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The Influence of Digital Transformation and Merger Integration on Customer Loyalty through Ecosystem Synergy

(Empirical Validation of the DEMC Framework in GoTo Group)

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Abstract. *The consolidation of digital-native platform ecosystems presents governance challenges that remain insufficiently explained by traditional organizational change models, particularly regarding how post-merger integration influences customer loyalty. This study proposes and empirically tests the Digital Ecosystem Merger Change (DEMC) Framework to analyze the relationships among Digital Transformation, Merger Integration, Ecosystem Synergy, and Customer Loyalty within the post-merger GoTo Group in Indonesia. Data were collected from 286 active customers using the Digital Ecosystem Merger Audit-Empirical (DEMC-AE) instrument and analyzed through Partial Least Squares Structural Equation Modeling (PLS-SEM). The results indicate that Merger Integration exerts a stronger influence on Ecosystem Synergy than Digital Transformation. Ecosystem Synergy fully mediates the relationship between Digital Transformation and Customer Loyalty and partially mediates the relationship between Merger Integration and Customer Loyalty. These findings suggest that customer loyalty is more likely to improve when structural integration is accompanied by more connected service experiences. Theoretically, this study provides preliminary empirical evidence supporting the relevance of Dynamic Capabilities Theory in explaining the governance of post-merger multi-platform ecosystems within super-app contexts in emerging markets. Practically, the findings highlight the importance of strengthening internal integration and cross-service synergy before reducing reliance on customer incentives as a retention strategy.*

Keywords: *Digital Transformation; Dynamic Capabilities Theory; Ecosystem Synergy; Customer Loyalty; Merger Integration.*

1. INTRODUCTION

Global corporations consolidate cross-platform ecosystems to restructure conventional organizational designs for digital transformation (Hanelt et al., 2021). This strategic focus moves away from individual organic growth toward cross-platform alliances for business continuity. The 2021 merger of Gojek and Tokopedia into GoTo Group exemplifies this trend, targeting over 100 million monthly active users during its initial announcement (GoTo Group, 2021). For digital-native platforms, successful post-merger integration (PMI) requires aligning internal dynamic capabilities with external technology architecture (Plekhanov et al., 2023; Santoso, 2024).

GoTo Group managed its post-merger transformation across three distinct phases. From 2021 to 2022, the group executed foundational technical integration. This process established GoPay as the unified payment layer, consolidated logistics infrastructure, and harmonized user data systems across Gojek and Tokopedia before the April 2022 listing on the Indonesia Stock Exchange (GoTo Group, 2022). During the 2022 to 2023 efficiency period, GoTo cut subsidies

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and divested a 75.01% stake in Tokopedia to TikTok, restructuring the ecosystem and lowering the consolidated gross transaction value. From 2024 onward, GoTo focused on ecosystem monetization by launching GoClub, expanding GoPay's active user base to 27.5 million by Q1 2026 (GoTo Group, 2026). These phases provide the structural context for examining user perceptions of digital transformation, merger integration, and ecosystem synergy.

Interoperable payment systems and logistics enhance consumer transaction convenience. Yet, data reveal an empirical paradox between internal technology integration and consumer loyalty stability. The average annual transaction value per GoTo customer dropped 18% from IDR 7.8 million to IDR 6.6 million, and Tokopedia's standalone Gross Transaction Value (GTV) fell 9% to IDR 249 trillion (GoTo Group, 2022). Based on market share estimates from industry reports, Shopee is projected to control approximately 38% of Indonesia's e-commerce volume, while Grab maintains a dominant position in the ride-hailing segment with an estimated share of around 63% of orders in Indonesia (Statista, 2024). On the other hand, GoPay's monthly transactions grew positively by 33%, reaching 27.5 million active users in Q1 2026 (GoTo Group, 2026).

Current change management literature fails to map the interdependencies of multi-sided platform ecosystems cleanly. Classical frameworks like Kotter's 8-Step Model address only internal change within centralized corporate structures, ignoring network effects, cross-service interoperability, and fluid boundaries within digital ecosystems (Tang & Qiao, 2025). Empirical studies remain fragmented. Plekhanov et al. (2023) isolate technical platform architecture, while Hanelt et al. (2021) limit their focus to internal socio-organizational dynamics inside single firms. Most quantitative researchers use cross-sectional retrospective designs, missing periodic post-merger dynamics (AlNuaimi et al., 2022). In Indonesia, structural barriers like fragmented infrastructure and digital literacy disparities widen this theoretical gap (Abdurrahman, 2025).

