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Entrepreneurs' competency, marketing innovation, and enterprise growth: uncovering the mediating role of marketing innovation

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Abstract

Despite their large numbers, the vertical growth of micro, small, and medium enterprises (MSMEs) is not readily apparent, even though they have a substantial impact on Ethiopia's economy. Earlier studies have underscored enterprise-related factors as hindrances to the expansion of MSMEs. However, entrepreneurs are blamed for their limited practice of innovative marketing that the researchers wanted to verify whether marketing innovation can positively influence the growth of MSMEs in Ethiopia. Therefore, the major objective of the study was to examine the effect of competency and marketing innovation on the growth of MSMEs in the Ethiopian business environment taking marketing innovation as a mediating variable. To collect data, researchers used a stratified random sampling technique and obtained data from 288 owner–managers of micro, small, and medium enterprises. The results of the study revealed that competency has a significant direct effect on enterprise growth. However, the study also found that the effect of competency on innovation and the effect of innovation on enterprise growth were not statistically significant. These findings suggest that competency directly influences the growth of enterprises, while the impact of innovation on growth is not evident in the context of Ethiopian enterprises. The negligible impact of competency on marketing innovation, coupled with the minimal effect of marketing innovation itself, suggests that entrepreneurs may not be prioritizing the adoption of innovative marketing strategies, assuming they can sell their existing products. However, such an approach is typically short-sighted and could leave the business exposed to future vulnerabilities. This study adds to the body of knowledge by indicating that marketing innovation does not mediate between competency and the growth of MSMEs. Instead, it is the competency of entrepreneurs that has a direct and exclusive impact on growth.

Keywords Entrepreneurs competency, Marketing innovation, Enterprise growth, MSMEs in Ethiopia

Introduction

The importance of micro, small, and medium enterprises is unequivocally evident, and enterprises' growth needs to be reinforced to generate "sufficient" employment [1]. Moreover, it is important to find out determinant factors of MSMEs' growth as their development is essentially important to examine their spillover effect on economic development. Nevertheless, the most commonly reported determinants of MSMEs' growth are either factors related to owner–managers or the characteristics of enterprises. For example, Sarwoko and Frisdiantara [2] found that growth is determined by the characteristics of the owner/manager. In the study, the personal attributes of the owner–manager in terms of age and gender are pronounced. Similarly, Meressa [3] and Esubalew and Raghurama [4] mentioned factors that influence the growth and survival of enterprises

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as beginning investment, company location, business experience, education, and access to finance.

Although owners/managers competencies are important for the growth of enterprises as reported by Mishra and Deshpande [5] and Mitchelmore and Rowley [6], it is equally important to study the spillover effect of the competencies on the growth of enterprises via improvisation and innovation of marketing practices. In this regard, however, there is insufficient literature that documented the effect of competency on enterprise growth through the use of marketing innovation as a mediator. According to the work of Audretsch et al. [7], there exists an association between innovation and growth. However, it is also argued that the relationship could vary based on the characteristics of the firm, the market considered, and the area where the firm is located. Although our focus is marketing innovation, innovations could be process innovation or product innovation, and the effect could vary accordingly [8]. Hunt and Morgan [9] described marketing innovation strategies as organizations' dedication to new or considerably better marketing tactics that allow them to use their resources efficiently to fulfill consumer demand and produce higher customer value.

Audretsch et al. [7], Fritsch and Meschede [8], and Naidoo [10] considered innovation as a positive factor for the growth of firms. Nevertheless, Coad et al. [11] claimed that investing in innovation is significantly riskier for young firms compared to mature ones which suggests young firms undertake riskier innovation activities which may have greater performance benefits if successful, or greater losses if unsuccessful. The success of the innovation activity to bring growth would again depend on other internal and external factors. Moreover, Demirel and Mazzucato [12] claimed that innovation has a significant negative effect on the growth of large firms if they decline their Research and Development (R&D) tasks. The study highlights that while innovation can spur growth in small firms with consistent patenting, it may negatively affect large firms, possibly due to their declining R&D productivity. Thus, consistent R&D and patenting are essential for firms to enjoy the benefit of innovation to growth.

Despite the availability of findings that support innovation as a positive factor for firm growth, some evidence claims the negative effect of innovation on young firms that left the field of study unformed [12]. According to Sarwoko and Frisdiantara [2] and Naidoo [10], the characteristics of each firm are the main determinants of how innovation influences their growth. Thus, the impact of innovation may depend on the skills and abilities of the entrepreneurs, which is an underexplored topic in the literature [7, 13].

