

PLATFORM-BASED FUNCTION REPERTOIRE, REPUTATION, AND SALES PERFORMANCE OF E-MARKETPLACE SELLERS

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Appendix A

Examples of Platform-Based Functions in E-Marketplace

The screenshot shows a Taobao product page for '相宜本草嫩白补水面膜 22g*5 补水保湿 美白嫩白细滑'. The page includes a price section with 'Original Price ¥22.90' and 'Taobao Price ¥19.90', a '15天退货' (15-day return) warranty, and various payment options like '蚂蚁花呗' (Ant Financial Credit Card) and '货到付款' (Cash on delivery). A seller profile on the right shows a '皇冠卖家' (Crown Seller) with a '5年老店' (5-year old store) and a '5' star rating. Annotations 1-5 point to specific features: 1. Buy-it-now option (秒杀价), 2. Money-back guarantee (15天退货), 3. Credit card payment (信用卡支付), 4. Cash on delivery (货到付款), and 5. Customer protection scheme (皇冠卖家).

Notes: 1. Buy-it-now option; 2. Money-back guarantee; 3. Credit card payment; 4. Cash on delivery; 5. Customer protection scheme

Figure A1. Platform-Based Functions in E-Marketplace (Taobao)



Notes: 6. Price bundling; 7. Cumulative quantity discount with free postage

Figure A2. Platform-Based Functions in E-Marketplace (Taobao)



Notes: Luxury store interface

Figure A3. Platform-Based Functions in E-Marketplace (Taobao)



Notes: 9. Coupons; 10. Time-limit discount; 11. Platform VIP

Figure A4. Platform-Based Functions in E-Marketplace (Taobao)

Appendix B

Categories of Platform-Based Functions in E-Marketplace

| Platform-Based Functions | | Definitions |
|---|--|---|
| | | An online function provided by the Taobao platform that allows sellers to: |
| Pricing-Oriented Functions | Time-Limited Discount | Specify <i>the degree of and the time period for product discount</i> . |
| | Buy-it-Now Option | Specify <i>the degree of price reductions within extremely short periods</i> . |
| | Cumulative Quantity Discount with Price Cuts | Set price reductions based on the quantity purchased, whereby buyers <i>receive discounts</i> when their purchasing amounts reach a certain value. |
| | Cumulative Quantity Discount with Free Postage | Set price reductions based on the quantity purchased, whereby buyers <i>receive free postage</i> when their purchasing amount reaches a certain value. |
| | Cumulative Quantity Discount with Credits | Set price reductions based on the quantity purchased, whereby buyers <i>receive credits</i> when their purchasing amount reaches a certain value. |
| | Cumulative Quantity Discount with Gift | Set price reductions based on the quantity purchased, whereby buyers <i>receive a gift</i> when their purchasing amount reaches a certain value. |
| | Shop VIP | Set price reductions based on the quantity purchased, whereby buyers <i>receive special privileges</i> from the shop, usually a price discount. |
| | Platform VIP | Set price reductions based on the quantity purchased, whereby buyers <i>receive special privileges (usually price discount)</i> from all the shops that support the functions. |
| | Bundling | Set price reductions based on the quantity purchased, whereby buyers receive a price discount if they buy <i>a couple of goods</i> simultaneously. |
| | Coupons | Set price reductions based on the quantity purchased, whereby buyers <i>receive a discount</i> , either a specified amount or a percentage, when they hold a <i>virtual voucher</i> . |
| Marketing-Oriented Functions | Pay for Performance | Use <i>paid advertising</i> provided by the transaction platform, and be charged according to advertising effectiveness. |
| | Hyperlink Advertisement | Use <i>product spreaders</i> who help sellers promote their products and charge according to effectiveness. |
| | Purchasing Agency Community | Accept orders placed in some <i>bricks-and-mortar stores</i> that are authorized by and affiliated to the platform. |
| | Luxurious Shop Interface | Use <i>personalized online shop interface</i> provided by Taobao. |
| Product Presentation-Oriented Functions | Zoom Function | Use <i>zoom technology</i> that shows the details of the products. |
| | Pictures of Real Products | Use <i>real photos taken by sellers</i> (rather than copied from manufacturers or other third parties). |
| Payment-Oriented Functions | Credit Card | Support payment <i>through credit card</i> . |
| | Cash on Delivery | Support payment <i>by cash</i> when buyers receive the goods. |
| Aftersales Service-Oriented Functions | Money-Back Guarantee within 7 Days | Reimburse <i>within 7 days after purchasing</i> without reason. |
| | Three Times Compensation for Fake Products | Reimburse <i>three times the monetary value of the product</i> if it is found to be fake. |
| | Consumer Protection Scheme | Join the <i>consumer rights protection plan</i> issued by the platform. |
| | Free Repair within 30 Days | Offer <i>maintenance service for free within 30 days</i> after purchasing. |