This study introduces the Digital Ecosystem Merger Change (DEMC) framework to resolve these empirical gaps, connecting four core dimensions: Digital Transformation (DT), Merger Integration (MI), Ecosystem Synergy (ES), and Customer Loyalty (CL). Through this approach, three scientific domains that were previously separated in earlier studies are successfully integrated (Hanelt et al., 2021; Plekhanov et al., 2023; Zahoor et al., 2022). Unlike separate earlier evaluations, DEMC combines these constructs into a single analytical model to explain how digital transformation and merger integration drive ecosystem synergy and shape customer loyalty within a post-merger super-app. The research addresses three quantitative questions: the impact of DT and MI on ES (RQ1), the impact of ES on CL (RQ2),

and the mediating role of ES between DT, MI, and CL (RQ3). The researchers evaluated this model using primary data from 286 active GoTo users via the Digital Ecosystem Merger Audit-Empirical (DEMC-AE) instrument.

This research delivers a distinct dual contribution. Theoretically, the findings provide empirical evidence supporting dynamic capabilities theory (Teece, 2007) within emerging-market digital ecosystems, prompting future replication studies. Practically, the study generates three concrete tools for industry practitioners: a Strategic Playbook for ecosystem orchestration, the DEMC-AE diagnostic instrument, and a Corporate Action Plan for customer loyalty management.

2. LITERATURE REVIEW

Digital transformation structurally alters organizational design beyond simply adding a technology layer to legacy structures (Hanelt et al., 2021). When operating within platform ecosystems, mature firms blur conventional business boundaries and trigger governance tensions (Plekhanov et al., 2023). Managing these tensions requires dynamic capabilities that integrate sensing, seizing, and transforming functions (Konopik et al., 2022). Change management activities mediate how dynamic capabilities secure transformation success (Al-Moaid & Almarhdi, 2024), where transformational leadership and organizational agility serve as primary drivers (AlNuaimi et al., 2022). Additionally, a distinct digital orientation sharpens organizational agility to lift business performance across Southeast Asia (Cuong et al., 2025; Kusuma et al., 2024).

However, current change management frameworks fail to accommodate the systemic complexity inherent in platform ecosystems. Kotter (1996) eight-step change model anchors change management for traditional hierarchical organizations. Even Kotter (2014) dual operating system concept focuses strictly on single-company internal dynamics and depends on formal authority to compel action. Digital-native ecosystems defy these assumptions through their reliance on distributed agility and decentralized coordination (Sharma, 2025). Legacy models also overlook the data governance, API interoperability, and network effects that drive the platform economy (Parker et al., 2016).

Post-merger platform ecosystem management demands an effectuation approach and integrative capabilities to spark co-creation among actors (Santoso, 2024). Successful digital transformation helps firms align their core, periphery, and environmental layers cohesively (Plekhanov et al., 2023). This service synergy accelerates super-app adoption. Users commit because they assess the platform's cumulative value rather than isolated single-service

functions (Fang et al., 2024). Incomplete post-merger integration directly erodes brand trust and consumer loyalty, irrespective of internal technical maturity (Alexander et al., 2025). Moreover, Western-centric literature limits the utility of conventional integration models when applied to emerging-market digital platforms (Zahoor et al., 2022).

This transformation unfolds iteratively and nonlinearly (Yang et al., 2025). Established companies usually choose the path of mergers and investments in startups to trigger rapid changes that exceed their organic development capacity (Yang et al., 2025). Currently, Indonesia's digital ecosystem undergoes a partial reconfiguration. This state delivers technical efficiency but yields weak cultural integration, while infrastructure gaps and digital literacy disparities compound the problem (Abdurrahman, 2025; Tricahyono et al., 2026). These frictions highlight the need for an integrated analytical model combining dynamic capabilities, post-merger integration, and end-user perceptions within emerging-market super-apps. Current literature fails to bridge this gap. Existing studies focus narrowly on single-firm internal metrics (Hanelt et al., 2021; Plekhanov et al., 2023) or at the conventional M&A level (Alexander et al., 2025; Zahoor et al., 2022) Most rely on cross-sectional designs that fail to track how user perceptions evolve across integration phases.

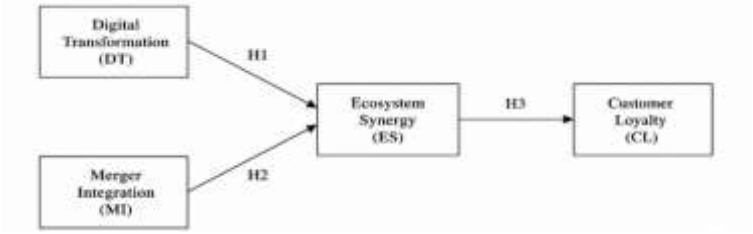

Figure 1. Proposed DEMC Model.

Source: Adapted from Teece (2007).