Innovation can be categorized into many types, and the effect of the specific innovation on the growth and performance of firms could vary. According to YuSheng and Ibrahim [14], the type of innovation is categorized into organizational, product, process, and marketing innovations. However, for the study at hand, we emphasized exploring the mediating effect of marketing innovation on the association between entrepreneurs' competency and the growth of MSMEs. Edeh et al. [15] conducted a study and explored the impact of different types of innovations on the export performance of SMEs in Nigeria. According to the study, export performance is negatively influenced by product innovation, while it is positively impacted by process and marketing innovations. Although the concept of marketing innovation is relatively new, few pieces of research are available. For example, Jung and Shegai [16] found that marketing innovation has a direct and indirect effect on firm performance. Regarding the mediating effect of innovation, Kamuri [17] claimed that innovation does not mediate the association between competency and enterprise performance. Taleb et al. [18] also conducted a study and found that entrepreneurial resources can significantly affect innovation capability.

Despite its insufficiency, few literatures reported a controversial finding about the role of innovation that needs further explanation. Addressing this gap may aid entrepreneurs in effectively implementing innovative marketing strategies, preventing them from being criticized for not utilizing such approaches. By investigating how competency influences marketing innovation, we would gain deeper insights into how enterprises can maintain a competitive edge. Furthermore, marketing innovation is believed to act as a mediator, potentially accelerating the positive impact of entrepreneurs' competency on MSME growth. Consequently, this research holds both practical and theoretical significance, and in practical terms, MSME owners can leverage these findings to optimize their marketing strategies and adapt to market dynamics. From a theoretical standpoint, researchers would gain valuable insights into the intricate relationship between competency, marketing innovation, and overall growth of MSMEs. Thus, researchers wanted to further explore whether marketing innovation influences growth and plays a mediating role between competency and the growth of MSMEs. The general objective of the study is, therefore, to investigate the direct effect of competency and the mediating effect of marketing innovation on the relationship between competency and growth. In line with the general objective, the researchers set specific objectives as follows:

1. To investigate the effect of entrepreneurial competency on enterprises' growth.
2. To analyze the role of marketing innovation on the growth of enterprises.
3. To examine the effect of entrepreneurs' competency on marketing innovation.
4. To analyze the mediating effect of marketing innovation on the relationship between entrepreneurs' competency and MSME growth.

The forthcoming sections of this study are structured as follows: "Review of literature" section delves into a comprehensive analysis of previous research focusing on the competencies of entrepreneurs, marketing innovation, and growth of MSMEs along with the appropriate theoretical lens and hypotheses derived from the literature review. "Methods and materials" section presents methods and material that explain sample size, variable identification, instruments and items used for the study, validity, reliability, and diagnosis test of appropriate assumptions. "Results and discussion" section explains the results and discussion. In this section, the direct effect of entrepreneurs' competency and marketing innovation on the growth of MSMEs, and the mediated effect of marketing innovation on the association between entrepreneurs' competency and growth of MSMEs are well explained. Moreover, the discussion and triangulation of results with the prior findings is done in "Results and discussion" section. Finally, "Conclusion and implications" section explains the conclusion and implications. In this section, the practical implications, the theoretical contribution, and suggestions for future research direction, and contextual limitations are presented.

Review of literature

The researchers employed the resource-based perspective as a theoretical lens to investigate the role of competency on firm growth. As advocated by Wernerfelt [19], the resource-based view concept emphasizes that the capabilities and resources of a business can better determine its growth. According to the theory's philosophical standpoint, if competitors easily duplicate a firm's resources, then sustaining competitive advantage cannot be gained. The possession of competence implies that a firm has a higher level of expertise and skill in one or more specific areas than its competitors, resulting in a competitive advantage [20]. However, there are critics of the resource-based view. For example, Stinchcombe [21] argued that the theory overlooks resource-related factors and lacks guidance on the crucial examination of capability acquisition. However, we still prefer the resource-based view as we are measuring the effect of available competencies on growth of enterprises. As it is noted by Barney [22], firms' capacity to produce or acquire valuable resources influences their performance and competitiveness. Thus, enterprises that possess unique and non-imitable resources and capabilities could be better off [23]. MSMEs possess different resources and capabilities in their entrepreneurial endeavor [24]. Because these resources and capabilities are so distinctive, they serve as barriers against the fierce competition for MSMEs that the resource-based view is an appropriate theoretical base for the study and the resource-based view can be applied to MSMEs [23, 25].

Storey and Greene [26] defined the owner–manager competency as the ability to prepare plans. Kearney et al. [27] identified five competencies of entrepreneurs such as: leadership, strategic thinking, problem-solving, and people relationships. Cruz-Ros et al. [28] and Phelan and Sharpley [29] proposed six competencies: opportunity, relationship, conceptual, organizing, strategy, and commitment. Kyguolienė and Švipas [30] listed ten competencies: opportunity seeking, persistence, commitment, risk-taking, demand for efficiency, goal seeking, information seeking, systematic planning, persuasion, and self-confidence. Considering competencies and capabilities as resources that are not easily copied, the researchers considered entrepreneurial competency as one of the essential resources required for the growth of enterprises. Thus, the competency of owner–managers that is hard to imitate could be a very important capability that can help to initiate and strengthen marketing innovations to bring growth to enterprises.

