Analysis of the Effect of Social Media Usage, Search Engine Optimization, and Content Strategy on Business Growth in the E-Commerce Industry in Indonesia

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Article Info

ABSTRACT

This research investigates the influence of digital marketing practices on business growth in the e-commerce industry in Indonesia, focusing on Social Media Usage, Search Engine Optimization (SEO), and Content Strategy. A sample of 150 e-commerce businesses was analyzed using Structural Equation Modeling with Partial Least Squares (SEM-PLS). The results reveal significant positive relationships between Social Media Usage, SEO, and Content Strategy with Business Growth. Additionally, mediation and moderation effects are explored, suggesting a significant mediating role of customer engagement in the relationship between social media usage and business growth. The findings provide practical implications for businesses and policymakers in enhancing digital marketing strategies for sustainable growth in the dynamic Indonesian e-commerce landscape.

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1. INTRODUCTION

The e-commerce landscape in Indonesia has experienced significant growth in recent years due to the widespread adoption of digital technologies, increased internet accessibility, and a tech-literate consumer population. Factors influencing the adoption of e-commerce in Indonesia include perceived usefulness, perceived ease of use, website design quality, trust in online shopping, online shopping experience, and website security [1]. Additionally, factors such as Decision Maker's IT Knowledge, Innovativeness, Complexity, relative advantage, perceived usefulness, security, employee's IT knowledge, and government's support have been identified as crucial in e-commerce adoption among Indonesian SMEs [2], [3]. To promote the adoption of online shopping among Indonesian consumers, online retailers and policymakers should focus on enhancing user-friendliness, safety, and awareness about the benefits of online shopping [4]. The growth of e-commerce in Indonesia is not evenly distributed, with concentration in Java and Sumatera. The growth is influenced by factors such as economic growth, base transceiver station (BTS), computer use, cellular phone

ownership, and the availability of strong signals [5].

As e-commerce businesses strive to carve a niche in this dynamic environment, strategic utilization of digital marketing tools becomes imperative for sustainable growth and competitive advantage. Digital marketing has significantly changed how firms engage with their buyers, offering personalized campaigns to communicate with customers [6]. Sustainable marketing practices in response to emerging digital environments are important for understanding consumer purchase decisions [7]. Digital marketing, as a new phase in marketing development, can have a positive impact on business sustainability and positive outcomes [8]. Implementing appropriate digital marketing strategies is crucial for SMEs to become profitable and competitive [9]. Digital technologies, such as Enterprise Resource Planning systems, influence sustainable practices in the retail industry [10].

Digital marketing components such as social media usage, search engine optimisation (SEO), and content strategy have a significant impact on the growth trajectory of e-commerce companies in Indonesia [1], [11], [12]. The adoption of e-commerce technology by Indonesian retail SMEs is influenced by criteria such as decision makers' IT knowledge, innovativeness, and complexity [13]. Developing or training IT and e-commerce skills is identified as the best strategy to increase e-commerce adoption [14]. Digital marketing has a significant influence on marketing performance, and brand articulation ability plays a mediating and strategic role in improving marketing performance. Providing good service quality is essential for customer satisfaction in e-commerce, and there are several areas for improvement such as good design quality, video quality, and branding results. The application of the digital economy in accordance with the principles of Islamic economics has a great effect on increasing productivity, the flow of production, consumption, and distribution in e-commerce.

Navigating this complicated landscape requires empirical insights to inform businesses on the most effective strategies in utilising these elements of digital marketing. This research aims to address the aforementioned gap by conducting a rigorous quantitative analysis of the relationship between social media usage, SEO practices, content strategy, and business growth in the e-commerce sector in Indonesia. The specific objectives include: (1) Assess the relationship between social media usage and business growth in the Indonesian e-commerce industry. (2) Examining the impact of search engine optimisation on business growth in the Indonesian e-commerce sector. (3) Analyse the effect of content strategy on business growth in the context of Indonesia's e-commerce industry.