The DEMC framework uses the dynamic capabilities theory proposed by Teece (2007) as an analytical basis. Specifically, the framework associates Digital Transformation (DT) with the sensing function, which involves scanning, learning, and interpreting the environment to identify technological opportunities. At the platform level, DT translates this sensing capability into tangible architecture by evaluating AI recommendations, open APIs, and cloud infrastructure. Meanwhile, Merger Integration (MI) reflects the seizing function. This function mobilizes resources to capture value from opportunities through post-merger processes that combine structural assets, harmonize payment systems, standardize interfaces, and unify data infrastructure. Next, Ecosystem Synergy (ES) operates within the transforming function. This synergy represents an emergent state where a firm effectively coordinates sensing and seizing to generate collective cross-service value visible in user experiences. This positioning matches

Helfat & Raubitschek (2018), who define transforming in digital ecosystems as the continuous realignment of assets into new, valuable configurations.

H1a: Digital Transformation has a positive and significant impact on Ecosystem Synergy.

Dynamic capabilities theory positions sensing as the primary mechanism for orchestrating relationships among core, periphery, and environment layers to build ecosystem synergies (Plekhanov et al., 2023; Teece, 2007). Sensing-driven adjustments to platform architecture integrate services across business units more coherently (Al-Moaid & Almarhdi, 2024).

H2a: Merger integration has a positive and significant impact on Ecosystem Synergy.

Merger integration drives the seizing process by combining the structural assets of two separate platforms. This combination strengthens service cohesion and opens a strategic path to orchestrate complex new ecosystems (Santoso, 2024; Zahoor et al., 2022).

H3a: Ecosystem Synergy has a positive and significant effect on Customer Loyalty.

Service synergy accelerates super-app adoption by raising switching costs. Similarly, consumer perceptions of post-merger integration directly shape brand loyalty and retention (Alexander et al., 2025; Fang et al., 2024).

H4a: Ecosystem Synergy mediates the positive effect of Digital Transformation on Customer Loyalty.

Dynamic capabilities seldom improve market performance directly; firms require intermediate mechanisms to translate internal capabilities into consumer-perceived value (Al-Moaid & Almarhdi, 2024). In post-merger platforms, digital transformation must spark cross-service synergies before it can lift customer loyalty (Plekhanov et al., 2023).

H5a: Ecosystem Synergy mediates the positive effect of Merger Integration on Customer Loyalty.

Merger integration fails to boost customer loyalty directly if the process misses building service cohesion. Without cohesion, users do not receive the expected benefits of the merger (Alexander et al., 2025; Zahoor et al., 2022). Ecosystem synergy provides the critical mediating link between integration quality and customer loyalty (Fang et al., 2024).

3. RESEARCH METHOD

Research Design, Population, and Sample

The researchers used an explanatory quantitative approach with a cross-sectional retrospective survey design to examine the relationships between variables within the DEMC framework among active users of the GoTo ecosystem in Indonesia. The study population

included all active users of the GoTo ecosystem. Purposive sampling was applied based on three inclusion criteria: (1) being aged 18 to 27 years as the digital native group (Statista, 2024), (2) having used at least two GoTo services within the past three months, and (3) residing in areas with high platform market penetration.

The researchers set a minimum target of 250 respondents to exceed the recommendation of Hair et al. (2019) for a structural model with low to moderate complexity. This sample size is expected to support the stability of parameter estimates and the bootstrapping procedure. Data were collected over a one-month period through an online questionnaire distributed to 300 potential respondents via relevant digital communities. Following a screening process and data completeness checks, 286 questionnaires were deemed suitable for analysis.

Operationalization of Variables and Instrument Development

The Digital Ecosystem Merger Audit-Empirical (DEMC-AE) instrument was developed by adapting four main constructs. The Digital Transformation (DT) dimension is operationalized based on the perceived usefulness and behavioral intention measures from the Technology Acceptance Model (Davis, 1989; Venkatesh & Davis, 2000). The Merger Integration (MI) dimension adapts integration quality indicators from Zahoor et al. (2022) and Alexander et al. (2025), tailored to the context of the Gojek and Tokopedia merger. The Ecosystem Synergy (ES) dimension refers to the concept of cross-service value and co-creation (Fang et al., 2024; Santoso, 2024), while the Customer Loyalty (CL) dimension adapts the digital platform loyalty instrument from Oliver (1999), adjusted to reflect multi-service characteristics.

Each item was contextualized within GoTo services, namely GoRide, GoFood, Tokopedia, GoPay, and GoClub, using a five-point Likert scale. Following the pilot test and analysis of outer loadings, items with outer loading values below 0.70 or those exhibiting semantic redundancy were removed. This process retained 21 final measurement items ($\mathrm{DT} = 5, \mathrm{MI} = 5, \mathrm{ES} = 6, \mathrm{CL} = 5$).