An empirical study conducted by Sakib et al. [31] reveals that certain dimensions of entrepreneurial competency have no impact, while others significantly contribute to growth. Specifically, the study highlights that competencies related to organizing and leading, learning, relationship-building, and commitment exhibit significant effects, whereas strategic and opportunity-related competencies do not. To further the empirical study and derive hypotheses from the literature, the researchers reviewed literature related to "the effect of entrepreneurs" competency on marketing innovation, the effect of marketing innovation on the growth of MSMEs, the effect of entrepreneurs' competency on growth, and the mediating role of marketing innovation as follows.

Effect of entrepreneurs' competency on marketing innovation

A study conducted by Cruz-Ros et al. [28] revealed that firms are incentivized to engage in marketing innovation due to the fear of failure. In the study, entrepreneurial competency was taken in terms of "perceived opportunities," "perceived capabilities," "entrepreneurial intentions," and "fear of failure." However, Phelan and Sharpley [29]

identified different kinds of entrepreneurs' competencies including opportunity-related, relationship-related, conceptual-related, organizing-related, strategy-related, and commitment-related competencies. Both studies reported that competency has a positive effect on innovation. Moreover, the study conducted in the case of the Indonesian footwear industry showed that competency has a positive effect on innovation capability [32]. Besides, Umar et al. [33] reported a positive and significant relationship between entrepreneurial competencies and innovation. As revealed in the study, entrepreneurs who are competent and abled are motivated to innovate. Moreover, the study conducted by Taipale-Erävala et al. [34] discovered that enterprises that can successfully exploit and execute innovations are those that are led by entrepreneurs with "special extrovert competencies." Kearney et al. [27], in their study, argued that companies should be assisted in developing the capabilities of their managers that can make them innovative. Moreover, the study conducted by Ozbag et al. [35] in Kocaeli, Turkey, reported a positive association between capabilities and innovation. Likewise, the study conducted by Alam et al. [36] witnessed how innovative marketing could be triggered if entrepreneurial skills are established. In countries like Ethiopia, entrepreneurs are blamed for a lack of innovative marketing practices, as they have no problem selling what they produce due to the gap between the supply and demand of goods and services [37]. However, based on the review of the literature, we presumed that competency is an essential element for entrepreneurs to be innovative, and the first hypothesis is formulated as follows:

H_1 Entrepreneurs' competency has a significant effect on the marketing innovation.

Effect of marketing innovation on MSMEs growth

The literature review on the effect of marketing innovation on the growth of MSMEs witnessed a mixed empirical finding that innovation has both positive and negative effects. Audretsch et al. [7], Fritsch and Meschede [8], and Naidoo [10] claimed that the effect of innovation on the growth and performance of enterprises is positive. However, Coad et al. [11] reported the negative effects of innovation on young firms. Moreover, Edeh et al. [15] conducted a study and found that export performance is negatively influenced by product innovation, while it is positively impacted by process and marketing innovations that implies the effect could vary depending on the type of innovation we deal with. According to Coad and Rao [38], the role of innovation on company growth is witnessed in fast-growing enterprises, but it can be detrimental to others. Though the general empirical evidence tells us the effect of innovation on growth as claimed by Audretsch et al. [7], the characteristics of firms, the market, and the geographical area could influence the effect.

In addition to what is claimed by Audretsch et al. [7] for the causes of mixed effect, the dimensions of firm growth could have conceptual disparity that researchers do not usually use similar attributes to measure growth. For example, according to Coad et al. [11], enterprise growth is explained in terms of "sales growth," "productivity growth," and "employment growth." However, Stenholm and Toivonen [39] considered enterprise growth only as the growth in the number of employees. Because innovation is a different kind and has different effects on the attributes mentioned, reporting a mixed effect could be expected. Thus, Coad and Rao [40] reported a positive effect of product innovation on labor, while process innovation harms labor in manufacturing firms. In addition to the usage of different attributes to measure the predictor and the outcome variables, the mixed results in the literature can be attributed to the fact that research on the link between innovation and growth is still in its early stages which seeks the attention of researchers. Despite the mixed reports on the effect of innovation on growth, we hypothesized that marketing innovation could help enterprises for the growth of employment and sales assuming innovative marketing could lead to increased sales and other attributes. Thus, we formulated the second hypothesis as follows:

H_2 The effect of marketing innovation on the growth of MSMEs is significant.

Effect of entrepreneurs' competency on the growth of firms

The effect of competency on firm growth is customarily expected to be positive as per the resource-based view. The more capable the entrepreneurs are, the better the growth of their enterprises will be. However, depending on the attributes used for competency, the result could be different. For instance, the study conducted by Tehseen et al. [41] revealed that strategic and ethical competencies do not affect growth which implies competency is not necessarily a significant positive factor. In addition, Sakib et al. [31] argued that certain dimensions of entrepreneurial competency have no impact, while others significantly contribute to outcomes. Despite the existence of controversial findings that require further study, we presumed the positive effect and formulated the third hypothesis as follows:

H_3 The effect of entrepreneurs' competency on the growth of MSMEs is positive and significant.

