NAVER D-Place Report



Part 2. NAVER Place Review: Improving Business Performance of Local SMEs





EXECUTIVE SUMMARY

NAVER Place Review and Keyword Review

NAVER offers an array of location-based services such as Integrated Search, SmartAround, Maps, and Navigation that allow users to explore and discover restaurants, beauty salons, lodgings, and other offline stores. Among other information on SmartPlace, authentic reviews from previous visitors help potential customers decide on their visit to the store.

NAVER offers 'Place Review,' which collects authentic reviews written by users who made their purchase through Booking or Order or verified their store visit with their receipt or credit card history. In order to prevent fake or malicious reviews and protect both businesses and customers, NAVER, in 2019, developed the industry's first-ever OCR(optical character recognition)-based 'Receipt Review,' requiring users to authenticate their store visit with their receipts. In July 2021, NAVER launched 'Keyword Review' to eliminate the negative effects of malicious star ratings by certain customers and create a system that facilitates constructive relationships between businesses and visitors. Keyword Review allows users to select review keywords (e.g. "uses fresh ingredients" or "dessert was delicious") that most accurately resemble their visit experience. Potential customers can then search for stores that suit their taste or preference, while businesses can highlight their stores' unique features and better connect with customers who are more likely to enjoy the store.

Correspondingly, the D-Place Report 2022 examines the effects of NAVER Place Review, particularly Keyword Review, on business performance of offline businesses as well as their perception of Place Review. This report was prepared by Professor Byungjoon Yoo and his research team at the Business School of Seoul National University. The analysis is based on empirical and survey data on NAVER Place Review and Keyword Review.



Keyword Review

Keyword reviews that allow visitors to highlight features unique to each store

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Effects of Place Review on Business Performance

(Improved Performance) Based on an empirical analysis on the effects of Place Review on offline businesses' performance, we observed that performance metrics improve as the number of Place Reviews increase. In particular, small and medium-sized enterprises (SMEs) experienced, on average, a 1.5x increase in business metrics compared to franchisees.

(Perceived Benefits) Based on a survey of businesses, we found that businesses were generally satisfied with Place Review, with an average rating of 3.67 to 4.25 (out of 5.0). Businesses also perceived garnering Place Reviews as beneficial for running their business. In particular, businesses responded that Place Review helped them 1) increase sales, 2) acquire and retain customers, 3) highlight their strengths, and 4) advertise and promote their business.

(Benefits for Local SMEs) Non-metropolitan and non-franchised businesses appeared to appreciate the benefits of Place Review more deeply than metropolitan and franchised businesses, which suggests Place Review is helping local SMEs grow.



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(Improved Performance) Our data analysis found that an increase in the number of Keyword Reviews results in an improvement in business performance. In particular, SMEs experienced, on average, a 1.2x increase in business metrics compared to franchisees. Keyword Reviews appear to have a stronger effect on increasing the number of saves and shares compared to regular reviews, implying that Keyword Reviews effectively encourage users to visit stores in the future by highlighting businesses' unique features.

(Perceived Benefits) Survey results also show that businesses, in general, prefer Keyword Reviews to star ratings, finding the former more beneficial than the latter. When comparing Keyword Reviews to star ratings, businesses commented the following: 1) Businesses can highlight their strengths through Keyword Reviews, allowing customers to conveniently find unique features of each store. Businesses can then consider the relevant keywords to improve their store operations. 2) Keyword Reviews help businesses improve the quality of their customer service. In addition, businesses found Keyword Review, in contrast to star ratings, more helpful in terms of 3) raising brand awareness online and 4) acquiring and retaining customers.

(Reduced Negative Effects) Many businesses responded that after using Keyword Reviews, they experienced fewer adverse effects of star ratings, including biased, malicious, fraudulent, and other bad faith reviews. This explains why businesses were more satisfied with Keyword Reviews—which they rated 3.77 out of 5.0—compared to star ratings.

(Virtuous Cycle Enhancing Performance) Our research also observed the workings of a virtuous cycle: implementing the Keyword Review system boosted the number of Keyword Reviews, which in turn helps SMEs improve their business performance.