Cronbach's α values ranged from 0.905 to 0.948, while composite reliability coefficients spanned from 0.938 to 0.961. An examination of the inter-item correlation matrix revealed that all coefficients were below 0.95. These results indicate that the high reliability primarily reflects consistency among indicators rather than item redundancy (Streiner, 2003).

Data Analysis

The empirical model was tested using PLS-SEM with the assistance of SmartPLS through four stages of analysis. The first stage involved analyzing descriptive statistics, while

the second stage evaluated the measurement model (outer model) through convergent validity, discriminant validity, and construct reliability. Since this study utilized a single-source survey, a full collinearity assessment (Kock, 2015) and Harman's single-factor test were also conducted to evaluate the potential for common method bias. In the third stage, the researchers tested the structural model (inner model) through the coefficient of determination (R^2), effect size (f^2), and predictive relevance (Q^2). The fourth stage involved examining the hypotheses and mediation effects using a bootstrapping procedure with 5,000 subsamples at a 5% significance level. The specific type of mediation was determined based on the significance and direction of both direct and indirect path coefficients, following the guidelines of Zhao et al. (2010).

4. RESULTS AND DISCUSSION

Descriptive Statistical Analysis

Table 1. Descriptive Statistics of Research Variables.

Variables	$\bar{x}$	Standard Deviation	Category
Digital Transformation (DT)	4.162	0.867	High
Merger Integration (MI)	4.017	0.852	High
Ecosystem Synergy (ES)	4.005	0.832	High
Customer Loyalty (CL)	3.764	0.836	High

Data source: Processed data.

Note: Categories refer to the interpretation range of $\bar{\mathbf{x}}$ on a 5-point Likert scale with an interval of (5–1)/5 = 0.80

Mean scores for all research variables fall within the high range of 3.41 to 4.20. The data reveal a clear downward trend from DT (4.162), MI (4.017), and ES (4.005) down to CL (3.764). This drop indicates that active GoTo users recognize technical progress but reduce their platform commitment once incentives change. Subsidies drive this transactional loyalty, explaining the 18% decline in annual transaction value per user after GoTo enforced cost discipline. Lastly, standard deviation values between 0.832 and 0.867 show high homogeneity in respondent answers.

Table 2. Frequency Distribution of Respondents' Perceptions per Variable.

Category	DT	%	MI	%	ES	%	CL	%
Very Low	12	4.26	12	4.26	12	4.26	6	2.13
Low	0	0.00	0	0.00	0	0.00	15	5.32
Moderate	27	9.57	55	19.15	37	12.77	73	25.53
High	113	39.36	122	42.55	128	44.68	119	41.49
Very High	134	46.81	97	34.04	109	38.30	73	25.53
Total	**286**	**100**	**286**	**100**	**286**	**100**	**286**	**100**

Data source: Processed data.

The frequency distribution reinforces this pattern. The DT, ES, and MI dimensions recorded combined high and very high ratings of 86.17%, 82.98%, and 76.59%, respectively. In contrast, the CL dimension exhibits the widest data distribution. Only 25.53% of respondents chose the very high category, while cumulative moderate-to-low values reached 32.98%, representing the highest concentration of lower scores across all variables. These data provide early evidence of a decoupling between internal platform capabilities and consumer loyalty, a phenomenon aligning with core principles of ecosystem orchestration and super-app commitment (Fang et al., 2024; Teece, 2007). Next, the structural model analysis evaluates these relationships.

Evaluation of the Measurement Model (Outer Model)

Convergent Validity

Table 3. Outer Loading and AVE per Construct

Construct	Indicator	Outer Loading	AVE	Criteria
Digital Transformation (DT)	DT1	0.948	0.821	Valid
	DT2	0.890		
	DT3	0.915		
	DT4	0.893		
	DT5	0.884		
Merger Integration (MI)	MI1	0.889	0.806	Valid
	MI2	0.904		

	MI3	0.905		
	MI4	0.906		
	MI5	0.886		
Ecosystem Synergy (ES)	ES1	0.868	0.797	Valid
	ES2	0.877		
	ES3	0.875		
	ES4	0.913		
	ES5	0.929		
	ES6	0.892		
Customer Loyalty (CL)	CL1	0.825	0.741	Valid
	CL2	0.791		
	CL3	0.874		
	CL4	0.919		
	CL5	0.890		

Data source: Processed data.

All indicators across the four constructs exceed the 0.70 outer loading threshold. AVE values range from 0.741 (CL) to 0.821 (DT), surpassing the recommended 0.50 minimum (Hair et al., 2019). These statistics confirm that the DEMC-AE instrument cleanly distinguishes each dimension within the framework among active GoTo users. Specifically, adapting the Technology Acceptance Model (Davis, 1989) to a multi-service platform context drives these robust outer loadings.

Discriminant Validity

Table 4. Fornell-Larcker Matrix.