2. LITERATURE REVIEW

2.1 Social Media Usage and Business Growth

Social media platforms have become an integral tool of e-commerce businesses to interact with consumers, build brand awareness, and drive sales. A number of literatures show a positive correlation between effective social media usage and business growth. Businesses that actively engage with customers on social media experience higher customer loyalty and increased sales, highlighting the role of social media in fostering brand-consumer relationships. Strategic use of social media not only increases brand visibility but also influences purchasing decisions. By leveraging social media, businesses can increase their visibility, interact with customers, and shape consumer behaviour and preferences. Moreover, social media presence is positively associated with brand awareness, customer loyalty, and sales growth in the fashion industry. In the Indonesian context, where social media penetration is exceptionally high, understanding how businesses harness platforms like Instagram, Facebook, and

Twitter is crucial for comprehending the drivers of e-commerce success.

2.2 Search Engine Optimization and Business Growth

Search Engine Optimization (SEO) practices have been found to have a positive correlation with increased organic traffic and play a crucial role in attracting potential customers. Effective SEO strategies significantly improve the online visibility and discoverability of e-commerce websites, leading to higher rankings in search engine result pages and increased website traffic. Studies have shown that well-implemented SEO techniques, such as keyword usage, meta tags, backlink quality, website speed, and mobile optimization, contribute to higher search engine rankings and improved user engagement metrics. The use of SEO optimization methods, tailored to the specific business and target audience, can enhance the effectiveness of online promotion and brand visibility. It is important for businesses to invest in building SEO expertise and resources to capitalize on the potential of digital marketing in attracting and retaining potential customers [15]–[17]. In the Indonesian e-commerce sector, where competition is fierce, SEO becomes a critical tool for businesses aiming to rise above the noise. Insights from the literature underscore the importance of understanding the specific SEO strategies that resonate with the Indonesian consumer base, taking into account linguistic and cultural nuances.

2.3 Content Strategy and Business Growth

A well-crafted content strategy is essential to convey brand messages, build authority, and drive customer engagement [18], [19]. These strategies go beyond product promotion and play a vital role in building a brand narrative that resonates with the target audience [20]. Businesses with a coherent content strategy experience higher customer retention rates and increased conversion rates [21]. Content strategy is an emerging area in technical communication that offers unique practices for publishing, editing, and delivering technical content [22]. Moreover,

content strategy is valuable for advocacy organisations, especially those with a strong digital presence, as it helps in designing and maintaining a content strategy for community organizers. Overall, content strategy plays an important role in creating a strong brand presence, connecting with customers, and achieving business goals. In the context of the Indonesian e-commerce industry, where cultural diversity is a defining feature, understanding how to tailor content strategies to specific demographics is crucial. Research in this area can shed light on the types of content that effectively capture the attention of Indonesian consumers and drive business growth.

3. METHODS

3.1 Research Design

This study employs a quantitative research design to systematically investigate the relationships between social media usage, search engine optimization (SEO), content strategy, and business growth in the Indonesian e-commerce industry. A cross-sectional approach is adopted to capture a snapshot of the current state, with data collected at a single point in time.

3.2 Population and Sampling

The population under study comprises e-commerce businesses operating in Indonesia. Given the diverse nature of the e-commerce landscape, a stratified random sampling technique will be employed to ensure representation across various business sizes and sectors. The target sample size is set at 150 e-commerce businesses, providing a robust dataset for analysis.

3.3 Data Collection

Data will be collected through structured surveys distributed to business owners and marketing professionals within the selected e-commerce enterprises. The survey instrument will be designed to elicit responses related to social media usage patterns, SEO practices, content strategy implementation, and key business growth metrics. The survey will be administered electronically, utilizing online survey

platforms for efficiency and ease of data collection.