Reduces adverse effects of star ratings

- Prevents and reduces bad faith star ratings
- Feel at ease after seeing fewer deliberately malicious reviews
- The number of bad faith reviews decreased
- Nice to see fewer fake reviewers and companies that manipulate business ratings
- No need to stress about malicious star ratings anymore
- Helps prevent customer abuse
- There are fewer negative comments
- Encourages good reviews overall

Highlights unique strengths of each business

- Easy to find out customer preferences and strengths unique to each store
- It appears customers decide on their visit based on keywords they like
- Enhances visual appeal of the business by providing information clearly to customers

Increases visibility, sales, and customer interaction

- Increased search visibility
- Increased sales
- Opened up more opportunities to connect with customers

Improves quality of customer service

- Used as reference for store operations
- It made it easy to understand the strengths of the store which helped me improve the business
- Improved the store's image

Increases number of reviews

- Thanks to the simple keyword selection process, the number
 of reviews increased
- Thanks to the convenient review-writing process, customers tend to write many reviews
- The number of reviews overall increased

Effects Based on Review Type

(Image/Text Review) Our analysis found that the more photos attached to a review and the shorter the review text, the better businesses performed, suggesting that businesses benefit from concise reviews with numerous photos. In addition, Keyword Review increased the number of image reviews and concise text reviews, which positively impacted businesses' performance.

(Star Ratings) On the other hand, NAVER ended its star ratings review system in October 2021 after launching Keyword Review; star ratings will no longer appear on store profiles. At the time of this research, businesses that had opted to hide their average star rating said they did so because they were concerned about malicious reviews and stressed out about managing reviews; they also noted that these ratings encouraged customers to take advantage of reviews and did not accurately represent customer satisfaction, while Keyword Review was sufficient to show how customers evaluated the store. These businesses responded that hiding average star ratings had a positive impact on sales (average rating of 3.34), and that Keyword Review helped them better convey positive information, reduce the number of bad faith reviews, and improve the authenticity of reviews.

Results and Implications

NAVER Place prevents fake reviews and provides meaningful information by collecting genuine reviews by customers that actually visited the particular store. Moreover, to alleviate problems caused by star ratings, NAVER Place continues to innovate its review system, including launching the industry's first, Keyword Review.

Based on SmartPlace data and survey of businesses, Place Review and Keyword Review effectively increase customer acquisition and impression (Navigation clicks, saves, shares) rates for offline businesses, especially small and medium-sized enterprises and non-metropolitan businesses. Furthermore, businesses themselves found Keyword Review more helpful than star ratings.

Keyword Review helps mitigate problems such as a surge of bad faith reviews or instances where customers take advantage of reviews, in addition to highlighting store strengths, raising awareness, and acquiring new customers. Users can easily identify unique traits of each store, which encourages them to visit. Keywords (of reviews) also help businesses improve their service quality, which will positively impact future customers.

Notably, these findings confirm that NAVER Place Review has a positive impact on how offline businesses, especially local SMEs, perform and operate. Since SMEs, compared to standardized franchisees, have more unique characteristics and strengths, Keyword Reviews showcasing authentic reviews by previous visitors and unique traits of each store will play a more important role for these businesses. Moreover, Keyword Review, which NAVER SmartPlace introduced for the first time in the industry, is NAVER's endeavor to replace uniform quantitative indicators with rich qualitative indicators tailored to each business, and can be seen as an innovative attempt by a digital platform to minimize the side-effects of existing review systems.

Now that we have proven the effects of Place Review and Keyword Review, NAVER, as the leading technology platform to support offline businesses digitally connect and grow, will continue to help businesses and users discover one another and feel more satisfied.

NAVER Place Review: Improving Business Performance of Local SMEs

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TABLE OF CONTENTS





01.





02.







Effects Based on Review Type



04.



Results and Implications

Effects of Place Review

on Business Performance

Effects of Keyword Review on Business Performance



Introduction

This report has been published as an interactive PDF, allowing readers to move quickly and easily to pages in the report, and including shortcuts to the related web pages.



1. Purpose of Study

The D-Place Report aims to examine the effects of Place Review and Keyword Review, which are offered by NAVER SmartPlace, a leading location-based service in South Korea. Currently, SmartPlace offers 'Place Review' which displays a collection of genuine reviews written by users who verify their visit with receipts or credit card history. In August 2021, SmartPlace made significant changes to its review system centered around star ratings and launched 'Keyword Review' to alleviate problems of malicious reviews by certain customers and facilitate constructive relationships between businesses and customers.

