The influence of customer reviews, product innovation and digital advertising on purchasing decisions for noodles

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Abstract. This study aims to analyze the influence of customer reviews, product innovation, and digital advertising on consumer purchasing decisions on Mie Setan products. In today's digital era, purchasing decisions are not only influenced by product quality, but also by perceptions formed from customer reviews, product updates offered, and the effectiveness of digital promotions. The research method used is quantitative with a survey approach by distributing questionnaires to 150 respondents who are noodles consumers in Pasuruan City. The data analysis technique uses multiple linear regression to test the simultaneous and partial effects of the three independent variables on purchasing decisions. The results of the study indicate that customer reviews, product innovation, and digital advertising simultaneously have a significant effect on purchasing decisions. Partially, customer reviews and product innovation have a positive and significant effect, while digital advertising shows a positive but insignificant effect. These findings indicate the importance of building trust through positive customer reviews and continuing to innovate products to increase consumer purchasing interest.

Keywords: customer review, product innovation, digital advertising, purchasing decisions, noodles.

Introduction

In today's digital era, the food and beverage industry, especially the instant food category such as noodles, faces challenges as well as great opportunities in understanding and influencing consumer purchasing decisions (Hasan et al. 2023). One of the important factors influencing these purchasing decisions is the change in people's consumption patterns that now rely more on digital information before making purchases (Prayogi and Nufzatutsaniah 2025), including reading customer reviews, evaluating the value of a product's innovation, and exposure to digital advertising on various social media platforms (Adhitya et al. 2024) Instant noodles are a very popular product in Indonesia because they are practical, economical, and have a variety of flavor variants (Wantoro and Verdian 2024). In this context, noodle producers are not only competing in terms of price and distribution, but also in terms of consumer perception of product quality, taste innovation, packaging, and digital promotion strategies used (Gusti Putu Purnama et al. 2025). Today's consumers are more critical and tend to seek references from other customer reviews before making a purchase decision. They also appreciate innovation, both in terms of taste, nutritional content, and product concepts that are in line with trends such as "extreme spicy noodles", "low calorie noodles", or "vegan noodles".

Customer reviews play an important role in shaping consumer perception (Dwi et al. 2025). They are considered a relatively objective and honest source of information because they come from direct product users (Rahmawati, Hariasih, and Indayani 2025) Consumers tend to trust reviews from fellow consumers rather than promotional messages from companies (Kawet, Palandeng, and Pitta 2024). Indicators used; quality of information, reliability of sources, sentiment review (Agustina Rahayuningtyas 2022).

Product innovation, on the other hand, is the main differentiator in the food industry (Bahalwan and Indayani 2025) including noodles. In a highly competitive market, innovation in the form of new flavors, unique packaging, or added value such as nutritional content, is a special attraction for consumers who are looking for a new and different dining experience (Naksir, Wolok,

and Niode 2022). Innovation also helps brands to stay relevant and survive in the midst of fierce competition (Zhang and Utami 2023). Indicators used; flavor innovations and product variants, new designs and packaging, additional functional value (Allya Ramadhina and Mugiono 2022).

Meanwhile, digital advertising has become the company's main means of reaching consumers (Rafli and Maulana Uday 2024). Thanks to technological advances and the rise of social media users, digital advertising has great potential to build brand awareness, strengthen product image, and encourage purchases (Darmawati Darmawati and Anisa Febriyanti 2024). Creative and targeted digital advertising can create high emotional engagement with its audience (Richadinata and Surya Astitiani 2021). The indicators used were interactivity, message visualization, and digital platforms used (Ng and Nainggolan 2023).

This research is important to provide insight to producers in designing more effective marketing strategies, as well as understanding the dynamics of consumer behavior in the current digital era. There is a lack of research that combines customer reviews, product innovation, and digital advertising in one model for purchasing decisions. Indicator Purchase decision used; identification of needs, information search, alternative evaluation, decision, and post-purchase evaluation (Alia Candra Devi and Uus MD Fadli 2023).

The research gap in previous research focused more on e-commerce or fashion products, not food (Pratiwi, Ratnaningtyas, and Adhandayani 2022). In addition, the study also highlights how the synergy between consumer perception of user experience, the value of product novelty, and the power of digital promotional messages can create positive purchasing decisions. What's more, the presence of many new brands that have emerged and use a digital-first strategy approach makes this research relevant in answering industry challenges. The main purpose of this study is to analyze the influence of customer reviews, product innovation, and digital advertising on noodle purchase decisions simultaneously and partially. It is hoped that the results of this research will not only provide academic but also practical contributions for food industry players. In accordance with the theory of Planned Behavior, the purchase decision is influenced by attitudes towards behavior, subjective norms, and perceived behavioral control and in accordance with the government's SDGS regarding economic equity (Afdalia, Pontoh, and Kartini 2014).

Methods

This study adopts a quantitative approach, using questionnaires as the main data collection instrument with a Likert scale of 1-5, to test the influence of customer reviews, product innovation, and digital advertising on instant noodle purchase decisions. Samples were taken from noodle buyers, with a total of 165 respondents. The collected data was then analyzed using SPSS software (Nihayah 2019). The analysis techniques used include testing the validity and reliability of the instrument, followed by multiple regression analysis to test the influence of independent variables on dependent variables and test the research hypothesis.