Construct	**DT**	**MI**	**ES**	**CL**
DT	0.906	0.892	0.887	0.684
MI	0.892	0.898	0.893	0.768
ES	0.887	0.893	0.893	0.769
CL	0.684	0.768	0.769	0.861

Data source: Processed data.

Table 5. HTMT Ratio and Bootstrapped 95% Confidence Interval.

Inter-construct correlations	HTMT	95% CI Lower	95% CI Upper	Criteria
DT ↔ MI	0.947	0.874	0.987	Fulfill
DT ↔ ES	0.938	0.849	0.983	Fulfill
MI ↔ ES	0.947	0.869	0.989	Fulfill
DT ↔ CL	0.744	0.549	0.872	Fulfill
MI ↔ CL	0.832	0.671	0.942	Fulfill
ES ↔ CL	0.831	0.672	0.934	Fulfill

Data source: Processed data.

Note: Bootstrapping was performed with 5,000 resamples.

The Fornell-Larcker criterion confirms discriminant validity because the square root of each construct's AVE exceeds its corresponding inter-construct correlations. The MI ↔ ES pair approaches the critical threshold since the inter-construct correlation (0.893) matches the ES construct's AVE (0.893). This condition avoids a formal violation but highlights that user experience merger integration and ecosystem synergy as an inseparable unit within a consolidated digital ecosystem (Hanelt et al., 2021; Plekhanov et al., 2023).

Inferential HTMT testing with 5,000 bootstrap resamples verifies discriminant validity. The 95% confidence interval upper bounds for all construct pairs remain below 1.0, ranging from 0.872 (DT ↔ CL) to 0.989 (MI ↔ ES) (Henseler et al., 2015). This close structural proximity among DT, MI, and ES reflects authentic, unified platform experiences in a post-merger super-app rather than a measurement error. Future researchers can increase discriminant power by separating platform-specific technical attributes from cross-platform service experiences.

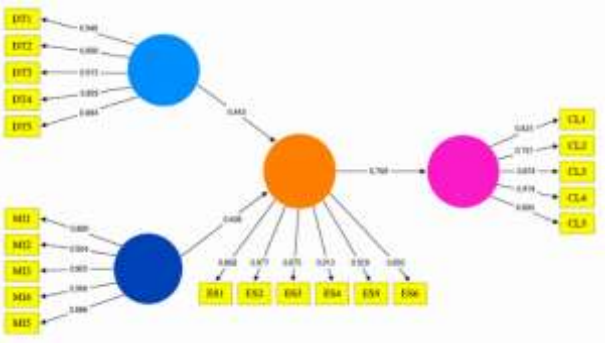

Figure 2. Results of DEMC structural model testing through SmartPLS bootstrapping.

Source: Processed primary data, 2026.

Construct Reliability

Table 6. Cronbach's α and Composite Reliability.

Construct	Cronbach's α	Category	Composite Reliability	Criteria
Digital Transformation (DT)	0.945	Very High	0.961	Highly Reliable
Merger Integration (MI)	0.939	Very High	0.957	Highly Reliable
Ecosystem Synergy (ES)	0.948	Very High	0.961	Highly Reliable
Customer Loyalty (CL)	0.905	Very High	0.938	Highly Reliable

Data source: Processed data.

Cronbach's α values range from 0.905 to 0.948, and Composite Reliability values range from 0.938 to 0.961. Both statistics exceed the 0.90 threshold for excellent internal consistency (Nunnally, 1978). The inter-item correlation matrix reveals no pairs above 0.95, ruling out item redundancy and proving that high reliability stems from genuine construct coherence rather than semantic overlap (Streiner, 2003). These values confirm strong measurement stability for the DEMC-AE instrument across all constructs.

Common Method Bias Test

This study utilizes a single-source survey design where the same respondents evaluate all independent and dependent variables simultaneously. This setup introduces a potential risk of common method bias (CMB), where measurement methods inject artificial variance (Podsakoff et al., 2003). To check this risk, an unrotated exploratory factor analysis via Harman's single-factor test evaluated all 21 items. The first principal factor explains 68.99% of the total variance, passing the 50% threshold. Similarly, a full collinearity assessment yields VIF values above 3.3 across all constructs: $DT = 6.09$, $MI = 6.40$, and $ES = 6.16$ (Kock, 2015). Both assessments point to a presence of common method variance (CMV) that warrants attention.

This outcome likely reflects the nature of a consolidated digital ecosystem where users view digital transformation, merger integration, and ecosystem synergy as highly overlapping realities (Hanelt et al., 2021; Plekhanov et al., 2023). To protect the data procedurally, the survey omitted reverse-scored items to prevent respondent confusion and lower CMV inflation (Podsakoff et al., 2003). The researchers interpret the subsequent path coefficients considering this potential variance inflation, and suggest that future studies combine perceptual surveys with actual platform behavioral tracking.

