Vol. 5 No. 1 (202)
e-ISSN: 2963-7589
Economic and Business Journal | ECBIS
https://ecbis.net/index.php/go/index

ECONOMIC CHARACTER BASED ON BUGIS LOCAL WISDOM, INTELLECTUAL AND SOCIAL CAPITAL, AND GOVERNMENT SUPPORT AS DETERMINANTS OF SMALL BUSINESS PRODUCTIVITY: MEDIATED BY CUSTOMER LOYALTY

Romansyah Sahabuddin[1], Azlan Azhari[2]
[1,2)] Management Study Program, Faculty of Economics and Business, State University of Makassar
E-mail: [1)] romansyah@unm.ac.id

Submitted:	Revised:	Accepted:
12 August 2026	24 October 2026	23 November 2026

Abstract

Although the small business sector contributes significantly to national economic output and labor absorption, its productivity still lags behind its potential, particularly in eastern Indonesia. Focusing on small business actors in Makassar City mostly from Bugis cultural backgrounds this study addresses a critical research gap where inherited economic values from inorganic economic education, such as perseverance, transactional honesty, and communal solidarity, remain unmeasured within modern management frameworks. Furthermore, integrated models combining these cultural characteristics with intellectual capital, social capital, and government supportwhile positioning customer loyalty as a mediating variable toward productivity remain scarce. Therefore, this study aims to examine the direct and indirect effects of Bugis wisdom-based economic characteristics, intellectual capital, social capital, and government support on small business productivity in Makassar City through customer loyalty, while operationalizing Bugis local wisdom into a measurable quantitative construct to inform culturally grounded empowerment policies. Employing a confirmatory quantitative approach with a cross-sectional survey design, data were collected from 292 home-industry small business actors registered at the Cooperative and MSME Office of Makassar City using purposive stratified sampling. The measurement instrument utilized a five-point Likert scale across six constructs and was validated via Confirmatory Factor Analysis (AVE > 0.50; Composite Reliability > 0.70). Hypotheses were tested using Partial Least Squares Structural Equation Modeling (PLS-SEM) in SmartPLS 4.0, encompassing outer model evaluation, inner model assessment, and bootstrapping with 5,000 subsamples to obtain robust mediation estimates.

Keywords: *Bugis Economic Character, Intellectual and Social Capital; Government Support; Business Productivity; Customer Loyalty.*

1. INTRODUCTION

The productivity of small businesses is the backbone of the economy in developing countries, including Indonesia. This sector's contribution to the national Gross Domestic Product reaches more than 60 percent, while absorbing about 97 percent of the total available workforce (1). However, the aggregate productivity level of small businesses still faces complex structural obstacles, ranging from limited access to capital, low technology

adoption, to weak managerial capacity of business actors (2). Within the *Resource-Based View*, the competitive advantage and productivity of a business entity do not solely come from physical production factors but from valuable internal resources that are scarce, and difficult to imitate including the character of business actors, knowledge competencies, and social networks owned (3). Meanwhile, *Institutional Theory* emphasizes that the external institutional ecosystem, including government policies and interventions, significantly shapes the productive capacity of business actors (4).

In Makassar City, as the economic center of Eastern Indonesia, the dynamics of small business productivity cannot be separated from the cultural context of the Bugis community, which dominates informal economic activities in the area. The Bugis economic philosophy, rooted in the values *of reso* (hard work ethic), *lempu* (honesty in transactions), and *siri' na pacce* (honor and communal solidarity), empirically shapes the distinctive economic character of business actors (5). This local wisdom-based economic character has the potential to be a strong determinant of productivity, but it has never been formally operationalized in modern quantitative management models.

Social capital, reflected in trust among business actors, the strength of community networks, and reciprocal norms, has been proven to significantly increase transaction efficiency while significantly expanding market access for small businesses (6). In line with this, intellectual capital, which includes human resource capabilities, innovative competencies, and managerial knowledge, contributes positively to the performance of small businesses in various developing countries (7). Government support through development programs, ease of licensing, financing facilitation, and marketing access also creates a conducive institutional environment for increasing small business productivity (8). In a competitive business ecosystem, customer loyalty built through trust, satisfaction, and relational commitment functions as a transmission mechanism that transforms internal capabilities and external support into measurable and sustainable business productivity (9).

Previous studies generally tested the influence of social capital and intellectual capital on business performance partially and separately, without integrating them into a comprehensive structural model (10). Moreover, the cultural dimension especially local wisdom as a shaper of economic character of business actors has almost never been operationalized as a measurable construct in research on small business productivity in Indonesia (11). The most critical gap is found in the absence of testing customer loyalty as a mediating variable linking these four determinants to business productivity. Most previous studies placed customer loyalty as a separate dependent variable, rather than as a transmission mechanism in productivity models (12). This gap is the main justification and novelty of this research.