Ordinary users will most likely consider other customer reviews when deciding on their store visit. We expect authentic customer reviews to be more important for local SMEs than for standardized franchisees, since local SMEs are more diverse in terms of their unique traits and strengths.

This study uses SmartPlace and survey data to determine how the standard Place Review and newly developed Keyword Review create value for SMEs. Specifically, the research covers the following:



2. Research Methodology

2-1. SmartPlace Data Analysis

- Business Sector: Businesses currently active (open and in operation) and registered on SmartPlace that are categorized as restaurants, beauty salons, photo studios, sports facilities (e.g. gyms, golf courses), tourist attractions (e.g. theme parks, immersive experiences), or other
- Period of Analysis: April 1, 2021 to September 25, 2022 (630 days)
- Research Method: In order to analyze how an increase in reviews affect business performance, we used a linear mixed model, a type of time series panel method that takes into account both fixed and random effects. The model is defined by the formula $Y = X\beta + Z\gamma + e$, where X is the fixed effect; Z, the random effect; and e and γ , both error terms that follow a normal distribution with a mean of zero. For this research, we considered random effects as random intercepts rather than slopes. In addition, we conducted a z-test to compare the performance of SMEs to that of franchisees.



¹⁰ Other includes the following: ['PC bang', 'comic book store', 'transportation', 'finance', 'study room', 'amenities', 'repair', 'other transport', 'car maintenance', 'steam car wash', 'self', 'self car wash', 'self', 'self car wash', 'bobic facility] ['hospital', 'hospital overall', 'maternity care facility', 'dental clinic', 'general hospital', 'veterinary clinic', 'pet grooming'] ['furniture', 'ring-making workshop', 'steam car wash', 'craft shop', 'gewery', 'flower shop', 'real estate agency', 'book store', 'shopping', 'supermarket', 'optician', 'toys', 'general appliances', 'convenience store', 'perfume-making workshop', 'cell phone store', 'interior accessories'] ['teaching center', 'child education', 'driving school', 'music practice center', 'after school learning centers, in general']

2-2. Survey of SmartPlace Businesses

- Respondents: Businesses registered on SmartPlace that are categorized as restaurants, beauty salons, photo studios, sports facilities (e.g. gyms, golf courses), tourist attractions (e.g. theme parks, immersive experiences)
- Period of Analysis: October 14, 2022 to October 28, 2022 (2 weeks)





oı. Effects of Place Review on Business Performance

oi. Effects of Place Review on Business Performance

1-1. How Place Review affects customer acquisition and conversion

A time-series panel analysis of SmartPlace data shows that as the number of Place Reviews increases, businesses' performance metrics improve.

As Place Reviews for SMEs increase by 100, page views also increase by 239; page visitors, by 65; Navigation users, by 5; Save users, by 2; Share users, by 1.3; and Call users, by 2. On the other hand, as Place Reviews for franchisees increase by 100, page views increase by 245; page visitors, by 50; Navigation users, by 3; Save users, by 1; Share users, by 1; and Call users, by 0.5. (All results p<0.01)

Comparing effects of Place Reviews on SMEs and franchisees, we found that SMEs experienced, on average, a 1.5x greater increase in conversion rates compared to franchisees.



o. Effects of Place Review on Business Performance

1-2. How businesses rate benefits of Place Review

The results of the business survey also support our data analysis. When we examined businesses' perception of Place Review taking into account various factors, we found businesses were highly satisfied, rating the service an average score of 3.67 to 4.25 (on a 5-point scale).

Overall, non-franchisee and non-metropolitan businesses appeared to appreciate the benefits of Place Review more strongly than franchisee and metropolitan businesses, implying that Place Review is helping local SMEs grow.

Businesses also regarded the accumulation of reviews, photos, and text to be helpful for their businesses. Specifically, businesses responded Place Review helped them 1) increase sales, 2) acquire and retain customers, 3) highlight strengths of the store, 4) enhance advertising and promoting, and 5) improve quality of customer service.



Perceived Benefits of Place Review, Metro vs. Non-metro and Franchisee vs. Non-Franchisee



2-1. How Keyword Review affects customer acquisition and conversion

Our data analysis shows that as the number of Keyword Reviews increases, businesses' performance metrics improve.

In particular, the effect that an increase in Keyword Reviews has on boosting saves and shares surpasses that of regular reviews, suggesting that Keyword Reviews are more effective in highlighting unique features of the store and, therefore, in encouraging users to visit in the future.