Structural Model Evaluation (Inner Model)

Model Fit

The analysis yields an SRMR value of 0.033, falling below the 0.08 threshold to confirm a close fit between the model and the empirical data (Henseler et al., 2015).

Multicollinearity

Table 7. VIF Value of Ecosystem Synergy Predictor.

Predictor	VIF	Threshold	Criteria
Digital Transformation (DT)	4.875	< 5,0	Supported
Merger Integration (MI)	4.875	< 5,0	Supported

Data source: Processed data

Collinearity testing on the ES structural equation yields a VIF value of 4.875 for both DT and MI, remaining below the critical threshold of 5.0 (Hair et al., 2019). The structural model avoids severe multicollinearity issues. Still, the strong correlation between DT and MI ($r = 0.892$) drives the VIF close to the limit, reinforcing the HTMT findings that users perceive these two constructs as closely linked parts of the same transition.

Coefficient of Determination (R^2) and Predictive Relevance (Q^2)

Table 8. Coefficient of Determination (R^2) and Predictive Relevance (Q^2).

Endogenous Variable	R^2	Interpretation	Q^2	Criteria
Ecosystem Synergy (ES)	0.838	Substantial	0.828	High predictive relevance
Customer Loyalty (CL)	0.591	Moderate-to-Substantial	0.557	High predictive relevance

Data source: Processed data.

Integrating DT and MI yields an R^2 of 0.838 for Ecosystem Synergy, meaning these two predictors explain 83.8% of the variance in ES and demonstrate strong explanatory power. The R^2 for Customer Loyalty (0.591) shows that ES accounts for 59.1% of loyalty variance. External factors like individual user traits, market competition, and omitted consumer behavior variables drive the remaining 40.9%. This difference shows that the DEMC framework predicts internal ecosystem capabilities better than external market responses (Al-Moaid & Almarhdi, 2024). Since Q^2coefficients for both endogenous variables exceed zero, the model establishes predictive relevance and avoids data overfitting.

Effect Size (f^2)

Tabel 9. Effect Size (f^2) of Relationships Between Constructs.

Path	f^2	Category
DT → ES	0.248	Moderate
MI → ES	0.313	Moderate
ES → CL	1.445	Large (highly dominant)

Data source: Processed data.

The $ES \rightarrow CL$ pathway generates an f^2 of 1.445, passing the large effect threshold (Cohen, 1988) and establishing Ecosystem Synergy as the dominant driver of Customer Loyalty inside the GoTo ecosystem. Moderate f^2 values for $DT \rightarrow ES$ (0.248) and $MI \rightarrow ES$ (0.313) reveal balanced, complementary contributions to ecosystem synergy, with MI showing a slightly larger impact.

Hypothesis Testing

Direct Effects

Table 10. Direct Path Hypothesis Testing Results.

Hypothesis	Path	Coefficient (β)	t-statistic	p-value	Decision
H1	DT → ES	0.443	4.536	< 0.001	Supported
H2	MI → ES	0.498	5.119	< 0.001	Supported
H3	ES → CL	0.769	7.548	< 0.001	Supported

Data source: Processed data.

The empirical findings support H1: The positive path coefficient ($\beta = 0.443$) shows that Digital Transformation strengthens user perceptions of Ecosystem Synergy. For example, cross-platform recommendation algorithms suggest Tokopedia products based on GoFood order histories, signaling to users that the super-app operates as a single value system instead of a broken collection of apps.

The empirical findings support H2: The $MI \rightarrow ES$ path coefficient ($\beta = 0.498$) exceeds the $DT \rightarrow ES$ coefficient ($\beta = 0.443$), supporting the seizing argument within dynamic capabilities theory (Teece, 2007). Structural harmonization across Gojek and Tokopedia unifies ecosystem perceptions more effectively than digital maturity alone during this post-merger stage.

The empirical findings support H3: The $ES \rightarrow CL$ pathway delivers the highest path coefficient ($\beta = 0.769$), backed by a t-statistic of 7.548 and an exceptionally large effect size ($f^2 = 1.445$). Users who experience smooth links between GoRide, GoFood, Tokopedia, and GoPay build a deep attachment to the whole GoTo network. This reality reflects the switching-

cost mechanism where super-app synergy converts regular usage into behavioral loyalty (Fang et al., 2024).

Mediation Test (Indirect Effects)

The analysis evaluated indirect mediating effects using a 5,000-resample bootstrapping procedure within an expanded structural model containing direct $DT \rightarrow CL$ and $MI \rightarrow CL$ pathways, following the methods of Hair et al. (2019) and Zhao et al. (2010).

Table 11. Direct Path Coefficient in the Extended Model.