Problem Formulation

Based on the identified theoretical and empirical gaps, this study formulates the research questions as follows:

1. Does the economic character based on Bugis wisdom have a significant effect on the productivity of small businesses in Makassar City?
2. Does intellectual capital have a significant effect on the productivity of small businesses in Makassar City?
3. Does social capital have a significant effect on the productivity of small businesses in Makassar City?
4. Does government support have a significant effect on the productivity of small businesses in Makassar City?
5. Does the economic character based on Bugis wisdom have a significant effect on customer loyalty of small businesses in Makassar City?
6. Does intellectual capital have a significant effect on customer loyalty of small businesses in Makassar City?
7. Does social capital have a significant effect on customer loyalty of small businesses in Makassar City?
8. Does government support have a significant effect on customer loyalty of small businesses in Makassar City?
9. Does customer loyalty have a significant effect on the productivity of small businesses in Makassar City?
10. Does wisdom-based economic character affect the productivity of small businesses in Makassar City through customer loyalty?
11. Does intellectual capital affect the productivity of small businesses in Makassar City through customer loyalty?
12. Does social capital affect the productivity of small businesses in Makassar City through customer loyalty?

Does government support affect the productivity of small businesses in Makassar City through customer loyalty?

2. RESEARCH METHOD

Research Design

This study uses a confirmatory quantitative approach designed in two continuous stages. The first stage has been completed, covering theoretical construction, instrument development, as well as testing the validity and reliability of the entire research construct. The proposed second stage focuses on empirical field testing and comprehensive structural model analysis (13).

Research Population and Sample

The research population consists of all small business actors in the home industry sector registered with the Cooperative and MSME Office of Makassar City. The sample size

determination refers to the SEM-PLS rule of thumb, which is at least ten times the highest number of indicators in the model, thus setting a minimum target of 250 respondents (17). The sampling technique used *purposive stratified sampling* with inclusion criteria: the business has been operating for at least two years, has an identified permanent customer base, and business actors with Bugis cultural identity as heirs of the local wisdom values studied. Thus, the research sample size is 292 people spread across Makassar City.

Research Instruments

The research instrument used a five-point Likert scale to measure six main constructs: Economic Character Based on Bugis Wisdom (X_1), Intellectual Capital (X_2), Social Capital (X_3), Government Support (X_4), Customer Loyalty (M), and Small Business Productivity (Y). All instruments have undergone content validity testing by Bugis cultural experts and management academics, as well as construct validity tests through *Confirmatory Factor Analysis* with *Average Variance Extracted* values above 0.50 and *Composite Reliability* above 0.70 (18). Data collection was carried out through 612structured surveys using questionnaires that had been validated in the previous stage online via Google Forms.

Variable	Dimensions	Indicator
Economic Character Based on Bugis Local Wisdom	The Value of Honesty (Lempu')	Honesty in business transactions; price openness to customers; commitment to fulfilling promises in business
	Hard Work (Reso)	Earnestness in running the business; perseverance in facing business difficulties; continuous efforts to improve product quality
	Self-Esteem / Integrity (Siri')	Maintaining the business reputation; responsibility for product quality; maintaining customer trust
	Solidarity / Togetherness (Sipakatau)	Respecting customers and business partners; good relationships with the community; mutual assistance among business actors
Intellectual and Social Capital	Human Capital	Entrepreneurial knowledge; business management skills; product innovation ability
	Structural Capital	An orderly business work system; use of technology in the business; clear service procedures

	Social Capital	Business networks with customers; relationships with suppliers; trust among business actors
Government Support	Regulatory Support	Ease of business licensing; policies that support MSMEs; protection of small businesses
	Financial Support	Access to capital assistance; business credit programs; subsidies or government assistance
	Coaching Support	Entrepreneurship training; business mentoring; MSME capacity development programs
Customer Loyalty (Mediating Variable)	Repurchase	Customers make repeat purchases; customers make products their top choice
	Recommendations	Customers recommend to others; customers give positive testimonials
	Customer Commitment	Willingness to continue using the product; not easily switching to competing products
Small Business Productivity	Business Efficiency	The ability to utilize resources optimally; reduction of production costs
	Output of Work	Increase in production volume; improve product quality
	Business Performance	Increase in business income; increase in business profits

Data Analysis Techniques

Data analysis was performed using *Structural Equation Modeling — Partial Least Squares* (SEM-PLS) with SmartPLS 4.0 software. The selection of SEM-PLS was based on its ability to test mediation models with formative and reflective latent constructs simultaneously, as well as its optimal performance at medium sample sizes (19). Measurement model testing (*outer model*) includes *convergent validity*, *discriminant validity* using HTMT criteria, and composite reliability. Structural model testing (*inner model*) included path coefficients, R^2 values, Q^2 (*predictive relevance*), and *effect size* f^2. Mediation effect testing was conducted through *bootstrapping* procedures with 5,000 subsamples to obtain *accurate confidence intervals* (20). To strengthen the validity of the findings, open-

ended question triangulation was conducted to obtain an overview of the transmission mechanism of customer loyalty as a mediator and to deepen the most dominant Bugis wisdom dimension in shaping the economic character of business actors (21).