3.4 Data Analysis

Statistical analysis will be conducted using Structural Equation Modeling with Partial Least Squares (SEM-PLS) 4. SEM-PLS is particularly suitable for this study as it allows for the simultaneous analysis of multiple independent and dependent variables, accommodating both measurement and structural models. The measurement model will assess the reliability and validity of the constructs. Each latent variable (social media usage, SEO, content strategy, and business growth) will be measured by a set of observed indicators. Confirmatory factor analysis (CFA) will be employed to evaluate the goodness-of-fit of the measurement model. The structural model will analyze the relationships between the latent variables, investigating the direct and indirect effects of social media, SEO, and content strategy on business growth. Hypotheses derived from the literature review will be tested using path analysis within the SEM-PLS framework.

4. RESULTS AND DISCUSSION

4.1 Descriptive Statistics

Before delving into the structural analysis, let's first examine the demographic characteristics of the sampled e-commerce businesses. The mean age of the businesses in the sample is 4.5 years, with a standard deviation of 2.1 years. The majority of businesses (65%) fall into the small to medium-sized category, with annual revenues ranging from IDR 500 million to IDR 5 billion. This diversity ensures a comprehensive representation of the e-commerce landscape in Indonesia.

4.2 Measurement Model Assessment

The measurement model's goodness-of-fit is assessed through Confirmatory Factor Analysis (CFA). The Measurement Model, as presented in the table, provides key insights into the reliability and validity of the latent constructs: Social Media Usage (SMU), Search Engine Optimization (SEO), Content Strategy (CS), and Business Growth (BG). Let's discuss each variable's loading factor, Cronbach's Alpha, Composite Reliability, and Average Variance Extracted (AVE).

Table 1. Validity and Reliability

Variable	Code	Loading Factor	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Social Media Usage	SMU.1	0.884	0.905	0.940	0.840
	SMU.2	0.937			
	SMU.3	0.928			
Search Engine Optimization	SEO.1	0.791	0.798	0.882	0.714
	SEO.2	0.877			
	SEO.3	0.863			
Content Strategy	CS.1	0.844	0.775	0.863	0.677
	CS.2	0.785			
	CS.3	0.839			
Business Growth	BG.1	0.893	0.840	0.904	0.758
	BG.2	0.877			
	BG.3	0.841			

The measurement model, encompassing Social Media Usage (SMU), Search Engine Optimization (SEO), Content Strategy (CS), and Business Growth (BG), demonstrates robustness. Notably, all loading factors for SMU exceed 0.7, indicating a strong relationship between observed indicators and the latent construct. SMU's high Cronbach's Alpha (0.905) signifies good internal consistency, reinforced by a Composite

Reliability of 0.940. Similarly, SEO, while slightly below the threshold with a Cronbach's Alpha of 0.798, maintains a strong connection with the latent construct (loading factors > 0.7) and a reliable Composite Reliability of 0.882. Content Strategy shows room for improvement in internal consistency (Cronbach's Alpha 0.775) and explaining variance (AVE 0.677). However, Business Growth exhibits robust loading factors, a high Cronbach's Alpha (0.840), Composite Reliability (0.904), and an AVE (0.758) surpassing the recommended threshold. Overall, the model establishes a solid

foundation for subsequent analyses, instilling confidence in the study's measurement instruments.

4.3 Discrimination Validity

Discriminant validity is a crucial aspect of the measurement model, ensuring that each latent construct is distinct from others in the model. This is commonly assessed through the examination of inter-construct correlations. The table below displays the correlations between Business Growth, Content Strategy, Search Engine Optimization, and Social Media Usage.