The mediating effect of marketing innovation

Although innovation has several categories as noted by Fritsch and Meschede [8], process and product innovation are claimed to mediate the relationship between competency and business performance. According to Danzen's [42] findings, the influence of marketing innovation on sustainable competitive advantage is mediated by product and price innovation. Because the mediating effect of marketing innovation on the association between entrepreneurs' competency and MSMEs growth is not well documented in the literature, entrepreneurs are unaware of whether to invest in innovation to grow their enterprises or not. To shed light on this, we formulated the fourth hypothesis as follows:

H_4 Marketing innovation has a significant mediating effect on the relationship between entrepreneurs' competency and MSME growth.

Briefly, prior studies have divergent views on the dimensions of entrepreneurs' competency that require further attention. In addition, more study is required to document the intervening role of marketing innovation on the association between competency and MSMEs growth for owners/managers to make informed decisions about innovative marketing and invest in core competencies that can improve the growth of enterprise. Based on the review of the literature and hypotheses formulated, Fig. 1 presents the hypothesized conceptual framework of the study.

Methods and materials

Variables definitions and measures

Given that the majority of enterprises in Ethiopia fall into the micro-category, it becomes crucial to identify factors that can propel them to the next level. Researchers have pinpointed entrepreneurs' competency and innovative marketing practices as pivotal drivers for growth. Consequently, these two variables—competency and marketing innovation—stand out as areas of interest. Studying entrepreneurs' competency, marketing innovation, and MSMEs growth in Ethiopia is essential to fostering economic development, creating job opportunities, driving innovation and competitiveness, and reducing poverty. To measure these latent variables, researchers consulted prior studies. Therefore, the measured variables used to measure entrepreneurs competency are "opportunity seeking," "persistence," "commitment," "risk-taking," "demand for efficiency," "goal seeking", "information seeking," "systematic planning," "persuasion," and "self-confidence" [28–30]. In addition, m*arketing innovation* is measured in terms of a new method of promotion, a new method of sales valuation, a change in the esthetic design of products, and a change in packaging [43]. Likewise, MSME *growth* is measured in terms of sales growth, productivity growth, and employment growth [39]. Accordingly, sales growth in terms of volume and value, the productivity of labor and material, and employment of contract and permanent workers were measured variables considered for growth. Based on the measured variables adopted from the literature, the researchers developed a data collection instrument, and the validity is maintained as explained in the diagnosis test and model fit section.

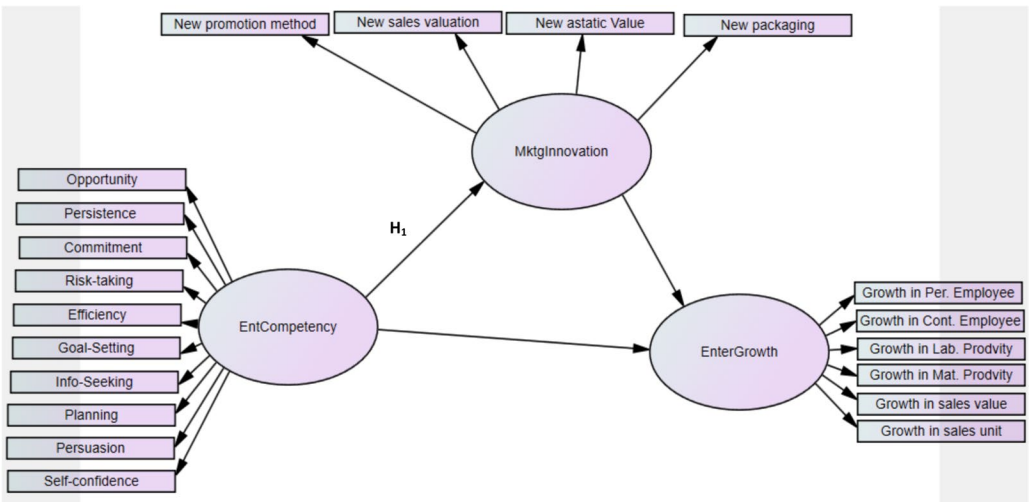

Fig. 1 Conceptual framework. *Source*: Created by authors

Context and sampling

Like other developing nations, micro- and small Enterprises predominantly institute the Ethiopian business environment, and these enterprises are viewed as one of the main actors in economic growth, employment creation, and social cohesion [4]. Entrepreneurs in Ethiopia are usually blamed for a lack of innovative marketing strategies that they are using traditional old-fashioned marketing practices. Thus, the researchers aimed to investigate whether marketing innovation has some value to the growth of MSMEs explained in terms of sales growth, productivity growth, and employment growth. Data were collected from owners/managers of MSMEs in Ethiopia using a stratified random sampling technique using each micro, small, and medium sizes as a stratum.