3. RESULTS AND DISCUSSION

Research Results

Respondent Description

Features	Category	Frequency	Percentage (%)
Gender	Male	165	56.5
	Women	127	43.5
Age (years)	≤ 25	18	6.2
	26–35	98	33.6
	36–45	102	34.9
	46–55	49	16.8
	≥ 56	25	8.5
Last Education	Elementary School/Equivalent	40	13.7
	Junior High School/Equivalent	70	24.0
	Senior High School/Vocational School	123	42.1
	Diploma (D1–D3)	31	10.6
	Bachelor's Degree (S1+)	28	9.6
Business Duration (≥ 5 years)	5–9 years	126	43.2
	10–14 years old	98	33.6
	≥ 15 years old	68	23.3

Source: *Proceed Data, 2026*

This study involved 292 small business actors in the home industry sector registered with the Cooperative and MSME Office of Makassar City. Viewed from the gender perspective, male respondents dominated with a proportion of 56.5%, while female respondents accounted for 43.5%. This composition indicates that the participation of business actors in the home industry sector in Makassar City is not limited to one gender, although men slightly dominate as the main business managers. In terms of age, most respondents fall into the productive age range, namely the 36–45 years group (34.9%) and 26–35 years (33.6%). These two groups cumulatively account for 68.5% of the total respondents, indicating that business actors in this sector are dominated by individuals in optimal work productivity phases, with relatively good adaptation and decision-making capacities. Meanwhile, in terms of education level, the majority of respondents had a high school/vocational school education at 42.1%, followed by junior high school/equivalent at 24.0% and elementary school/equivalent at 13.7%. Only a small portion pursued higher

education, namely Diploma (10.6%) and Bachelor's degree or above (9.6%). This pattern reflects that involvement in household businesses is more supported by practical skills and field experience rather than a high formal education background. In terms of business duration, all respondents have been running business activities for at least five years, in accordance with the established inclusion criteria. The largest group is those who have been running for 5–9 years (43.2%), followed by those aged 10–14 years (33.6%), and those aged 15 years or more (23.3%). This distribution indicates that most respondents already have adequate business experience, so it can be assumed that they have a sufficient understanding of local market dynamics, capital management, and interactions with various stakeholders including local governments.

Descriptive Analysis

Table 1. Descriptive Analysis

Variable	Mean	Std. Dev.	Min	Max	Skewness	Kurtosis	Category
Economic Character (X1)	3,982	0,578	2	5	-0,671	2,579	Medium
Intellectual Modal (x2)	4,046	0,586	2	5	-0,681	2,506	High
Government Support (X3)	3,988	0,602	2	5	-0,619	1,845	Medium
Customer Loyalty (M)	3,952	0,592	2	5	-0,596	2,010	Medium
Business Productivity (Y)	4,132	0,615	2	5	-0,628	1,910	High

Source: *Proceed Data, 2026*

The Economic Character variable based on Bugis local wisdom (X1) obtained an average score of 3.982 with a standard deviation of 0.578, which falls into the moderate category. The skewness value of -0.671 indicates a left-leaning distribution of answers, with most respondents tending to give good assessments of their economic characteristics. The Intellectual Capital variable (X2) recorded the highest average value among exogenous variables, namely 4.046 with a standard deviation of 0.586, thus categorized as high. This indicates that respondents have a positive perception of the capacity for knowledge, skills, and innovation abilities possessed in managing their businesses. The Government Support variable (X3) has an average value of 3.988 with a standard deviation of 0.602, which falls into the moderate category. This condition indicates that business actors feel support from the government, although it has not been optimally assessed by all respondents. The mediating variable Customer Loyalty (M) obtained an average score of 3.952 with a standard deviation of 0.592, which falls into the moderate category. This finding reflects that the level of customer loyalty felt by business actors is at a fairly good level but still has room for improvement. Meanwhile, the dependent variable Business Productivity (Y) recorded an

average value of 4.132 with a standard deviation of 0.615, which is the highest value among all research variables and classified as high. These results indicate that small business actors in the home industry sector in Makassar City generally have a positive perception of the productivity of the businesses they run.