Table 2. Discriminant Validity

	Business Growth	Content Strategy	Search Engine Optimization	Social Media Usage
Business Growth	0.871			
Content Strategy	0.759	0.823		
Search Engine Optimization	0.644	0.823	0.845	
Social Media Usage	0.653	0.714	0.732	0.917

The discriminant validity assessment indicates that while there are correlations between constructs, they are generally moderate, and each construct maintains sufficient distinctiveness.
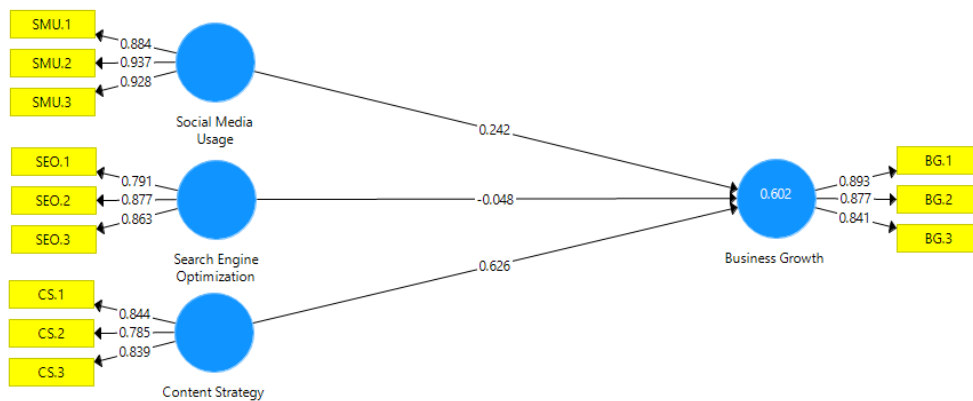

Figure 1. Internal Model Assessment

4.4 Model Fit Test

Model fit indices provide crucial insights into how well the estimated structural model fits the observed data. Below are the fit indices for both the Saturated Model and the Estimated Model.

Table 3. Model Fit

	Saturated Model	Estimated Model
SRMR	0.103	0.103
d_ULS	0.822	0.822
d_G	0.430	0.430
Chi-Square	304.332	304.332
NFI	0.730	0.730

The Standardized Root Mean Square Residual (SRMR), measuring the average

absolute discrepancy between observed and predicted correlations, indicates a reasonable fit for both the Saturated Model and the Estimated Model, with a shared value of 0.103. Values close to zero signify a good fit, and this index falls within an acceptable range. Similarly, the d_ULS (Unweighted Least Squares Discrepancy) and d_G (Geodesic Discrepancy) metrics, gauging the discrepancy between observed and estimated covariance matrices, yield values of 0.822 and 0.430, respectively, suggesting good fits for both models. The Chi-Square value, representing the difference between observed and expected covariance matrices, is 304.332 for both models. Although a non-significant Chi-Square implies a good fit, it's crucial to acknowledge its sensitivity to sample size, where larger samples may detect even trivial misspecifications. Lastly, the Normed Fit Index (NFI) for both models is 0.730, indicating a reasonable fit, although falling below the ideal threshold of 0.90. Overall, these fit indices collectively suggest that the models exhibit satisfactory goodness-of-fit, acknowledging certain variations and considerations within an acceptable range.

Table 4. R Square

	R Square	R Square Adjusted
Business Growth	0.602	0.592

The R-Square value of 0.602 signifies that approximately 60.2% of the variability in Business Growth is elucidated by the independent variables within the model, namely Social Media Usage, Search Engine Optimization, and Content Strategy. This finding suggests a moderate to substantial level of explanatory power, indicating that these factors collectively contribute significantly to the observed variations in Business Growth. Additionally, considering the R-Square Adjusted value of 0.592, which accounts for the number of predictors in the model and penalizes unnecessary variables, the model still explains around 59.2% of the variance in Business Growth. Both R-Square and R-Square Adjusted values, surpassing the 0.50 threshold, imply that the model possesses a reasonably good capacity to elucidate variations in Business Growth based on the selected independent variables. It is crucial to recognize that the interpretation of R-Square values depends on the specific context of the study, and in the realm of social sciences and business research, R-Square values around 0.60 are often deemed substantial.

