quality.

P1. Non-reputable retailers adopting low-price strategies can improve performance by adopting marketing, guarantee-required schemes, transaction modes, and solution exemplars.

P2. Non-reputable retailers adopting high-price strategies can improve performance by adopting guarantee-required schemes and solution exemplars and avoiding service diversity.

For retailers with a strong reputation, a low-price strategy often provides competitive advantages through economies of scale. Platform functions, such as marketing and transaction modes, serve as critical factors in achieving this advantage. In this case, retailers generally face two options. On the one hand, they can supplement their low-price strategy by offering after-sales guarantees, such as refund policies or

Table 8
Robustness check.

Configuration Elements	Configurations of high sales performance (Consistency threshold = 0.9)					Configurations of high sales performance (PRI consistency threshold = 0.75)			
	S1′	S2′	S3a′	S3b′	S4′	S1″	S2″	S3″	S4″
MAR	•		●	●	⊗	•		●	⊗
GRS	●	●		•	●	●	●		●
TM	●		•	•		●		•	
SE	•	●				•	●		
SD		⊗	•		⊗		⊗	•	⊗
PP		•	⊗	⊗	•		•	⊗	•
RR		⊗	•	•	•		⊗	●	•
Raw coverage	0.478	0.304	0.293	0.203	0.374	0.478	0.304	0.293	0.374
Unique coverage	0.107	0.012	0.027	0.005	0.013	0.107	0.012	0.035	0.016
Consistency	0.950	0.986	0.992	0.986	0.979	0.950	0.986	0.992	0.989
Overall solution coverage	0.551					0.524			
Overall solution consistency	0.946					0.947			

Table 9
Platform functionality configurations for high performance under different conditions.

	Low price position	High price position
Low reputation	Configuration S1	Configuration S2
	➢ High MAR (peripheral)	➢ High GRS (core)
	➢ High GRS (core)	➢ High SE (core)
	➢ High TM (core)	➢ Low SD (peripheral)
	➢ High SE (peripheral)	
High reputation	Configuration S3a	Configuration S4
	➢ High MAR (core)	➢ Low MAR (peripheral)
	➢ High TM (peripheral)	➢ High GRS (core)
	➢ High SD (peripheral)	➢ Low SD (peripheral)
	Configuration S3b	
	➢ High MAR (core)	
	➢ High GRS (peripheral)	
	➢ High TM (peripheral)	

Note: MAR = marketing; GRS = guarantee-required scheme; TM = transaction mode; SE = solution exemplar; SD = service diversity; PP = price position; RR = retailer reputation.

quality assurances, to reduce the potential trust issues associated with low prices (Hong et al., 2020; Zheng et al., 2023). On the other hand, they may diversify their service categories to develop new markets and broaden their customer base, which can boost sales without relying on after-sales services to build trust.

For reputable sellers offering high-priced services, a high level of guarantee service and a low level of service diversity and marketing are essential for increasing sales. Offering high-priced service indicates that retailers need to signal quality and reliability. A comprehensive trust mechanism is established through the integration of reputation and guarantee service. Reputation provides direct trust by signaling reliability from past transactions (Koh, 2019; Kokkodis, 2021, 2023), whereas guarantee services offer consumers indirect trust by ensuring effective remedies when service-related issues arise (Hong et al., 2020; Zheng et al., 2023). Moreover, retailers should avoid engaging in multiple service categories, as this contradicts their specialization strategy. By providing a limited number of service categories, retailers can concentrate on niche markets and target a small group of consumers. As a result, even without marketing efforts, they can still establish a competitive advantage. Based on the above viewpoints, we propose:

P3. Reputable retailers adopting low-price strategies can improve performance by adopting: 1) marketing, transaction mode, and service diversity; 2) marketing, guarantee-required scheme, and transaction mode.

P4. Reputable retailers adopting high-price strategies can improve performance by adopting guarantee-required schemes and avoiding marketing and service diversity.

5.2. Limitations and future research

This study has several limitations, which point out the direction for further exploration. First, while this study provides insights within SSPs, we are interested in whether the conclusion can be extended to broader contexts, such as Amazon, eBay, or Taobao. Second, this study does not account for the heterogeneity of platform functionality configurations based on the service types. For example, the functional requirements and configurations may differ between retailers offering high-skilled services (e.g., software development) and those specializing in low-skilled services (e.g., data entry and administration) (Fu et al., 2022; Kokkodis, 2023). Third, despite this paper analyzes platform functionality configurations under different market conditions (e.g., price position, reputation), it does not consider other strategic dimensions, such as exploration strategies (seeking new opportunities) and exploitation strategies (improving existing services to meet immediate needs) (Mom et al., 2007). The inherent divergence between these strategies may result in different functionality requirements (Benitez et al., 2018; Jiang et al., 2022; March, 1991). The convergence of these perspectives in future research will facilitate a more robust alignment of PFs with overarching business strategies.

5.3. Theoretical implications

First, this paper extends the emerging body of studies on PFs in SSPs. As demonstrated in Appendix 1, although prior literature on SSPs has increasingly examined the role of individual PFs or their interactions with contingency factors (Burtch et al., 2021; Dong et al., 2024a; Fu et al., 2022; Hong et al., 2020; Koh, 2019; Li et al., 2021), the configuration effects of multiple functionalities on sales performance remain underexplored. To address this gap, we adopt a configurational perspective to identify distinct platform functionality configurations

that improve performance under varying conditions. The results suggest that PFs work together as an interconnected system, rather than functioning independently. Thus, this paper is one of the first studies to investigate the pathways through which PFs collectively influence sales performance in SSPs.