SEM Analysis

PLS-SEM with SmartPLS 3.0 was selected for the complex model with mediating variables and a sample size of n=292 (Hair et al., 2022; Sarstedt et al., 2021). **Evaluation of the Outer Model (Measurement Mode**), which includes testing convergent validity through *loading factor* values (≥0.70) and *Average Variance Extracted* (AVE ≥0.50), discriminant validity through *the Fornell-Larcker Criterion* or *HTMT,* as well as reliability through *Composite Reliability* (CR ≥0.70) and *Cronbach's Alpha* (≥0.60). **Structural Model**: (a) VIF < 5 for collinearity; (b) R^2 with thresholds of 0.75 (substantial), 0.50 (moderate), 0.25 (weak); (c) f^2 for effect size: 0.02 (small), 0.15 (medium), 0.35 (large); (c) path coefficient with bootstrapping 5,000 resamples, significant at $p<0.05$ ($t>1.96$); (f) mediation analysis with VAF: <20% (no mediation), 20-80% (partial), >80% (full). Model fit index: SRMR <0.08 ((Hair et al., 2022) and NFI ≥0.90 (Hair et al., 2022). Descriptive statistics and demographic characteristics were analyzed before PLS-SEM with α=0.05 (Henseler et al., 2015). **Hypothesis testing** if the P value > 0.05 was rejected.

Measurement Model

This research model examines the influence of economic character, intellectual capital, and government support on business productivity with customer loyalty as a mediating variable in small businesses in Makassar City as shown in Figure 1. This research model integrates several main theories in an integrated manner, namely Resource-Based View (RBV) as the foundation of intellectual capital variables where internal resource pressure determines competitive advantage, Institutional Theory to explain the role of government support and institutional environment on business performance, Economic Environment Theory to analyze the influence of economic characteristics on the small business climate, and the Customer Loyalty Model (Oliver, 1999) which indicates customer loyalty as a mediating variable between these input factors and the business. The integration of this fourth model forms a comprehensive conceptual framework to understand how resources, institutions, and customer relationships together affect the productivity of small businesses in Makassar City.

Picture 1. Outer Loading

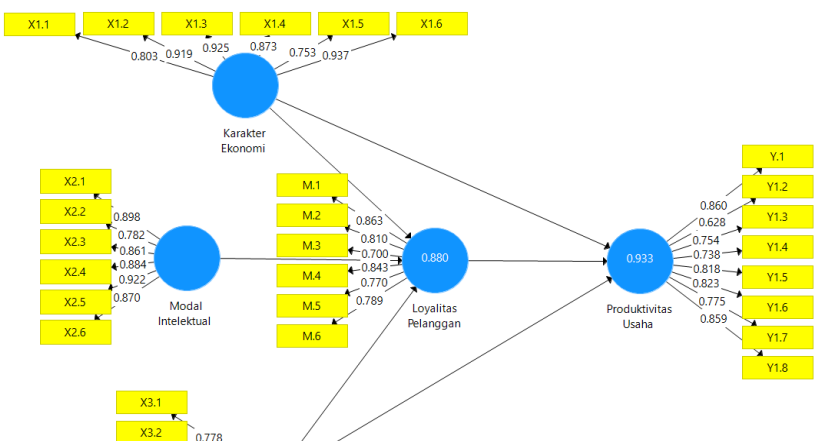


Table 1. Outer Loadings

Variable	Dimensions	Indicator	Outer Loadings	Description
Economic Character Based on Bugis Local Wisdom (X1)	The Value of Honesty (*Lempu'*)	X1.1	0,803	Valid
		X1.2	0,919	Valid
	Hard Work (*Reso*)	X1.3	0,925	Valid
	Self-Esteem / Integrity (*Siri'*)	X1.4	0,873	Valid
	Solidarity / Togetherness (*Sipakatau*)	X1.5	0,753	Valid
		X1.6	0,937	Valid
Intellectual and Social Capital (X2)	*Human Capital*	X2.1	0,898	Valid
		X2.2	0,782	Valid
	Structural Capital	X2.3	0,861	Valid
		X2.4	0,884	Valid
	Social Capital	X2.5	0,922	Valid
		X2.6	0,870	Valid
Government Support (X3)	Regulation	X3.1	0,778	Valid
		X3.2	0,911	Valid
	Financial	X3.3	0,856	Valid
		X3.4	0,754	Valid
	Construction	X3.5	0,719	Valid
		X3.6	0,814	Valid
Customer Loyalty (M)	Repurchase	M.1	0,863	Valid
		M.2	0,810	Valid
	Recommendations	M.3	0,700	Valid
		M.4	0,843	Valid

	Customer Commitment	M.5	0,770	Valid
		M.6	0,789	Valid
Small Business Productivity (Y)	Business Efficiency	Y.1	0,860	Valid
		Y.2	0,628	Invalid
		Y.3	0,754	Valid
	Business Bar	Y.4	0,738	Valid
		Y.5	0,818	Valid
		Y.6	0,823	Valid
	Business Performance	Y.7	0,775	Valid
		Y.8	0,860	Valid