Appendix C

Empirical Results for Apparel Industry

| Variables | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 | Model 6 | Model 7 | Model 8 |
|---|---------------------|----------------------|---------------------|---------------------|----------------------|----------------------|----------------------|----------------------|
| Ln(Number of Low Price Products) | -0.037* (0.019) | -0.063*** (0.018) | -0.062** (0.018) | -0.060** (0.018) | -0.068*** (0.018) | -0.067*** (0.018) | -0.067*** (0.018) | -0.065*** (0.018) |
| Ln(Number of Mid-Price Products) | 0.017 (0.022) | -0.025 (0.021) | -0.027 (0.021) | -0.025 (0.022) | -0.035 (0.022) | -0.036 (0.022) | -0.036 (0.022) | -0.035 (0.022) |
| Ln(Number of High Price Products) | 0.102*** (0.017) | 0.120*** (0.017) | 0.115*** (0.017) | 0.115*** (0.017) | 0.120*** (0.017) | 0.118*** (0.017) | 0.118*** (0.017) | 0.117*** (0.017) |
| Ln(Response Speed of Instant Message) | 0.076*** (0.008) | 0.072*** (0.008) | 0.073*** (0.008) | 0.072*** (0.008) | 0.077*** (0.008) | 0.077*** (0.008) | 0.076*** (0.008) | 0.075*** (0.008) |
| Ln(Delivery Time) | 0.048** (0.020) | 0.052** (0.020) | 0.052** (0.020) | 0.053** (0.020) | 0.051** (0.020) | 0.050** (0.020) | 0.050** (0.020) | 0.050** (0.020) |
| Repertoire Volume (H1 _a) | | 0.121*** (0.012) | 0.114*** (0.012) | 0.121*** (0.014) | 0.119*** (0.014) | 0.126*** (0.014) | 0.125*** (0.014) | 0.126*** (0.014) |
| Repertoire Complexity (H2 _a) | | | 0.485* (0.161) | 0.381* (0.187) | 0.372* (0.186) | 0.306* (0.184) | 0.308* (0.183) | 0.309* (0.183) |
| Repertoire Heterogeneity (H3 _a) | | | | -0.099* (0.086) | -0.118* (0.086) | -0.139* (0.087) | -0.139* (0.087) | -0.154* (0.087) |
| Reputation | | | | | 0.048*** (0.008) | 0.024** (0.009) | 0.030** (0.010) | 0.047*** (0.011) |
| Volume * Reputation (H1 _b) | | | | | | -0.016*** (0.003) | -0.011** (0.004) | -0.025*** (0.006) |
| Complexity * Reputation (H2 _b) | | | | | | | 0.118 (0.058) | 0.111 (0.075) |
| Heterogeneity * Reputation (H3 _b) | | | | | | | | 0.238*** (0.047) |
| Constant | 5.465*** (0.093) | 5.679*** (0.092) | 5.691*** (0.092) | 5.679*** (0.092) | 5.717*** (0.092) | 5.729*** (0.092) | 5.728*** (0.092) | 5.721*** (0.092) |
| F test | 31.47*** | 38.4*** | 34.52*** | 30.55*** | 29.25*** | 28.66*** | 26.82*** | 25.38*** |
| R-square | 7.18% | 25.69% | 25.70% | 25.72% | 25.77% | 25.91% | 26.00% | 26.21% |
| R-square Change | — | 18.51% | 0.01% | 0.02% | 0.05% | 0.14% | 0.09% | 0.21% |

Notes: The dependent variable is Ln(SalesPerformance); Number of observations = 42,480; Number of sellers = 1,062; Robust Standard Errors in parentheses. * $p < 0.05$, ** $p < 0.025$, *** $p < 0.001$, one-tailed tests.