In the Ethiopian context, micro-enterprises are defined as "enterprises having a total capital excluding buildings not exceeding Birr 50,000 in the service sector or not exceeding Birr 100,000 in the manufacturing sector and engaging five workers including the owner." In the same way, small enterprises are defined as enterprises having a total capital excluding building from Birr 50,001 to Birr 500,000 in the case of service sector or Birr 100,001 to Birr 1,500,000 in the case of non-service sector and engage 6–30 workers including the owner. Medium enterprises are enterprises having a total capital, excluding building, of Birr 1,500,001 to Birr 20,000,000 and engage employees of 30–100 [4].

The data were collected from March 2023 to April 2023. The appropriate data from the target sample element are obtained using Slovin's [44] formula for the target population of 1,529,113 MSMEs. To determine the sample size, we chose a 5% margin of error as it is commonly chosen due to its balance between precision and practicality [45].

$$n = N \Big/ \left(1 + N * e^2\right)$$

For the target population stated above, n is calculated as $1{,}529{,}113/(1 + 1{,}529{,}113{*}0.05^2)$, and the sample size was determined as 399.88 which is approximately equal to 400 MSMEs. From the distributed 400 questionnaires, the researchers were able to get 288 questionnaires field in good order and ready for analysis. The response rate is acceptable as the data sufficiency is established with the acceptable value of KMO and Bartlett's Test of Sphericity. The statistical tools utilized in this study were the Statistical Package for Social Science (SPSS) and the Analysis of Moment Structure (AMOS) Version 22.

Diagnosis tests and model fit measures

To test the reliability of the data, we used Cronbach's alpha reliability statistics, and the value measured for 20 variables is 0.831 which is above the threshold of 0.70 [46].

In addition to the reliability statistics, we made a diagnosis test of convergent and discriminant validity. From the 20 measured variables grouped under the three latent factors, we removed some of the measured variables due to validity concerns. Accordingly, from the 10 dimensions of entrepreneurs' competency, we removed four variables, namely opportunity, planning, persuasion, and self-confidence, and from the MSMEs growth factor, we removed three variables namely, growth in contract employees (Growth 2), growth in productivity of labor (Growth 3), and growth in productivity of materials (Growth 4). Thus, the convergent and discriminant validities' concerns are resolved, and a clean pattern matrix is produced. In addition to the reliability and validity tests, we checked the data sufficiency with the KMO and Bartlett's Test of Sphericity. The KMO is 0.792 which indicates the data sufficiency for factor analysis. Thus, we can get a clean pattern matrix as shown in Table 1.

As shown from the clean pattern matrix, convergent validity (loading on a single factor) and discriminant validity (no cross-loadings) are satisfied. Because we collected data for both dependent and independent variables from the same respondents at a time, we ran a common method bias test using Harman's single factor score method. According to this method, common method bias does not affect the data when the total variance for the single factor is less than 50% [47]. For the data at hand, we took all the items that measured latent variables and loaded them in a single factor. The result indicated that only 33.709% of the variance could be explained. Therefore, no common method bias was observed.

To identify any influential outliers in the data, researchers performed a Cook's distance analysis using SPSS. No case exhibited a Cook's distance greater than one, as per Walfish [48]. The majority of cases were significantly less than Cook's distance of 0.02459, suggesting the absence of influential outliers. As per Hair et al. [49], multicollinearity is assessed using the Variance Inflation Factor (VIF), with a VIF value below 4 indicating no significant concern regarding multicollinearity. For this study, the larger VIF result is 3.369 which is less than the threshold of 4, and there is no multicollinearity problem.

To improve the model fit, we draw a covariance between e_3 and e_6 and between e_4 and e_6 based on modification indices, and using AMOS plugins, we run the model fit, and the model is acceptable [46, 50] (Table 2).

Table 1 Rotated clean pattern matrix. *Source*: Created by authors

	Component		
	Entrep. competency	**Marketing innovation**	**MSMEs growth**
Goal setting	0.887		
Persistence	0.882		
Commitment	0.834		
Risk-taking	0.833		
Information seeking	0.830		
Efficiency	0.684		
Marketing innovation 4		0.871	
Marketing innovation 1		0.816	
Marketing innovation 3		0.635	
Marketing innovation 2		0.567	
Growth 5 (increase in sales value)			0.817
Growth 6 (increase in sales units)			0.793
Growth 1 (increase in permanent employees)			0.669

Extraction method: principal component analysis

Rotation method: Varimax with Kaiser normalization

Rotation converged in four iterations

Table 2 Model fit measures. *Source*: Created by authors

Measure	Estimate	Threshold	Interpretation
CMIN	146.352	–	–
DF	60	–	–
CMIN/DF	2.439	Between 1 and 3	Excellent
CFI	0.947	> 0.95	Acceptable
SRMR	0.053	< 0.08	Excellent
RMSEA	0.071	< 0.06	Acceptable
PClose	0.010	> 0.05	Acceptable

Results and discussion

In this section, the result of the descriptive analysis for some variables and the inferential analysis related to direct and mediated effects using exploratory factor analysis, confirmatory factor analysis, and structural equation modeling are presented.

