How e-marketplace sellers configure platform-based functions to increase sales

An equivalent of over US $887.40 billion of online retail transactions took place via e-marketplaces in China in 2017, rising 29.6 per cent from a year earlier according to iResearch 2018. The growth of e-marketplaces has been accompanied by increasingly intense competition among sellers on transaction platforms. For instance, more than nine million sellers are competing on Taobao, China's dominant e-marketplace. Hence, it's a big challenge for these sellers to compete and enhance sales performance in an emerging, yet crowded and competitive e-marketplace.

E-marketplace platforms, such as eBay and Taobao, have pre-packaged a rich set of IT-enabled storefront functions that sellers can use to customise their offerings. These functions may be used to facilitate pricing (e.g., time-limited discounts), marketing (e.g., luxury store interface), product presentation (e.g., zoom function), or customer service (e.g., seven-day money-back guarantee), among others. We call these unique IT-enabled configurable functions (which are embedded in or supported by the e-marketplace platform) **platform-based functions**. The set of such functions deployed by a seller in a given period constitutes the platform-based function repertoire. To survive and excel in the online platform, the sellers must understand how to configure their platform-based function repertoire so as to improve their sales performance.

In a recent paper, we used a unique longitudinal dataset consisting of 43,992 seller-week observations from Taobao, to analyse the performance impact of a seller's structural configurations of platform-based functions. We classified the available platform-based functions and identified five categories of such functions:

- _Pricing-oriented functions_: allow sellers to specify the degree of, and time period for, product discounts, e.g., time-limited discount, buy-it-now option, price bounding.
- _Marketing-oriented functions_: enhance retailer visibility in the e-marketplace, e.g., sponsored searching advertisements, hyperlink advertisements, purchasing agency community, luxurious shop interface.
- _Product presentation-oriented functions_: provide detailed product information to mitigate the lack of "touch and feel" in the e-marketplace, e.g., zoom, alternative photos.
- _Payment-oriented functions_: provides online customers with diverse payment options, e.g., credit card payment option, cash-on-delivery option.
- _After-sales service-oriented functions_: support the customer along and after the sales process, e.g., money-back guarantee.

As an important IT artefact that enables sellers' competitive actions in the e-marketplace, the structural configuration of the platform-based function repertoire can form the basis for competitive differentiation, thereby leading to superior performance. Specifically, platform-based function repertoires exhibit three structural characteristics that directly affect the sales performance of the e-marketplace seller:

- _Repertoire volume_: the total number of times that a seller uses platform-based functions to support competitive actions in a given period;
- _Repertoire complexity_: the scope of platform-based function categories used by a seller in a given period;
- _Repertoire heterogeneity_: the extent to which the set of platform-based functions undertaken by a seller in a given period deviates from those of its rivals.

As the e-marketplace has several distinctive characteristics that affect how customers notice, interpret, and trust competitive actions, sellers must develop firm-specific solutions to overcome the contextual challenges. Seller reputation, manifested as seller ratings, serves as an extrinsic and readily observable cue capable of addressing these concerns.

Our analyses yield a set of interesting findings:

First, the more functions a seller undertakes, the better the sales performance will be. But this strategy of increasing repertoire volume is more efficient for sellers with low reputation than for those with high reputation.

Second, extending the scope of categories of functions deployed will also increase sales performance. This strategy applies to all sellers.

Third, the performance impact of being different from rivals varies depending on the reputation of sellers. A reputable seller will benefit from being different from rivals, while a non-reputable seller undertaking this strategy could incur decrease in sales performance.

Our study provides a clearer understanding of the extent to which platform-based functions, aggregated at the repertoire level, affect sales performance and the boundary of the set of theoretical relationships. Next, we hope to analyse the uninterrupted sequences of competitive actions that constitute sellers' competitive attacks.

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Notes:

- _This blog post is based on the authors' paper [Platform-Based Function Repertoire, Reputation, and Sales Performance of E-arketplace Sellers](), MIS Quarterly, forthcoming._
- _The post gives the views of its author(s), not the position of LSE Business Review or the London School of Economics._
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