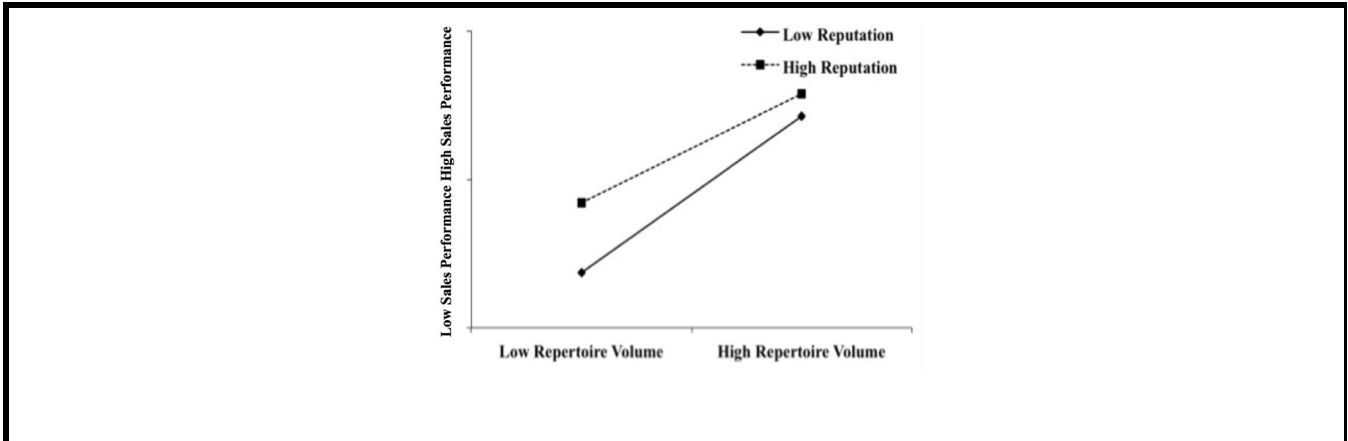


Figure C1. Interaction between Repertoire Volume and Reputation in Apparel Industry

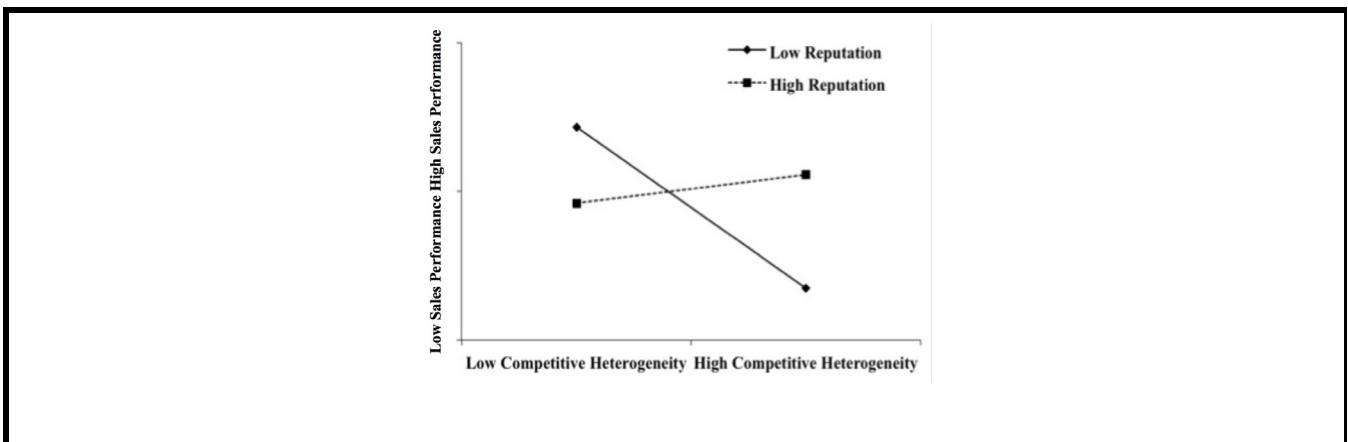


Figure C2. Interaction between Repertoire Heterogeneity and Reputation in Apparel Industry