To analyze the descriptive statistics of the measured variables under each factor, we ran descriptive statistics and explained as per the Likert scale mean score interpretation of 1.0–2.4 (low), 2.5–3.4 (Neutral), and 3.5–5.0 (high) [51, 52]. As shown in Table 3, the groups' mean scores of variables for entrepreneurs' competency, MSMEs growth, and marketing innovation are 3.44, 3.38, and 3.07, respectively. The result indicates that the mean score of all dimensions under each factor is above the median/Neutral point. Relatively, the score of marketing innovation is low which indicates entrepreneurs are not giving due attention to innovative marketing practices due to different reasons.

Table 3 Descriptive statistics. *Source*: Created by authors

	N	Mean	Std. deviation
Persistence	288	3.54	0.957
Commitment	288	3.57	0.828
Risk-taking	288	3.10	0.984
Efficiency	288	3.86	0.858
Goal setting	288	3.24	1.024
Information seeking	288	3.33	0.981
Entrepreneurs' competency mean		**3.44**	
Growth 1 per. employees	288	3.80	1.142
Growth 5 sales value	288	3.27	1.391
Growth 6 sales unit	288	3.08	1.361
MSMEs growth mean		**3.38**	
Marketing innovation 1	288	3.15	1.206
Marketing innovation 2	288	2.90	1.153
Marketing innovation 3	288	2.95	0.930
Marketing innovation 4	288	3.27	1.063
Marketing innovation mean		**3.07**	
Valid *N* (listwise)	288		

The numbers highlighted in bold represent the overall average for each underlying variable

Direct effect

In addition to the descriptive analysis done for the measured variables, researchers ran inferential analysis related to direct and mediated effect analysis. The direct influence of one variable on another can be quantified by maintaining all intervening variables constant, as explained by Pearl [53] and Judea [54]. In this case, researchers analyzed the direct effects of entrepreneurs'

competency on marketing innovation, the direct effect of marketing innovation on the growth of MSMEs, and the direct effect of entrepreneurs' competency on MSMEs' growth. The result that shows the direct effect of variables is presented in Table 4.

The unstandardized coefficient of entrepreneurs' competency for marketing innovation is −0.040 which represents the partial effect of entrepreneurs' competency on marketing innovation, holding other variables constant. This coefficient value is not different from zero as the *p* value is greater than 0.05. The implication of the insignificant effect suggests that while individual entrepreneurial competency does not directly derive innovation in marketing efforts in Ethiopia, the insignificant effect of competency on marketing innovation refutes the study reported by Cruz-Ros et al. [28], Pranowo et al. [32], Taipale-Erävala et al. [34], Kearney et al. [27], and Ozbag et al. [35]. Although the area needs further research, the insignificant effect of entrepreneurs' competency on marketing innovation implies that the competency of entrepreneurs may not directly translate into the ability to drive marketing innovation within the organization. Marketing innovation requires a specific set of skills and knowledge related to market research, consumer behavior, and strategic marketing techniques that may not be fully captured by general entrepreneurial competencies.

The unstandardized coefficient of marketing innovation on MSME growth is −0.066 which indicates the partial effect of marketing innovation on MSME growth holding other variables constant. The estimate is not significantly different from zero, and the *p* value is 0.288 which is greater than 0.05. Existing empirics on the association between innovation and growth have mixed reports, and the results concurred with some of the prior studies and refuted others. Although it is not significant, the result agreed with the findings reported by Coad et al. [11] and Demirel and Mazzucato [12] who claimed the negative effect of innovation on some large firms. However, it refuted the findings reported by Audretsch et al. [7], Fritsch and Meschede [8], and Naidoo [10] that require further study. In our result, the marketing innovation does not show significant effect on the growth of enterprises (explained in terms of sales growth, productivity growth, and employment) which could be because entrepreneurs are not interested in applying innovative marketing practices as their "traditional" marketing practice is already helping them to sell what they produced. This practice could work for short terms. However, when the competition is becoming fierce, business as usual might not work, and entrepreneurs are expected to apply innovative marketing practices. The implementation of marketing innovation may require time to yield results, and short-term studies may not capture the full impact on growth. The effects of marketing innovation on growth may be more long-term and require sustained efforts to materialize.