Source: *Proceed Data, 2026*

The table above presents the results of the validity test of the research instrument based on *the outer loading values* of the Partial Least Squares (PLS) model, which includes five main variables. The Economic Character variable Based on Bugis Local Wisdom (X1) is measured through six indicators reflecting the dimensions of honesty (*lempu'*), hard work (*reso*), self-esteem (*siri'*), and solidarity (*sipakatau*) with *outer loadings* ranging from 0.753 to 0.937, all declared valid. The Intellectual Capital variable (X2) consists of six indicators representing *human capital*, *structural capital*, and *social capital* with *loading* values ranging from 0.782 to 0.922, all valid. The Government Support variable (X3) is measured through six indicators covering regulatory, financial, and development dimensions with values ranging from 0.719 to 0.911, all valid. The mediating variable Customer Loyalty (M) has six indicators measuring repeat purchases, recommendations, and customer commitment with *loading values* ranging from 0.700 to 0.863, all of which are valid. Meanwhile, the dependent variable Small Business Productivity (Y) includes eight indicators measuring business efficiency, operating profit, and business performance, with almost all indicators declared valid except for indicator Y.2, which obtained *an outer loading* value of 0.628 and was declared invalid, thus excluded from the measurement model.

Table 2. Model Measurement

Construct	**Alpa Cronbach**	**rho_A**	**Composite Reliabel**	**AVE**
Economic Characteristics	0,935	0.940	0.949	0.759
intellectual modal	0.936	0.939	0.949	0.758
Government Support	0,892	0.899	0.918	0.652
Customer Loyalty	0,885	0,890	0.913	0.636
Business Productivity	0.910	0.918	0.927	0.617

Source: *Proceed Data, 2026*

All constructs meet the **reliability** requirements because *the Cronbach's Alpha* value ≥ 0.60 and *the Composite Reliability* ≥ 0.70. Furthermore, all constructs also meet **the convergence validity** requirements because *the AVE* value ≥ 0.50, indicating that each construct is able to explain more than 50% of the variance of its indicators, so it can be concluded that all constructs in this research model meet the reliability **and convergent validity** requirements and are feasible for further hypothesis testing.

Model Struktural

The Structural Model (Inner Model) is measured through main criteria: **(3)** which measures the magnitude of the influence of one latent variable on other latent variables, with criteria of 0.02 (small), 0.15 (medium), and 0.35 (large); **(4) Path Coefficient** , which indicates the direction and strength of relationships between constructs in the structural model; and **(5) Goodness of Fit (GoF)** as the overall measure of model suitability, with a strong GoF value > 0.36. These five measures are used together to assess the quality and capability of the structural prediction model comprehensively.

Coefficients of Determination (R2)

The coefficient of determination (R^2) indicates how much the exogenous variable can explain the endogenous variable, with criteria of 0.19 (weak), 0.33 (moderate), and 0.67 (strong).

Table 3. Coefficient of Determination

Variable Endogenous	R Square (R^2)	R Square Adjusted	Category
Customer Loyalty (M)	0,880	0,873	Strong
Business Productivity (Y)	0.933	0,929	Strong

Source: *Proceed Data, 2026*

The coefficient of determination (R^2) in the SEM-PLS model using SmartPLS 3 can be described as having an R^2 value categorized as strong based on Chin's (1998) criteria. The Customer Loyalty variable (M) obtained an R^2 value of 0.880, meaning that the variables Economic Character (X1), Intellectual Capital (X2), and Government Support (X3) together explain 88.0% of the variation occurring in Customer Loyalty, while the remaining 12.0% is explained by other variables not included in this research model. Meanwhile, the Business Productivity variable (Y) obtained an R^2 value of 0.933, which means that the variables Economic Character (X1), Intellectual Capital (X2), Government Support (X3), and Customer Loyalty (M) together explain 93.3% of the variation occurring in Business Productivity, while the remaining 6.7% is explained by other variables outside the model. Thus, both endogenous variables have very high R^2 values far exceeding the minimum strong category (0.67), so it can be concluded that the structural model in this study has very strong predictive ability and is feasible to test the hypotheses further.

Effect Size (f^2)

Table 4. Effect Size (f2)

Construct	Customer Loyalty	Category	Business Productivity	Category
Government Support	0,323	Medium	0.541	Large
Economic Characteristics	0.000	Small	0,134	Small
Customer Loyalty	-	-	0,041	Small
Intellectual modal	0,014	Small	-	-
Business Productivity	-	-	-	-

Source: *Proceed Data, 2026*

Government Support has the most dominant influence in this model. On Customer Loyalty, the f^2 value of 0.323 indicates a moderate effect size, meaning Government Support makes a significant contribution in explaining the variation in Customer Loyalty. Its influence on Business Productivity is even stronger, with $f^2 = 0.541$ categorized as large this is the highest value in the entire model, indicating that Government Support is the most substantial predictor of Business Productivity.

Economic Characteristics show a relatively weak influence on both endogenous constructs. For Customer Loyalty, the value of $f^2 = 0.000$ indicates almost no practical effect, although technically still in the small category. For Business Productivity, $f^2 = 0.134$ is also in the small category, although close to the moderate threshold (0.15), so its influence cannot be completely ignored.