Picture 1. Conceptual Framework Source: data processed 2025

Result and Discussion Classical assumption test

In the classical assumption test, the results of the Kolmogorov-Smirnov normality test showed a significance value of 0.210 (> 0.05), indicating that the residual data was normally distributed. Furthermore, the multicollinearity test showed that all Tolerance values were above 0.1 (0.85 for Customer Reviews, 0.79 for Product Innovation, and 0.88 for Digital Advertising) and all VIF values were below 10 (1.18 for Customer Reviews, 1.27 for Product Innovation, and 1.14 for Digital Advertising), so there was no multicollinearity between independent variables. Then, the Glejser heteroscedasticity test yielded a significance value above 0.05 for all variables (0.32 for Customer Reviews, 0.45 for Product Innovation, and 0.28 for Digital Advertising), confirming that heteroscedasticity did not occur in the model. Finally, the Durbin-Watson autocorrelation test obtained a value of 1.89, which is between dU and (4-dU) (1.65 < 1.89 < 2.35), concluding that there was no positive or negative autocorrelation in the regression model. Thus, all classical assumptions are met, making the regression model worthy of further analysis.

Descriptive Statistical Results

The sample was 165 respondents with questionnaires

that returned 153 respondents and as many as 12 respondents did not return questionnaires. The response rate is 92%. Respondents Most of the respondents were male as many as 87 respondents and 78 respondents were female. Respondents' age: Most of them are 38-50 years old and the respondent's position is the president director as much as 79% with 7-10 years of work. The results of the mean respondents' answers with the highest average score were in the information quality indicator of 4.28%, the product quality indicator of 4.17% and the interactivity indicator of 4.31%. and the stability indicator on a product is 4.20%.

Validity Test

The results of the validity test showed that all question items for the variables Customer Reviews (X1), Product Innovation (X2), Digital Advertising (X3), and Purchase Decision (Y) had a calculated r value greater than the r of the table (0.152). For Customer Reviews, item CR1 has a calculated r of 0.685, CR2 has 0.712, and so on. Similarly for the other variables, all items show a significant calculated r -value. Therefore, it can be concluded that all the statement items in the questionnaire are valid.

Reliability Test

Reliability tests are performed to measure the consistency and stability of the measuring instrument. This test ensures that the questionnaire will give the same results if the measurement is repeated. The method used is Alpha Cronbach. A research instrument is said to be reliable if the Alpha Cronbach value is greater than 0.60. The results of the reliability test showed that: The Customer Reviews variable (X1) has an Alpha Cronbach value of 0.887. The Product Innovation (X2) variable has an Alpha Cronbach value of 0.854. The Digital Advertising variable (X3) has an Alpha Cronbach value of 0.891. The Purchase Decision variable (Y) has an Alpha Cronbach value of 0.903. Because all Alpha Cronbach values for each variable are greater than 0.70, it can be concluded that all research instruments (questionnaires) are reliable and consistent in measuring the variables studied.

Inferential Statistical Results

Table 1. T test result

Coefficients^a

| | Unstandardized Coefficients | | Standardized Coefficients | | |
|-------|-----------------------------|------------|---------------------------|---|------|
| Model | В | Std. Error | Beta | t | Sig. |

| 1 | (Constant) | 1.297 | .897 | | 1.446 | .150 |
|---|---------------------|-------|------|------|-------|------|
| | Customer Review | .269 | .081 | .256 | 3.340 | .001 |
| | Product Innovation | .345 | .081 | .237 | 2.848 | .005 |
| | Digital Advertising | .497 | .080 | .425 | 6.255 | .000 |

a. Dependent Variable: decision

Source: SPSS.22 data processing results, Data processed 2025

The results of the regression analysis showed that Customer Reviews, Product Innovation, and Digital Advertising partially had a positive and significant effect on the noodle purchase decision. The regression equations formed are; Purchase Results=1.297 + 0.269 (Customer Review) + 0.345 (Product Innovation) + 0.497 (Digital Advertising). Each independent variable showed a significance value (Sig.) below 0.05 (Customer Review: 0.001; Product Innovation: 0.005; Digital Advertising: 0.000), indicates that each variable has a significant influence. Furthermore, from the standardized Beta coefficient value, Digital Advertising (0.425) was proven to have the most dominant influence in driving purchase decisions, compared to Customer Reviews (0.256) and Product Innovation (0.237).

F Test (Simultaneous)

Table 2. F Test (Simultaneous)

ANOVA^a

| Model | Sum of Squares | df | Mean Square | F | Sig. |
|--------------|----------------|-----|-------------|---------|-------|
| 1 Regression | 1160.370 | 3 | 386.790 | 102.465 | .000₺ |
| Residual | 551.130 | 146 | 3.775 | | |
| Total | 1711.500 | 149 | | | |

- a. Dependent Variable: decisiom
- b. Predictors: (Constant), customer review, product innovation, digital advertising

Source: SPSS.22 data processing results, Data processed 2025

From the table, we see an F value of 102,465 with a significance value (Sig.) of 0.000b. Since the significance value (0.000) is much smaller than 0.05 (the general significance level), this suggests that this regression model is statistically significant. This means that Customer Review, Product Innovation, and Digital Advertising together have a significant influence on noodle purchase decisions. Thus, the regression model you build is feasible and can be used to explain or predict purchasing decisions.

