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The cultural impact in platform competition

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Platform competition is the central theme of the contemporary electronic market. The user-generated content (UGC) has been widely utilized in the cross-cultural context with the globalization of online platform portals. We define UGC as information on consumers' online posts or contributions, including product reviews, tweets, blogs, audio, videos, and images found in the online environment. The diversity of global consumers' cultural backgrounds both enriches the utility of UGC on multi-national social media platforms. It increases the complexity of platform competition strategy (Alt and Zimmermann 2019), such as the trade-off between local customization versus global standardization.

Meanwhile, big data and cloud computing revolutionize data processing strategies on UGC. As a result, we witnessed more sophisticated algorithms and models used to analyze online reviews and other user-generated content to gain insights into consumers' expectations. However, this momentum is relatively slow in the direction of cross-cultural analysis of consumers. While some studies reported cross-cultural differences in restaurant reviews (Chik et al. 2016; Nakayama and Wan 2019a), we are still in the early stage of understanding how cross-cultural influences are transpiring in the broader spectrum of UGC. For example, how should UGC platforms channel cross-cultural influences as a differential factor for improving service and product recommendations in platform competition? Underutilization of cross-cultural aspects is partially due to a lack of appropriate and effective cross-cultural analytical frameworks. This special issue consists of research utilizing different analytical frameworks, ranging from traditional Hofstede (Hofstede 1980; Minkov and Hofstede 2012) to Elaboration Likelihood Model (Petty and Cacioppo 1986) and more recent Social-Cognitive Systems theory (Nisbett et al. 2001).

There is also the need for effective data analytics methods on cross-cultural-related content. Today, global social media platforms such as Facebook and Yelp are accessible not only via desktop computers and smartphones but also via automobiles and an increasing number of IoT devices. These platforms constantly collect and analyze UGC, then interpret and package them into recommendations or other information services and products. Though this process has been replicated across the globe in different languages by e-commerce portals, they are applying similar algorithms and standard practices across platforms, regardless of cultural factors. However, consumers from different countries are not a monolithic group. Their cultural backgrounds influence their preferences, usage, and evaluation of products and services. Globally standardized recommendation and customization algorithms without incorporating cultural factors could contribute to or directly lead to strategic failures, such as the exit of the Chinese market by Amazon (Liao 2019). Recent studies found consumers with different cultural backgrounds place different emphases on food quality, waiter service, ambiance, and price fairness in their reviews (Nakayama and Wan 2018, 2019b). In other words, comparable Yelp five-star sushi restaurants in Tokyo and New York could be different because Japanese and US reviewers have different emphases on evaluation attributes. Failure to account for cross-cultural differences in the provided ratings may also distort the information content of UGC for firms and

customers (Stamolampros et al. 2020). In this special issue, two studies explored this issue from different angles (Brand et al. 2022; Guan et al. 2022).

Today's economy is driven strongly by optimizing the product mix to the target consumer profiles on a global scale. When cultural factors influence the consumer in evaluating products and services, we should expect such influence to be properly utilized, presented, and informed to other consumers through recommendation systems, widgets on social media outlets, and review websites. Big data analytical methods can help analyze the cross-cultural perspective of UGC (Aker and Wamba 2016). We expect future studies would not only identify cultural influence but also measure and integrate cultural factors into analysis quantitatively. In this special issue, two studies explored this topic with different focuses (Biswas et al. 2021; Shneor et al. 2021).

Special issue papers

In this special issue of Electronic Markets, we collected four papers under two categories. The first two papers focus on theoretical/methodology aspects of cultural impact analysis. They were followed by two application-oriented papers on UGC helpfulness as well as social trust.

- The article “cultural differences in processing online customer reviews: holistic versus analytic thinkers” by Brand *et al.* (2022) used Socio-Cognitive Systems Theory to illustrate how consumers from different cultures are cognitively processing information. The author(s) found this analytical framework is more applicable in intercultural contexts. They interviewed Western (German; n=552) and East Asian (Chinese; n=585) consumers to analyze the intercultural appropriateness of the model. The results empirically validate the assumptions of the Socio-Cognitive Systems Theory. Specifically, they found the Chinese to perceive review credibility holistically, whereas Germans tend to categorize its antecedents for evaluating them separately.
- In “cultural differences in hospitality service evaluations: mining insights of user-generated content” by Guan *et al.* (2022), the authors found research on the cultural impacts of the broad spectrum of UGC remains nascent and limited. They elaborated on how the hospitality service dimensions that are reflected in UGC both predict service evaluation and are contingent on a reviewer's prevailing culture. Within Hofstede's cultural dimension analytical framework and through analyzing a sample of 9,257 hotel reviews from 148 countries with latent Dirichlet allocation and aspect-based sentiment analysis algorithms, they identified three dimensions of hospitality service quality: adaptability, reliable delivery, and tangibles. They found these three dimensions could predict customers' overall hotel ratings, and the magnitude and direction of their effects depend on alignments of cultural orientations.
- In “your reviews or mine? Exploring the determinants of ‘perceived helpfulness of online reviews: a cross-cultural study,” Biswas et al. (2021) explored a prevalent issue with current e-commerce platforms: many online reviews remain non-voted by existing customers. They found the contemporary literature overlooked the effect of these non-

voted reviews and lacked the cross-cultural perspective to analyze online reviews on an e-commerce platform. So the authors proposed a novel cross-cultural framework by using online consumer reviews from a global e-commerce retailer to investigate these shortcomings. They identified the significant predictors (such as review title, review sentiments, star rating, social context, and temporal features) of the count of helpful votes received by online reviews – both voted and non-voted. They also identified a strong moderating effect of national culture on these predictors during the perception and evaluation of global consumers' reviews.