Customer Loyalty as a mediating variable was only tested for its influence on Business Productivity, with $f^2 = 0.041$ categorized as small. This indicates that although Customer Loyalty has a statistically significant effect, its practical contribution to Business Productivity is relatively limited. Intellectual Capital on Customer Loyalty yielded $f^2 = 0.014$, which is categorized as small, even below the threshold of 0.02, so its practical effect can be said to be very weak or almost not substantively significant.

Path Coefficients (Direct and Indirect Effects)

The path coefficient analyzes the direct effect as the effect of an independent variable on the dependent variable directly without passing through the mediating variable. Its value is identical to the path coefficient. Indirect effect is the influence of an independent variable on the dependent variable transmitted through one or more mediating variables.

Table 5. Path Koefisien

Path Coefficient	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
X1 – Y	0,798	0,776	0,165	5,421	**0,000**
X2 – Y	0,722	0,666	0,349	2,072	**0,039**
X3 – Y	0,784	0,762	0,177	4,428	**0,000**
M–Y	0,611	0,523	0,201	3,112	**0,041**
X1 – M – Y	0,151	-0,037	0,255	0,591	**0,555**
X2 – M – Y	0,109	-0,076	0,115	0,951	**0,342**
X3 – M – Y	0,790	0,723	0,142	5,112	**0,000**

Source: *Proceed Data, 2026*

Goodness of Fit (GoF)

Goodness of Fit (GoF) is a measure used to determine how well the entire model both the measurement model (outer model) and the structural model (inner model) is able to explain the observed data simultaneously.

Table 6. Goodness of Fit

	Saturated Model	Estimated Model
SRMR	0,107	0,107
d_ULS	6,059	6,075
d_G	n/a	n/a
Chi-Square	infinite	infinite
NFI	n/a	n/a

Source: *Proceed Data, 2026*

It can be explained below that SRMR (Standardized Root Mean Square Residual) shows a value of 0.107 in both models, both Saturated and Estimation meeting the ideal threshold ≤ 0.10. The similarity between the two models shows that the estimated model structure is consistent with the saturated model, meaning the path specification in the model is not much different from the freest model condition. d_ULS (Unweighted Least Squares Discrepancy) shows a very close value between the Saturated Model (6.059) and the Estimated Model (6.075). This very small difference indicates that the constructed structural model has a good level of conformity and does not lose much information compared to the saturated model. d_G, Chi-Square, and NFI all show n/a or infinity values which are reasonable. Overall, the model can be considered fairly fit based on the SRMR values still within tolerance and consistency between the Saturated and Estimated Models. Unavailable indicators (n/a and unlimited) are not a weakness of the model, but rather a consequence of the characteristics of the PLS-SEM method itself, which do not require assumptions of normal distribution and do not depend on Chi-Square measurements.

Hypothesis Testing

Hypothesis testing was conducted to determine whether the proposed hypothesis has a significant effect on both direct and indirect effects. To determine whether the indirect effect is significant, the bootstrapping method in PLS-SEM is used, where the indirect path is declared significant if the T Statistics > 1.96 and the P Values < 0.05. If the indirect effect is significant while the direct effect remains significant, partial mediation occurs. If the direct effect becomes insignificant after the mediator is inserted, full mediation occurs.

The Path of the Influence of Economic Character Based on Bugis Local Wisdom (X1) on the Productivity of Small Businesses in Makassar City (Y) produced an original sample value of 0.798 with a T Statistic of 5.421 and P Values of 0.000. T > 1.96 and P < 0.05, so the influence of X1 on Y is declared significant with a strong positive direction, meaning that the increase in X1 directly contributes significantly to the increase in Y.

The Path of the Influence of Intellectual Capital (X2) on the Productivity of Small Businesses in Makassar City (Y) yields 0.722 with a T Statistic of 2.072 and P Values of 0.039. This path is significant, although its T value is slightly above the threshold of 1.96, indicating a statistically significant positive effect of X2 on Y.

The path The influence of government support (X3) on the productivity of small businesses in Makassar City (Y) yielded 0.784 with a T Statistic of 4.428 and P Values of 0.000. This path is significant and shows a substantial positive direct effect of X3 on Y.

The path of the influence of Customer Loyalty (M) on the productivity of small businesses in Makassar City (Y) yields a coefficient of 0.611 with a T Statistics of 3.112 and P Values of 0.041. This path is significant, meaning the mediator variable M is proven to have a positive and significant direct effect on Y.

The path of the influence of economic character based on Bugis local wisdom (X1) on small business productivity (Y) with customer loyalty (M) as a mediating variable yields a coefficient of 0.151 with a T Statistics of 0.591 and P Values of 0.555. This path is not significant, meaning M is not proven to mediate the influence of X1 on Y.

The path of the influence of social capital (X2) on small business productivity (Y) with customer loyalty (M) yielded a coefficient of 0.109 with a T Statistics of 0.951 and P Values of 0.342. This path is not significant, indicating that M fails to significantly mediate the effect of X2 on Y.