Second, this study challenges the conventional view that reputation is the determining factor of high performance (Burtch et al., 2021; Kokkodis, 2021, 2023; Kokkodis and Ransbotham, 2023). Despite prior research has emphasized the critical role of reputation, this study reveals that retailers can still attain high performance without a strong reputation by strategically configuring PFs (as illustrated by pathways S1 and S2 in Table 7). This finding suggests that certain combinations of platform features can effectively mitigate the trust deficits associated with low reputation, thereby providing an alternative pathway to competitive success. Thus, this study not only challenges the traditional view that overreliance on reputation but also provides actionable insights for retailers with limited reputational capital.

5.4. Practical implications

This study provides practical insights for both retailers and platform operators on how to effectively configure PFs. Although the platform has developed various features, many retailers have failed to configure them in a reasonable way. As shown in Table 9, we theoretically build four propositions under different conditions of price position and reputation. These propositions offer retailers prescriptive guidance for platform functionality optimization and provide platform operators with strategic insights for refined platform infrastructure and deployment practices.

To promote the ethical use of PFs, platform managers can implement algorithmic controls and transparent practices. For instance, algorithms can be used to verify the authenticity of solution exemplars by comparing them with a retailer's actual service history (Jago, 2019). This ensures that the examples accurately reflect the retailer's capabilities. In terms of pricing, platforms can use dynamic pricing algorithms to identify and correct cases where low-price strategies are linked to poor service quality. In addition, platforms should enforce pricing transparency (Carter and Curry, 2010; Di Domenico et al., 2022). Tools such as price comparison features can help consumers make informed decisions. This is particularly important for challenging the misconception that higher prices always signal better service quality.

CRediT authorship contribution statement

Lingfeng Dong: Writing – review & editing, Writing – original draft, Project administration, Methodology, Investigation, Funding acquisition, Conceptualization. **Jiaying Wang:** Writing – review & editing, Writing – original draft, Investigation. **Sin You Tok:** Writing – review & editing, Writing – original draft, Methodology. **Yu Tu:** Writing – original draft, Writing – review & editing. **Ou Li:** Writing – review & editing, Writing – original draft, Funding acquisition.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Appendix 1. The Extant Studies on PFs in SSPs

Source	Research interests	Interaction	Theoretical foundation	Finding	Methods
Hong et al. (2018)	Reverse Auction (transaction mode)	Not examined.	Behavior decision-making theory	Longer auction duration attracts more bids but also more low-quality bidders, resulting in a lower probability of successful contracting and project completion.	Regression analysis
Koh (2019)	Solution Exemplars	● Domain experience; ● prize attractiveness	Not explicitly stated.	Prize attractiveness enhances the influence of exemplar quantity but attenuates the influence of exemplar variability. Solvers' domain experience negatively moderates the impact of exemplar adoption on ad effectiveness.	Regression analysis
Hong et al. (2020)	Guarantee-required schemes	● Task complexity; ● task description.	Signaling theory	Guarantee-required tasks attract fewer but higher-quality retailers. Retailers bid shorter durations but less-detailed proposals in such tasks. Task complexity and task description moderate the screening and slack effects.	Regression analysis
Burtch et al. (2021)	dispute resolution (ex-post guarantees)	● Online reputation(ex-ante informational mechanism)	Not explicitly stated	Dispute resolution reduces buyers' reliance on reputation systems, particularly for objectively valuable tasks.	Regression analysis
Fu et al. (2021)	Skillset	● Industry type	Not explicitly stated	Employers in low-skill industries tend to favor job applicants with greater skill incongruity, whereas this preference does not hold in high-skill industries.	Regression analysis
Li et al. (2021)	Quality assurance mechanisms (skill certification)	● Transaction efficiency ● certification informativeness	Item response theory	Freelancers are more likely to pursue certification when their expertise surpasses a certain threshold, a level that declines as transaction efficiency and certification informativeness increase.	Game theory
Fu et al. (2022)	Skill spanning	Job types	Not explicitly stated	Skill spanning decreases freelancers' chances of securing high-skill jobs, while its relationship with winning low-skill jobs follows an inverse U-shaped pattern.	Regression analysis
Kokkodis (2023)	Service skill	Not examined.	● Exploration-exploitation theory	Increasing skillset cohesion leads to reputation gains but opportunity losses.	Regression analysis
Yang et al. (2023b)	Solution exemplar	● Expertise	Signaling theory	Expertise enhances the positive associations between both the quantity and popularity of exemplars and sales performance.	Regression analysis
Zheng et al. (2023)	Platform refund insurance	● Reputation; ● popularity	Signaling theory	Sellers with a better reputation or less popularity might benefit less from refund options.	Regression analysis
Dong et al. (2024a)	Marketing (live chat)	● Prior experience	Signaling theory	Prior experience weakens the influence of affective signals of live chat but enhances the influence of information signal.	Regression analysis
Dong et al. (2024b)	Marketing (live chat)	● Business familiarity	Signaling theory	As business familiarity increases, the role of politeness in influencing contract decisions diminishes, while the importance of reply speed becomes more significant.	Regression analysis

Data availability

Data will be made available on request.

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