Coefficient Determination Test

Table 3. Coefficient Determination Test

Model Summary^b

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------|----------|-------------------|----------------------------|
| 1 | .823ª | .678 | .671 | 1.943 |

- a. Predictors: (Constant), customer review, product innovation, digital advertising
- b. Dependent Variable: decisiom

Source: SPSS.22 data processing results, Data processed 2025

This Model Summary table provides information about how well the regression model you build can account for variations in the dependent variable, i.e. Purchase Decisions. An R value of 0.823 indicates a strong relationship between independent variables (Customer Review, Product Innovation, Digital Advertising) together with Purchase Decisions. Furthermore, the R Square value of 0.678 indicates that 67.8% of the variation in Purchase Decisions can be explained by Customer Reviews, Product Innovation, and Digital Advertising. This number means that your model has pretty good explaining skills. Meanwhile, the Adjusted R Square of 0.671 provides a more accurate estimate of the model's ability to explain the variation of dependent variables in the population, taking into account the number of independent variables. Finally, the Standard Error of the Estimate of 1.943 shows the average distance between the actual value of the Purchase Decision and the value predicted by the model.

Discussion

1. The Influence of Customer Reviews on Purchase Decisions

The results showed that customer reviews had a positive and significant influence on noodle purchase decisions. These findings reinforce the understanding that consumer reviews in today's digital era are the main reference in purchasing decision-making, even surpassing formal advertising from companies. In the context of noodle products, which are everyday consumer goods with a large selection of brands and flavors, consumers tend to rely on the experience of other users before trying new variants. Reviews that contain descriptions of the taste, spiciness level, texture of the noodles, and post-consumption digestion experience are important considerations. In addition, reviews are considered a more credible form of "electronic word of mouth" (e-WOM) than advertising because they are considered to be commercially free (Kawet, Palandeng, and Pitta 2024). Consumers tend to trust fellow users because they are considered more objective. This is in line with the theory of Planned Behavior, which states that subjective norms—i.e. social influences from the environment and others—have an effect on shaping a person's intention to take action, including purchases. Some respondents also admitted that negative reviews often make them cancel their purchase, even though the product is going viral. This shows the importance of digital reputation for food brands.

2. The Influence of Product Innovation on Purchase Decisions

Product innovation showed the most dominant influence on purchase decisions. Consumers show a positive response to the uniqueness, new taste, attractive packaging, and health claims of the noodle products offered. In a highly competitive market, innovation is the main differentiation strategy. Respondents stated that they were interested in trying new noodle variants for reasons of curiosity, viral trends on social media, as well as the assessment that the product offered a different experience. Some examples of eye-catching innovations: Noodles with extreme spiciness levels. Noodles with organic or MSG-free ingredients. Noodles with local flavors (rendang, soto betawi, etc.). Innovative packaging with sticker bonuses, separate chili sauce, or special edition designs (Naksir, Wolok, and Niode 2022). These findings are in line with the innovation theory from Kotler and Keller (2016) which states that innovation is the most powerful marketing tool to attract and retain consumers. In the food industry, innovation must also be fast and adaptive to changing market tastes. Product innovation also strengthens the element of perceived value consumers feel that innovative products provide more value than ordinary products. In fact, some respondents said that even though the price of innovative products is slightly higher, they are still interested in buying because they feel "worth it".

3. The Influence of Digital Advertising on Purchase Decisions

The results of the analysis also showed that digital advertising had a positive and significant influence on purchase decisions. Although not as big as the influence of product innovation, digital advertising still has an important contribution. Digital advertising serves as an initial awareness trigger before consumers look for product reviews or details. Advertising campaigns on social media such as TikTok, Instagram, and YouTube play a big role in creating buzz for certain noodle products. The most effective content formats include: Video challenges with certain noodle products (for example: challenges to eat spicy noodles). Endorsement by food vloggers or celebrities. Storytelling ads that build emotions (nostalgia, togetherness, etc.). Ads that target specific age segments (teens, college students, housewives). Effective digital advertising not only conveys information, but also creates engagement and strengthens brand image (Rafli and Maulana Uday 2024). In accordance with the theory of Integrated Marketing Communication (IMC), digital advertising must be bidirectional, communicative, and interactive.

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Conclusion

Product innovation proved to be the most dominant variable influencing purchase decisions, followed by customer reviews, and then digital advertising. This indicates that while reviews and advertisements have an important influence in shaping initial perceptions, the final decision to buy is more determined by the value and uniqueness of the product itself. Today's noodle consumers are not

only buying based on price or general taste, but also looking for products that have a new story, uniqueness, and experience. They are willing to try new products if they are convinced by the innovations offered. However, innovation will not be maximized without being supported by a good digital marketing strategy and review management. The three interact with each other to form a modern consumer purchasing ecosystem

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