In today’s emerging and competitive e-marketplaces, sellers must take competitive action to improve their sales performance. E-marketplace platform operators offer sellers a portfolio of platform-based functions that are intended to enhance competitiveness. However, little is known about how these platform-based functions can be used at the repertoire level to improve the sales performance of e-marketplace sellers. Extending the competitive repertoire theory to the e-marketplace context and integrating it with the e-commerce literature on reputation, we posit that a seller could improve sales performance by using these functions as a repertoire, featuring such structural characteristics as large volume, high complexity, and heterogeneity. We also posit that the performance impact of this repertoire approach to function use varies depending on seller reputation, manifested as customer rating. We empirically examined the hypotheses with a unique longitudinal dataset consisting of 43,992 seller-week observations from Taobao, one of the largest e-marketplaces in the world. Our analyses yield a set of interesting findings that unveil more nuanced theoretical relationships between different structural characteristics of the platform-based function repertoire and sales performance under different levels of seller reputation. We elaborate on how these findings contribute to the e-marketplace literature in the information systems field and the competitive action research in the strategy field. We also discuss implications for practice and make suggestions for future works.

**Keywords:** Competitive action, reputation, performance, e-marketplace, platform-based function, competitive repertoire, complexity, heterogeneity, volume