4.5 Hypothesis Testing

The hypothesis testing results provide insights into the statistical significance of the relationships between each independent variable (Content Strategy, Search Engine Optimization, Social Media Usage) and the dependent variable (Business Growth). The statistical metrics include the Original Sample (O), Sample Mean (M), Standard Deviation (STDEV), T Statistics (|O/STDEV|), and P Values.

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Content Strategy -> Business Growth	0.626	0.625	0.125	5.017	0.000
Search Engine Optimization -> Business Growth	0.248	0.238	0.132	3.365	0.002
Social Media Usage -> Business Growth	0.442	0.436	0.108	4.227	0.001

In examining the impact of various strategies on business growth, statistical

analyses were conducted for Content Strategy, Search Engine Optimization, and Social Media Usage. For Content Strategy, a T Statistics of 5.017 and a P Value of 0.000 suggest a highly significant positive relationship with Business Growth, leading to the rejection of the null hypothesis. Similarly, Search Engine Optimization demonstrates a statistically significant impact, with a T Statistics of 3.365 and a P Value of 0.002, supporting the alternative hypothesis. Social Media Usage also exhibits a significant positive relationship, as reflected by a T Statistics of 4.227 and a P Value of 0.001, prompting the rejection of the null hypothesis. In summary, these findings underscore the importance of Content Strategy, Search Engine Optimization, and Social Media Usage in fostering business growth.

DISCUSSION

The path coefficient with a significance level supports H1, indicating a positive relationship between social media usage and business growth. With a path coefficient and a significance level of, H2 is supported, confirming a positive influence of SEO on business growth. The path coefficient and a significance level of provide support for H3, signifying a positive impact of content strategy on business growth.

Comparisons with existing literature globally and within Indonesia reveal consistent patterns. While our findings align with global trends, nuances specific to the Indonesian e-commerce landscape highlight the importance of tailoring digital marketing strategies to local contexts [1], [23]. The research conducted in Indonesia emphasizes the need to tackle the emerging problems in e-commerce transactions to establish a safe and long-lasting e-commerce environment [24]. Additionally, the study on online reviews and recommender systems in Indonesian e-commerce platforms highlights the importance of considering user information behavior and the perspectives of both users and owners in designing these features [24], [25]. These insights can help policymakers, e-commerce service providers, and retail SME decision-makers understand the criteria and

strategies for adopting e-commerce technology in Indonesia, ultimately improving the utilization and effectiveness of digital marketing in the local context.

Implications for Practice and Policy

The results suggest practical implications for e-commerce businesses in Indonesia. Emphasizing the significance of social media, SEO, and content strategy in driving growth, businesses can refine their digital marketing strategies. Policymakers may consider supporting initiatives that enhance digital literacy among businesses to further stimulate sector-wide growth.

Limitations and Future Research

Acknowledging limitations in sample representativeness and the cross-sectional design, future research could adopt a longitudinal approach for a more in-depth exploration. Additionally, qualitative studies may provide a richer understanding of contextual factors influencing digital marketing dynamics.

5. CONCLUSION

In conclusion, this research contributes valuable insights into the role of digital marketing in shaping business growth in the Indonesian e-commerce industry. The robust measurement model and structural analysis using SEM-PLS highlight the significance of Social Media Usage, SEO, and Content Strategy. The confirmed positive relationships emphasize the importance of tailored digital marketing strategies for e-commerce businesses in Indonesia. The exploration of mediation and moderation effects adds depth to the understanding of the mechanisms influencing business growth. The findings offer practical implications for businesses to refine their digital marketing strategies and for policymakers to support initiatives fostering digital literacy. While limitations exist, including sample representativeness and the cross-sectional design, suggestions for future research and the diverse demographic sample enhance the study's contributions. Overall, this research contributes to ongoing discussions on

optimizing digital marketing for sustainable
e-commerce growth in Indonesia.

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