Path	Coefficient (β)	t-stat	p-value	Decision
DT → CL	-0.231	-1.245	0.213	Non-significant
MI → CL	0.517	2.610	0.009	Significant
DT → ES → CL	0.227	2.169	0.030	Significant
MI → ES → CL	0.255	2.813	0.005	Significant

Data source: Processed data.

In this extended model, VIF values for the CL equation exceed the standard threshold of 5.0: DT = 6.09, MI = 6.40, and ES = 6.16 (Hair et al., 2019). This pattern matches the suppression effect that appears when researchers enter highly collinear predictors into a model at the same time (MacKinnon et al., 2000). To protect analytical validity, the mediation classification follows Zhao et al. (2010) by tracking the statistical significance of indirect effects rather than unstable direct coefficients.

Table 12. Indirect Effects and Types of Mediation.

Hypothesis	Indirect Path	IE	t-statistic	p-value	DE	VAF	Type of Mediation	Decision
H4	DT → ES → CL	0.227	2.169	0.030	-0.231 (ns)	N/A	Full Mediation (Indirect-Only)	Supported
H5	MI → ES → CL	0.255	2.813	0.005	0.517 (sig)	33.0%	Partial Mediation	Supported

Data source: Processed data.

H4 Supported: Full Mediation (Indirect-Only): A non-significant direct $DT \rightarrow CL$ path ($\beta = -0.231$; $p = 0.213$) paired with a significant positive indirect path $DT \rightarrow ES \rightarrow CL$ ($IE = 0.227; t = 2.169; p = 0.030$) satisfies the criteria for indirect-only mediation (Zhao et al., 2010). Ecosystem Synergy carries the entire impact of Digital Transformation onto Customer Loyalty. Because inner equation VIFs exceed the baseline, future studies should use larger samples to verify structural stability

H5 Supported: Partial Mediation: The direct pathway $MI \rightarrow CL$ ($\beta = 0.517$; $p = 0.009$) and the indirect pathway $MI \rightarrow ES \rightarrow CL$ ($\beta = 0.255$; $p = 0{,}005$) both exhibit statistically significant effects. These empirical results confirm a complementary partial

mediation effect. A Variance Accounted For of 33.0% demonstrates that Ecosystem Synergy (ES) transmits approximately one-third of the total impact of Merger Integration (MI) onto Customer Loyalty (CL). Concurrently, the remaining two-thirds of the effect operate directly through the structural integration pathway. This structural pattern reflects the dual-path dynamics of the seizing capabilities conceptualized by Teece (2007). These strategic capabilities secure customer loyalty directly while simultaneously enhancing overarching ecosystem synergy.

Discussion

Synthesis of Key Findings

Empirical results validate the structural pathways of the DEMC framework. Digital Transformation and Merger Integration significantly improve Ecosystem Synergy, which then exerts a dominant effect on Customer Loyalty. The mediation analysis reveals a critical asymmetry. Digital Transformation impacts customer loyalty only through Ecosystem Synergy via indirect-only mediation. In contrast, Merger Integration utilizes both direct and indirect pathways through complementary mediation. This distinction shows that sensing capabilities require ecosystem synergy to generate user loyalty, whereas seizing capabilities drive loyalty through direct integration consistency and mediated value simultaneously. Descriptive data reveal a gap between internal technological maturity and behavioral loyalty. Robust internal capabilities do not automatically secure long-term loyalty unless customers experience the utility of the integrated ecosystem.

Theoretical and Literature Compatibility

Empirical testing of the DEMC framework confirms and extends dynamic capabilities theory (Teece, 2007) and platform ecosystem theory (Parker et al., 2016). This study applies both models to an under-examined setting: a post-merger digital-native super-app within an emerging market.

Within the dynamic capability perspective, the difference between the MI $\rightarrow$ ES ($\beta = 0.498$) and DT $\rightarrow$ ES ($\beta = 0.443$). path coefficients demonstrates that structural integration contributes more to ecosystem synergy than digital maturity alone. This finding extends the work of Zahoor et al. (2022) and Alexander et al. (2025) beyond conventional M&A contexts. Specifically, the data quantify the relative strength of seizing over sensing within a digital super-app setup. Additionally, the distinct mediation paths for DT and MI expand previous dynamic capabilities models (Al-Moaid & Almarhdi, 2024). These paths identify unique boundary conditions for dynamic capabilities in multi-platform mergers, showing that seizing capabilities transcend the single-firm models common in traditional literature.

The ES → CL f^2 value of 1.445 reinforces the idea that service interconnection drives platform value more than individual service quality (Parker et al., 2016). This large effect also supports the view that transforming requires aligning internal organizational capabilities with external environment shifts (Helfat & Raubitschek, 2018). High HTMT values among the DT, MI, and ES pairs reflect how users experience a mature ecosystem. From the end-user perspective, the boundaries between digital capabilities, integration processes, and value creation blur together (Hanelt et al., 2021; Plekhanov et al., 2023). Inferential HTMT testing confirms this experiential overlap since all confidence interval upper bounds remain strictly below 1.0.