Specifically, as Keyword Reviews for SMEs increase by 100, page views also increase by 178; page visitors, by 56; Navigation users, by 3.4; Save users, by 2.5; Share users, by 1.8; and Call users, by 0.85. On the other hand, as Keyword Reviews for franchisees increase by 100, page views increase by 169; page visitors, by 43; Navigation users, by 2.2; Save users, by 1; Share users, by 1; and Call users, by 0.6. (All results p<0.01)

Comparing effects of Keyword Reviews on SMEs and franchisees, we found that SMEs experienced, on average, a 1.2x greater increase in business metrics compared to franchisees.



2-2. How businesses rate benefits of Keyword Review (Objective Questions)

Our survey results show that businesses rated Keyword Reviews, compared to star ratings, with a satisfaction score of 3.77, indicating that businesses overall consider Keyword Review more beneficial than star ratings.

In particular, businesses responded that Keyword Reviews, compared to star ratings, help them 1) better highlight strengths of the store, 2) improve customer service quality, 3) promote online brand awareness, and 4) acquire and retain customers.



2-2. How businesses rate benefits of Keyword Review (Subjective Questions)

In a subjective survey about the businesses' experience before and after implementing Keyword Review, many responded that Keyword Review helped alleviate problems related to the star ratings system, such as bad faith reviews, malicious reviews, and customer abuse, which explains why businesses are satisfied with Keyword Review. Furthermore, businesses stated that, after the introduction of Keyword Review, 1) customers are now able to easily identify unique features and strengths of each store, and 2) businesses can take into account relevant keywords to improve store operations. These responses indicate that Keyword Review is also helpful in improving customer service. In addition, businesses noted that because it is now easier to write reviews, 3) the number of customer reviews has increased. Combining these responses with our data analysis, we can identify a virtuous cycle whereby the introduction of Keyword Review drives an increase in the number of customer reviews, which then leads to an improvement in business performance of SMEs. Businesses also observed, after implementing Keyword Review, an increase in 4) online visibility and sales and 5) customer interaction.

Businesses' Views Before and After Implementing Keyword Review (Subjective Survey Responses)

Reduces adverse effects of star ratings



- Prevents and reduces bad faith star ratings
- Feel at ease after seeing fewer deliberately malicious reviews
- The number of bad faith reviews decreased
- Nice to see fewer fake reviewers and companies that manipulate business ratings
- No need to stress about malicious star ratings anymore
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Highlights unique strengths of each business

- Easy to find out customer preferences and strengths unique to each store
- It appears customers decide on their visit based on keywords they like
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Improves quality of customer service

- Used as reference for store operations
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Increases visibility, sales, and customer interaction

- Increased search visibility
- Increased sales
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Increases number of reviews

- Thanks to the simple keyword selection process, the number of reviews increased
- Thanks to the convenient review-writing process, customers tend to write many reviews
- The number of reviews overall increased

2-2. How businesses rate benefits of Keyword Review (Subjective Questions)

On the other hand, some respondents claimed they could not notice the difference either due to a lack of understanding of Keyword Review or because they did not have enough Keyword Reviews. Some businesses underscored that there was not enough information that clearly distinguished their store from others, while certain businesses expressed their desire to use other keywords. This is likely due to the fact that businesses were not yet aware that they could modify their keyword options. (Only 52.2% of respondents said they were aware that businesses could change their Keyword Review options).

Of the businesses who knew they could change their Keyword Review options, 66.7% stated that they modified their keyword options because, among other reasons, "there were certain keywords they wanted to emphasize" or "some keywords did not accurately represent features of the store." Although these businesses were unable to observe a significant increase in sales after changing their keyword options, they did notice a positive impact from highlighting keywords that better resembled their stores, while some businesses responded they desired a wider range of keyword options.



o3. Effects Based on Review Type

os. Effects Based on Review Type

3-1. How different review types affect business performance

Based on our data analysis on how different review types affect business performance, we found that the more photos attached to a review, the better the business's metrics. There was also a negative correlation between the length of the review text and business metrics.

Specifically, an increase of 100 photo reviews was associated with 115.6 more page visitors, 7.9 more Navigation users, 5.5 more save users, 4.6 more share users, and 5.7 more call users.

In other words, reviews that include concise information and images significantly help businesses.