The path The influence of government support (X3) on small business productivity (Y) with customer loyalty (M) yielded a coefficient of 0.790 with a T Statistics of 5.112 and P Values of 0.000. This path is significant, meaning M is proven to effectively mediate the influence of X3 on Y. This is the only successful mediation path in this model, with the highest coefficient value among all indirect effects.

Discussion

The influence of economic character based on Bugis local wisdom on the productivity of small businesses in Makassar City

The results of this study show that economic character based on Bugis local wisdom has a positive and significant effect on the productivity of small businesses in Makassar City. These findings indicate that the stronger the internalization of Bugis local wisdom values such as *lempu'* (honesty), *reso* (hard work), *siri'* (self-respect), and *sipakatau* (solidarity) in business practice, the higher the productivity achieved by small business actors. Previous relevant research supports these findings. Wuryandini et al. (2022) in their study on entrepreneurship based on local wisdom in Indonesia found that local cultural values consistently contribute to the success of micro and small businesses through the formation of social capital and a strong work ethic. Furthermore, Muñoz and Cohen (2022) in their study on the *embedded culture of entrepreneurship* emphasize that entrepreneurial cultural identity plays an important role in determining business strategies and productive capacity. Furthermore, Lortie and Cox (2021) argue that internalized local values form entrepreneurial *cognition* that drives more adaptive and efficient business decision-making.

The Influence of Intellectual Capital on the Productivity of Small Businesses in Makassar City

The results of this study prove that intellectual-social capital has a positive and significant effect on the productivity of small businesses in Makassar City. Although the influence is at a more moderate significance level compared to other variables, this finding still provides meaningful empirical evidence that the accumulation *of human capital*, *structural capital*, and *social capital* together contribute significantly to increasing the productive capacity of small businesses. The theoretical basis of this finding refers *to the Resource-Based View* (RBV) developed by Barney (1991) and then elaborated in the context of intellectual capital by Bontis (1998). This theory states that intangible resources such as knowledge, competence, and social networks are the foundation of competitive advantage that is difficult to replicate and determines long-term productivity. In the context of small businesses, intellectual capital plays a compensatory role for the financial capital limitations commonly faced by small-scale business actors. Previous research supports the consistency of these findings. Xu and Li (2022), in their study on small and medium enterprises in the Asian region, found that *human capital* components such as education and entrepreneurial experience significantly improve operational efficiency and business output. Meanwhile, Mention and Bontis (2020) emphasize that *structural capital* realized in knowledge management systems and standard operating procedures directly contributes to productivity improvement through error reduction and work process savings. Furthermore, Kweh et al. (2023) found that *social capital* manifested in the strength of business networks and trust

among business actors can open access to information, technology, and markets, ultimately driving productivity growth.

The Influence of Government Support on the Productivity of Small Businesses in Makassar City

The results of this study prove that government support has a positive and significant effect on the productivity of small businesses in Makassar City. These findings confirm that the presence of government interventions in the form of conducive regulations, financial support, and training programs makes a significant contribution to increasing the productive capacity of small business actors. Previous research supports the consistency of these findings. Motta and Sharma (2020), in their study in developing countries, found that comprehensive government support programs, especially those covering financial and non-financial aspects, significantly increase the productivity of small and medium enterprises. Similar findings were put forward by Nguyen et al. (2021), who concluded that easy access to subsidized credit and government-facilitated training programs strengthen the operational capabilities and innovation of small businesses in Vietnam. Furthermore, Audretsch et al. (2022) emphasize that *integrated and consistent entrepreneurship-based* policies produce much greater productivity impacts compared to partial and uncoordinated interventions.

In the context of Makassar City, government support through small business development programs managed by related agencies has a real impact on increasing production capacity and business efficiency. Ningsih and Setiawan (2023) also found that synergy between business-friendly regulations, financing access, and technical assistance from local governments in South Sulawesi has proven to strengthen the competitiveness and productivity of small businesses simultaneously. Thus, the government's role is not merely as a passive regulator but as an active partner that helps determine the trajectory of small business productivity in Makassar City.

The Influence of Customer Loyalty on the Productivity of Small Businesses in Makassar City

The results of this study show that customer loyalty has a positive and significant effect on the productivity of small businesses in Makassar City. These findings confirm that loyal customers—characterized by repurchase tendencies, recommending behavior, and long-term commitment to a business—make a real contribution to increasing the productivity of small business actors. Previous research strongly supports these findings. Kumar and Reinartz (2022), in their comprehensive study on customer relationship management, found that customer loyalty consistently remains positive with financial performance and business productivity, especially in small business segments that heavily depend on a fixed customer base. Meanwhile, Srivastava and Rai (2021) found that the customer commitment dimension, as the highest level of loyalty component, has the

strongest influence on business income stability, which is a prerequisite for sustainable productivity. Furthermore, Almost and Sharma (2021) confirmed that recommendation behavior (*word-of-mouth*), which is a manifestation of customer loyalty, effectively expands the small business market share without requiring large marketing costs, thereby driving business efficiency and productivity.