Relevance to Indonesia's Structural Conditions

Intense platform competition and high consumer price sensitivity characterize Indonesia's emerging digital economy. The findings of this study directly address these dynamics. Specifically, the observed decoupling phenomenon demonstrates that enhancements in technical capabilities and operational integration do not automatically generate customer loyalty. The score disparities among Digital Transformation (4.162), Merger Integration (4.017), and Ecosystem Synergy (4.005), relative to Customer Loyalty (3.764), indicate that cultivating loyalty within a digital ecosystem demands strategic governance that extends far beyond technological upscaling and service integration.

Low switching costs within Indonesia's digital marketplace afford users the flexibility to migrate between platforms seamlessly. Consequently, firms cannot rely solely on cultivating internal capabilities to drive digital transformation. Instead, management must translate these capabilities into seamless cross-service experiences that deliver discernible practical value to the end-user. Ultimately, the mediation analysis underscores that Ecosystem Synergy (ES) captures the relational value of inter-service connectivity, thereby sustaining customer loyalty amid hyper-competitive dynamics.

Practical Contribution to the Phenomenon

This study offers a twofold practical contribution. First, for GoTo management, the findings underscore that post-merger integration must prioritize cross-application harmonization, reward system consistency, and GoPay interoperability, driven by the dual-pathway mechanism through which Merger Integration (MI) impacts loyalty. Furthermore, the DEMC-AE instrument serves as a periodic diagnostic tool to detect erosions in user perception before they jeopardize commercial performance. Second, for regulators, ecosystem synergy quality provides a novel evaluation benchmark for digital platform consolidation, effectively complementing traditional metrics that focus strictly on antitrust and market structure.

5. CONCLUSIONS

Key Findings

This study provides three contributions to the DEMC model based on a survey of 286 GoTo users. Ecosystem Synergy acts as the main mediator between internal capabilities and Customer Loyalty. Specifically, Digital Transformation affects Customer Loyalty only through Ecosystem Synergy. In contrast, Merger Integration uses both direct and indirect pathways simultaneously. This pattern extends the dynamic capabilities framework to super-apps in emerging markets. Within this model, the seizing coefficient exerts a stronger influence than sensing on the transforming capability. Practically, firms must quickly transform technology investments into real cross-service experiences. This action becomes vital as management reduces the use of monetary incentives.

Research Limitations

This study contains several methodological limitations. First, the cross-sectional retrospective survey design prevents researchers from tracking user loyalty dynamics over time. Second, the sample only involves active young users, which limits the generalization of the findings to non-urban communities, elderly users, or business partners. Third, the high correlation between merger integration and ecosystem synergy indicates a conceptual overlap. In an established digital ecosystem, users naturally perceive separate services as a single, unified experience. Nevertheless, the statistical testing still satisfies discriminant validity because the inferential index remains below the maximum acceptable threshold. This high inter-predictor correlation also inflates the Variance Inflation Factor (VIF) values. These elevated scores can disrupt the stability of the direct path estimates for digital transformation. Therefore, future research must refine the measurement indicators through item selection testing and replicate the model using different sample characteristics. Finally, short-term operational efficiency pressures impede the execution of these investment recommendations.

Suggestion

Block A - Practical Suggestions

GoTo management must prioritize post-merger integration quality to strengthen ecosystem synergies. Specifically, managers need to harmonize user experiences, integrate reward systems, and enhance payment system interoperability. These measures compensate for the reduction of monetary incentives. Consequently, customer loyalty will not rely solely on short-term financial benefits. In addition, the company can use the DEMC-AE instrument as a periodic evaluation tool to detect early declines in user perception. In the policy realm, regulators should incorporate service integration quality and user benefits into official success

indicators. This step broadens the evaluation focus, which previously only assessed business competition and capital adequacy. Finally, these empirical data remind micro-business partners about systemic vulnerability risks. Therefore, these partners need to diversify their digital channels to minimize market fluctuations from single-platform dependence.

Block B - Directions for Further Research

Future researchers should use a longitudinal design. This approach will track the dynamics of user perception changes throughout the post-merger integration phase. Additionally, researchers should also conduct comparative studies across digital ecosystems. Such comparative research will examine whether the dominance of the seizing role over sensing is a specific characteristic of GoTo or a common pattern in similar platforms. Future studies should also incorporate several external variables into the model, such as price sensitivity, intensity of multiplatform usage, digital literacy levels, and competitive pressure. Finally, combining user perception data with actual platform behavior data will reduce the potential for common method bias. This strategy also addresses the inherent limitations of single-source survey designs.

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