- In “the role of social trust in reward crowdfunding campaigns’ design and success” by Shneor *et al.* (2021), the authors explored how cultural differences in social trust proclivities influenced reward crowdfunding campaign design and success. Specifically, the authors analyzed data about 700 campaigns from Finland, a relatively high social trust society, and a similar number of campaigns from Poland, a relatively low social trust society. Using Elaboration Likelihood Model as the analytical framework, they found a different emphasis on persuasion routes in campaigns between these two cultures. Specifically, they found central route cues to persuasion were more prevalent in campaigns from low social trust culture, and some peripheral cues were more prevalent in campaigns from high social trust culture. They also found partial support that central route cues are more important for campaign success in low social trust culture.

As we can see from the overview, these four papers provided insights on the topic of this special issue from theoretical, methodological, and applicational perspectives. New theoretical framework and service dimensions for cross-cultural analysis could lead to more effective strategic formulation in platform competition.

Implications for platform competition

The main implication of the studies in this special issue is national culture influence consumers with varying yet predictable patterns when they interact with online platforms. For example, Chinese customers are more holistic in their assessment of reviews. In contrast, German customers are more analytical (Brand *et al.* 2022), which leads to differing interactive design and user-generated content processing strategies. National culture also influences the pattern of emphasis on the same set of service dimensions (Guan *et al.* 2022), the perception of platform content (Biswas *et al.* 2021), and the channel of persuasion (Shneor *et al.* 2021). Platform hosts and business owners can gain much more efficiency when strategizing and executing service promotion, delivery, recovery, and evaluation along culture-specific patterns.

This special issue also introduced socio-cognitive systems theory as an alternative to Hofstede's cultural dimensions framework for cross-cultural platform digital content analysis, especially in Asian culture. We expect this to inspire researchers to explore other appropriate intercultural-friendly theories or analytical frameworks.

Reference:

Akter, S., & Wamba, S. F. (2016). Big data analytics in E-commerce: a systematic review and

- agenda for future research. *Electronic Markets*, 26(2), 173–194.
<https://doi.org/10.1007/s12525-016-0219-0>
- Alt, R., & Zimmermann, H.-D. (2019). Electronic Markets on platform competition. *Electronic Markets*, 29(2), 143–149. <https://doi.org/10.1007/s12525-019-00353-y>
- Biswas, B., Sengupta, P., & Ganguly, B. (2021). Your reviews or mine? Exploring the determinants of “perceived helpfulness” of online reviews: a cross-cultural study. *Electronic Markets*. <https://doi.org/10.1007/s12525-020-00452-1>
- Brand, B. M., Siegfried, C., Theresa, K., & Rausch, M. (2022). Cultural differences in processing online customer reviews : holistic versus analytic thinkers. *Electronic Markets*, (1980). <https://doi.org/10.1007/s12525-022-00543-1>
- Chik, A., Vásquez, C., & Vasquez, C. (2016). A comparative multimodal analysis of restaurant reviews from two geographical contexts. *Visual Communication*, 16(1), 3–26.
<https://doi.org/10.1177/1470357216634005>
- Guan, C., Hung, Y.-C., & Liu, W. (2022). Cultural differences in hospitality service evaluations: mining insights of user generated content. *Electronic Markets*.
<https://doi.org/10.1007/s12525-022-00545-z>
- Hofstede, G. (1980). Culture and Organizations. *International Studies of Management & Organization*, 10(4), 15–41.
- Liao, S. (2019). Amazon admits defeat against Chinese e-commerce rivals like Alibaba and JD.com - The Verge. *The Verge*. <https://www.theverge.com/2019/4/18/18485578/amazon-china-marketplace-alibaba-jd-e-commerce-compete>. Accessed 30 December 2019
- Minkov, M., & Hofstede, G. (2012). Hofstede’s fifth dimension: New evidence from the World Values Survey. *Journal of cross-cultural psychology*, 43(1), 3–14.
- Nakayama, M., & Wan, Y. (2018). Is culture of origin associated with more expressions? An analysis of Yelp reviews on Japanese restaurants. *Tourism Management*, 66, 329–338.
<https://doi.org/10.1016/j.tourman.2017.10.019>
- Nakayama, M., & Wan, Y. (2019a). The cultural impact on social commerce: A sentiment analysis on Yelp ethnic restaurant reviews. *Information & Management*, 56(2), 271–279.
<https://doi.org/10.1016/j.im.2018.09.004>
- Nakayama, M., & Wan, Y. (2019b). Same sushi, different impressions: a cross-cultural analysis of Yelp reviews. *Information Technology & Tourism*, 21(2), 181–207.
<https://doi.org/10.1007/s40558-018-0136-5>
- Nisbett, R. E., Peng, K., Choi, I., & Norenzayan, A. (2001). Culture and systems of thought: holistic versus analytic cognition. *Psychological review*, 108(2), 291.
- Petty, R. E., & Cacioppo, J. T. (1986). The elaboration likelihood model of persuasion. In *Communication and persuasion* (pp. 1–24). Springer.
- Shneor, R., Mrzygłód, U., Adamska-Mieruszevska, J., & Fornalska-Skurczyńska, A. (2021). The role of social trust in reward crowdfunding campaigns’ design and success. *Electronic Markets*. <https://doi.org/10.1007/s12525-021-00456-5>
- Stamolampros, P., Dousios, D., Korfiatis, N., & Symitsi, E. (2020). The joint effect of consumer and service providers’ culture on online service evaluations: A response surface analysis. *Tourism Management*, 78. <https://doi.org/10.1016/j.tourman.2019.104057>