The Influence of Economic Character Based on Bugis Local Wisdom on Small Business Productivity Mediated by Customer Loyalty in Makassar City

The results of this study show that customer loyalty is not proven to mediate the influence of economic character based on Bugis local wisdom on the productivity of small businesses in Makassar City. These findings indicate that although Bugis local wisdom has a strong direct effect on productivity, this influence is not channeled through the mechanism of forming customer loyalty. Theoretically, this mediation failure can be explained through the *direct path dominance* framework in the structural model, where the direct path of influence is so dominant that it closes space for meaningful mediation effects. Baron and Kenny (1986), in their classical mediation analysis framework, explain that mediation becomes weak or insignificant when independent variables have a very strong direct influence on the dependent variable without having to bypass the mediating variable. In this context, the values of Bugis local wisdom seem to work directly on internal business aspects such as work ethic, efficiency, and operational integrity, which directly drive productivity without first manifesting in customer loyalty.

The Influence of Intellectual Capital on Small Business Productivity Mediated by Customer Loyalty in Makassar City

The results of this study show that customer loyalty is not proven to mediate the influence of intellectual-social capital on the productivity of small businesses in Makassar City. These findings indicate that although intellectual-social capital contributes significantly directly to productivity, its influence pathways are not meaningfully channeled through the formation of customer loyalty. This failure of mediation can be explained through the perspective knowledge utilization theory proposed by Nonaka and Takeuchi (1995) and updated in the context of small businesses by Andreeva and Kianto (2022). This theory asserts that knowledge capital and intellectual capability essentially work through internal organizational mechanisms—such as increased process efficiency, product innovation, and smarter decision-making—rather than through external relational mechanisms like customer loyalty. In other words, the main benefits of intellectual capital are inward-looking and are directly realized in productivity without first generating affective responses from customers.

The Influence of Government Support on Small Business Productivity Mediated by Customer Loyalty in Makassar City

The results of this study show that customer loyalty is proven to significantly mediate the influence of government support on the productivity of small businesses in Makassar City. Moreover, this mediation pathway is the only significant indirect effect in the overall model, with the highest mediation coefficient among all indirect effects tested. These findings indicate that government support not only directly affects productivity but also effectively works by strengthening customer loyalty as a transmission mechanism. Theoretically, this finding can be explained through the stakeholder theory proposed by Freeman (1984) and developed in the context of public policy by Hillman and Keim (2021). This theory emphasizes that effective government intervention not only increases business supply capacity but also strengthens business legitimacy in the eyes of consumers, thereby encouraging stronger loyalty responses. Training programs and financial support from the government improve the quality of small business products and services, which in turn increases customer satisfaction and loyalty, ultimately leading to increased productivity. Thus, government support creates *a good cycle* between business capability, customer loyalty, and productivity. Previous research strongly supports these findings. Ozili (2022) found that comprehensive government support programs for MSMEs effectively improve service quality and customer trust, which in turn drives loyalty and ultimately increases business productivity sustainably. Meanwhile, Yin et al. (2023) in their study in developing countries found that government-facilitated training and mentoring programs improve small business actors' ability to build long-term relationships with customers, which is the main foundation of loyalty. Furthermore, Nguyen et al. (2021) emphasize that easy access to government financing allows small businesses to improve product quality and service consistency, two key factors driving customer loyalty.

4. CONCLUSION

This study concludes that the productivity of small businesses in Makassar City is significantly influenced by a combination of internal, external, and relational factors. The economic character based on Bugis local wisdom has been proven to have a strong direct influence on the productivity of small businesses. Values such as *lempu'* , *reso* , *siri'* , and *sipakatau* serve as the foundation of work ethic, integrity, and operational discipline that drive efficiency and consistency in business performance. These findings confirm that local wisdom is not merely a cultural dimension, but a real strategic resource in microeconomic practice. Intellectual capital also contributes positively to the productivity of small businesses, although its influence is more internal. Strengthening the strength of business actors, work systems, and social networks has been proven to increase process efficiency and production capacity. Government support plays a very important role, both directly and indirectly. Specifically, government support is the only variable whose effect on productivity

is significantly mediated by customer loyalty. This shows that appropriate government intervention can improve business quality, strengthen customer trust, and create a stable demand base. Customer loyalty has been proven to have a direct effect on productivity, but does not always act as a mediator for all independent variables.

The implications of this study emphasize that the development of small businesses in Makassar City needs to be carried out through an integrated approach that combines strengthening internal values, external support, and managing customer relationships. Small business actors are expected to be able to internalize Bugis local wisdom as a source of work ethic and integrity in business operations, while also strengthening intellectual capital through improving competencies, work systems, and business networks. Local governments need assistance to design policies that focus not only on financial but also on improving service quality and customer trust. Meanwhile, strategies for building customer loyalty need to be strengthened to reinforce the effectiveness of government support in sustainably driving the productivity of small businesses.

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