The unstandardized coefficient of entrepreneurs' competency for MSME growth is 0.313 which indicates the partial effect of entrepreneurs' competency on the MSMEs' growth holding other variables constant. The positive sign implies that such an effect is positive that MSME growth would increase by 0.313 for every unit increase by entrepreneurs' competency. Moreover, the coefficient is significantly different from zero, and the *p* value is less than 0.001. The result concurs with previous findings reported by Audretsch et al. [7], Naidoo [10], Fritsch and Meschede [8], Mitchelmore and Rowley [6], and Esubalew and Raghurama [4]. Entrepreneurs' competency is the sole influencer of MSMEs' growth from the variables listed. Based on the standardized coefficient, entrepreneurs' competency on MSMEs growth is the most influencing path (0.32) in this Structural Equation Model, indicating the only significant direct path for the effect of entrepreneurs' competency on MSMEs growth. Entrepreneurial competency is a critical factor that can directly influence the overall performance and growth of MSMEs. Competent entrepreneurs are better equipped to identify opportunities, make effective business decisions, and navigate challenges, leading to sustainable growth. Entrepreneurs with strong competencies are more likely to create a positive organizational culture, attract and retain talented employees, build strong relationships with stakeholders, and adapt to changing market dynamics that contribute to the growth of MSMEs over time.

Mediated effect

The mediating impact of one variable on another is determined by subtracting the direct effect from the overall effect. In path analysis, mediation is recognized as the indirect influence of the independent variable on the

Table 4 Standardized and unstandardized regression weights. *Source*: Created by authors

	Unstandardized estimate	Standardized estimate	C.R	*p*
Marketing innovation ← Entrep. competency	−0.040	−0.035	−0.547	0.584
MSMEs growth ← Marketing innovation	−0.066	−0.076	−1.062	0.288
MSMEs growth ← Entrep. competency	0.313	0.32	4.052	***

dependent variable, with the magnitude of this indirect effect reflecting the degree of mediation through the relevant mediator variable, as described by Judea [54] and Reuben and David [55]. Therefore, the mediating effect of marketing innovation on the relationship between entrepreneurs' competency and MSMEs growth is examined based on results presented in Fig. 2 and Table 5. To make the mediation analysis, the bias-corrected percentile bootstrapping method was used as it is less susceptible to the impact of extreme values and more stable compared to other tests, according to Creedon and Andrew [56]. As shown in Table 5, zero is within the lower and upper bounds that indicate marketing innovation does not significantly mediate the relationship between entrepreneurs' competency and MSME growth. This result is consistent with the finding reported by Kamuri [17]. Thus, marketing innovation is not playing a mediating role that leaves competency as the sole direct influencer of enterprise growth. While marketing innovation can be a valuable tool for MSMEs to enhance their growth prospects, it may not always mediate the relationship between entrepreneurs' competency and the growth of MSMEs due to the complex nature of growth factors and the importance of overall entrepreneurial competency in driving sustainable growth. Thus, entrepreneurs should strive to develop a holistic growth strategy that incorporates marketing innovation alongside their competencies to maximize their chances of success.

It is also important to note that the relationships between entrepreneurs' competency, marketing innovation, and growth of MSMEs can be complex and context-dependent, and additional research and analysis may be needed to further explore and validate these relationships in different settings and industries. Drawing from the findings presented in Tables 4 and 5, as well as the insights gleaned from Fig. 2, we tested our hypotheses, and the culmination is succinctly summarized in Table 6.

Conclusion and implications

The findings of this study provide valuable insights into the interplay between entrepreneurs' competency, marketing innovation, and MSME growth. The significant effect of entrepreneurs' competency on the growth of MSMEs underscores the importance of core competencies in driving overall business performance. However, the insignificant effect of entrepreneurs' competency on