Survey results asking businesses about the benefits of Keyword Review indicate that Keyword Review made it more convenient to write reviews, which has led to an increase in the number of reviews (rated 3.48) and the number of images attached to reviews (rated 3.45). In the subjective questionnaire, there were also responses noting that reviews became shorter and more concise after the introduction of Keyword Review.

Taking into account all of the above, these findings suggest that Keyword Review positively impacts business performance by increasing the number of photo reviews and concise, short reviews.

3-2. How businesses rate star ratings system

After establishing a new review system oriented around Keyword Review, NAVER, in October 2021, ended its star ratings review feature and planned to hide all average star ratings in the near future. However, at the time of this study, businesses were still able to choose to display star ratings. Hence, we were able to assess what businesses thought about terminating the star ratings feature by asking how they perceived the show/hide display option of star ratings.

Of all respondents, 81.7% claimed they were aware of the display option of average star ratings, among which 60.9% stated they had experienced changing the display option of average star ratings. Among these respondents, 35.1% replied they hid average star ratings from display.

The most common reasons for disabling average star ratings were that 1) managing malicious reviews and ratings was stressful, 2) star ratings elicited customer abuse, 3) average star ratings did not accurately represent customer satisfaction, and 4) Keyword Reviews sufficiently highlighted how customers evaluated the store. Businesses responded that disabling average star ratings had a positive impact on sales (rated 3.34), and specifically noted that Keyword Reviews enabled them to communicate constructive information, reduce malicious reviews, and enhance the authenticity of reviews. Some businesses that display average star ratings underlined that, since average star ratings offer a straightforward measure of customer satisfaction, star ratings are a unique asset that helps businesses differentiate themselves from others. Nonetheless, considering that star ratings, terminated in October 2021, are not up to date and that businesses can also showcase their strengths through Keyword Reviews, we can expect Keyword Reviews, as they accumulate, to effectively replace the role of star ratings.



o4. Results and Implications

04. Results and Implications

Results and Implications

In this research, we analyzed empirical review data from SmartPlace and survey results to examine the effects of Place Review and Keyword Review—offered on SmartPlace on SMEs. Our findings include the following:

- An increase in the number of Place Reviews and Keyword Reviews positively impacts customer acquisition and conversion. This positive impact is greater for SMEs than for franchisees. Local non-metropolitan businesses also perceive these benefits more strongly than metropolitan businesses. In sum, we can confirm that Place Reviews help local SMEs thrive.
- In particular, Keyword Reviews, compared to regular reviews, have a greater positive impact on customers' use of Save and Share. Keyword Reviews more effectively
 encourage customers to visit the store, considering survey results indicate that Keyword Reviews, compared to star ratings, better highlight strengths of each store, improve
 customer service, and help acquire and retain customers.
- The more photo reviews there are and the shorter text reviews are, the better businesses perform. Keyword Reviews prompt additional image reviews and shorter, more concise text reviews, which positively affects businesses' performance.
- Businesses note that, since the introduction of Keyword Review, they no longer see problems such as floods of bad faith reviews, malicious reviews, and customer abuse previously seen with star ratings.
- Businesses positively view disabling star ratings, citing reasons such as malicious reviews, difficulty managing star ratings, limitations in conveying customer satisfaction with a single star rating, and the fact that Keyword Reviews are sufficient to show how customers evaluate the store.
- The above results are significant in that they confirm that NAVER Place Reviews positively affect operations of offline businesses, especially local SMEs. Authentic reviews written by customers that actually visited the store and Keyword Reviews that showcase the store's unique features will be particularly important for SMEs, considering these businesses are more diverse, in terms of their traits and strengths, compared to standardized franchisees.

Keyword Review, which NAVER SmartPlace introduced for the first time in the industry, is NAVER's endeavor to replace uniform quantitative indicators with rich qualitative indicators tailored to each business, and can be seen as an innovative attempt by a digital platform to minimize the side-effects of existing review systems. This study goes beyond underlining the social impact of Keyword Reviews; it confirms that Keyword Reviews have practical benefits for SMEs, including improving business performance, highlighting store strengths, enhancing customer service, and alleviating review-related problems.

We hope that the D-Place Report 2022 will help guide the future direction of developing review systems and services. We look forward to new, diverse efforts that help minimize adverse social effects of reviews and better satisfy businesses and users.