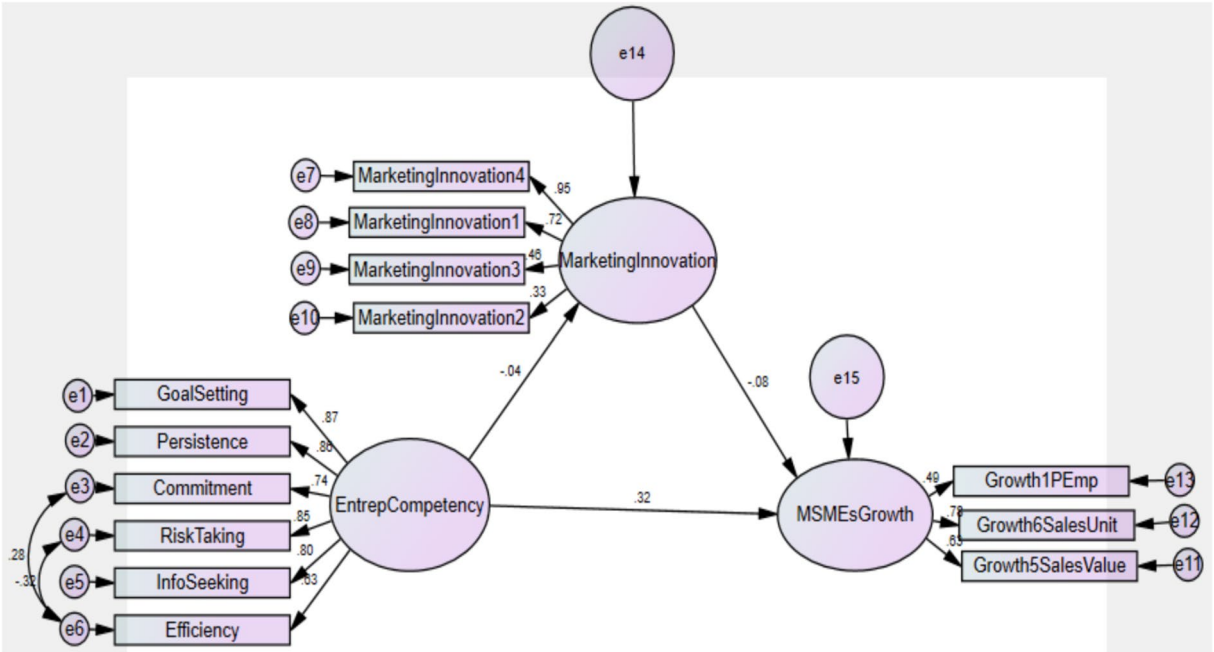

Fig. 2 Causal model. *Source*: Created by authors

Table 5 Mediation effect analysis. *Source*: Created by authors

Parameter	Estimate	Lower bound	Upper bound	*p* value
Entrep. competency–marketing innovation–MSMEs growth	0.003	−0.003	0.023	0.702

Table 6 Summary of hypotheses. *Source*: Created by authors

No.	Hypotheses	Test statistics	Decision rule and decision
H_1	Entrepreneurs' competency has a significant effect on the marketing innovation	*t* test	C.R = −0.547 *p* = 0.584 Rejected
H_2	The effect of marketing innovation on the growth of MSMEs is significant	*t* test	C.R = −1.062 *p* = 0.288 Rejected
H_3	The effect of entrepreneurs' competency on the growth of MSMEs is positive and significant	*t* test	C.R = 4.052 *p* = 0.001 Accepted
H_4	Marketing innovation has a significant mediating effect on the relationship between entrepreneurs' competency and MSMEs growth	Percentile bootstrap confidence interval	Upper bound = 0.023 Lower bound = −0.003 *p* value = 0.702 Rejected (0 is within the interval)

marketing innovation suggests that while competencies may be essential for firm success, they may not directly translate into marketing innovation within the context of Ethiopia. Furthermore, the insignificant effect of marketing innovation on MSMEs' growth implies that, in this particular scenario, the ability to innovate in marketing strategies may not be a significant driver of firm growth. Because this finding challenges the common assumption that supposed marketing innovation inevitably leads to enhanced business growth, it contributes to the existing literature by challenging the assumption that argued "entrepreneurs' competency and marketing innovation are always positively correlated with business growth." It highlights the complexity of these relationships within the context of MSMEs in Ethiopia. Practically, the findings suggest that MSMEs may benefit more from directly enhancing entrepreneurs' competencies rather than focusing solely on marketing innovation. The criticism directed at Ethiopian entrepreneurs for not prioritizing marketing innovation does not stand up to scrutiny, at least in the short term, as the research indicates that marketing innovation has an insignificant impact on the growth of MSMEs. However, when the competition is becoming fierce, implementing innovative marketing practices is essential that could lead to more targeted training and development programs for entrepreneurs to foster business growth. Hence, it is recommended that Ethiopian entrepreneurs equip themselves with the necessary skills in marketing innovation to be prepared for the future.

Despite its practical and theoretical contributions related to MSMEs, the study does not cover other sectors in large enterprises, and the generalizability of the finding might be influenced by cultural, economic, or sector-specific factors. Therefore, future researchers are suggested to study the iterative process of learning and adoption in the entrepreneurial venture that includes other macro-variables like culture.

Abbreviations

MSMEs	Micro, small, and medium enterprises
GrowthPEmp	Growth in permanent employees
GrowthSalesUnit	Growth in sales unit
GrowthSalesValue	Growth in sales value

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Author contributions

AAE worked on conceptualization, methodology, and analysis, and SAA has contributed by reviewing and editing. All authors read and approved the final manuscript.

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Availability of data and materials

All the data generated and analyzed during this research are included in this manuscript and can be available on demand.

Declarations

Ethics approval and consent to participate

Respondents themselves filled the questionnaire, and all ethics approval was not required.

Consent for publication

The authors guarantee that this manuscript has not been previously published in other journals and is not under consideration by other journals. The authors also guarantee that this manuscript is original and is their own work.

Competing interests

The authors affirm that they have no known financial or interpersonal conflicts that could have appeared to have impacted the research presented in this study.

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