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E-COMMERCE AS THE GREAT LEVELLER: A LONGITUDINAL ANALYSIS OF DIGITAL MARKETING MATURITY PROGRESSION AMONG UK SMES

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ABSTRACT

Digital transformation is reshaping strategic marketing practice, yet little is known about how digital marketing maturity develops within small and medium-sized enterprises (SMEs) once initial adoption has occurred. This study addresses this gap by tracking digital marketing maturity across four consecutive quarters (Q3–Q6) in a sample of 100 UK SMEs spanning six industry sectors and three business-model categories. Guided by an integrated theoretical framework combining the Technology-Organisation-Environment (TOE) framework, Dynamic Capabilities Theory, and the Digital Awareness Strategy Adoption and Transformation (DASAT) model, a quantitative cross-sectional survey was analysed in SPSS 28.0 using descriptive statistics, paired-samples t-tests, chi-square tests, Spearman correlation, one-way ANOVA, and multiple linear regression. Mean maturity rose significantly across every interval ($p < .001$), from $M = 4.12$ (Q3) to $M = 5.23$ (Q6), a 27.0% improvement. E-commerce migration was the strongest predictor of progression ($\beta = .356$, $p < .001$; adopters were 2.08 times more likely to advance two or more maturity levels), while a significant negative coefficient for baseline maturity ($\beta = -.314$, $p = .002$) revealed a ceiling effect in which lower-maturity organisations retained greater absolute growth potential. Organisational size, industry sector, and business model showed no significant influence, indicating that the determinants of successful digital integration are predominantly behavioural and strategic rather than structural. These findings empirically validate the DASAT model in a UK context, extend the TOE framework beyond first-adoption decisions, and operationalise Dynamic Capabilities Theory within an SME marketing setting. The paper concludes with recommendations for SME managers and policymakers centred on e-commerce investment, maturity-differentiated support, and leadership-led cultural change.

Keywords: Digital Marketing Maturity; SME Digitalisation; E-Commerce Migration; TOE Framework; Dynamic Capabilities; DASAT Model; UK SMEs

1 INTRODUCTION

Digital transformation is widely regarded as one of the most consequential shifts in contemporary business, reshaping competitive dynamics, organisational processes, and customer relationships (Kraus et al., 2021). For small and medium-sized enterprises (SMEs), digitalisation offers a route to democratising marketing capabilities once the preserve of larger, better-resourced firms (Clemente-Almendros et al., 2024). Digital tools promise UK SMEs — which constitute 99.9% of UK businesses and around 61% of private-sector employment — a mechanism for closing performance gaps with larger competitors (Department for Business and Trade, 2023). Yet the evidence base suggests that SME digital

adoption remains largely discontinuous and tactical: firms deploy tools such as social media and web analytics without integrating them into a coherent marketing strategy (Clemente-Almendros et al., 2024; Tawil et al., 2023).

This disconnect between technology ownership and strategic value realisation is the central problem this study addresses. A parallel gap exists in the theoretical literature. The Technology-Organisation-Environment (TOE) framework offers strong explanatory power for the antecedents of adoption but treats digitalisation as a single, static decision rather than a developmental trajectory (Kruger & Steyn, 2024). Dynamic Capabilities Theory addresses this developmental dimension conceptually, through the sensing–seizing–transforming cycle (Teece et al., 1997), but remains abstract when applied to SME marketing functions specifically, with limited empirical operationalisation (Muller et al., 2021). More recent process models, such as the Digital Awareness Strategy Adoption and Transformation (DASAT) model, conceptualise digitalisation as an iterative progression through awareness, experimentation, implementation and transformation stages (Radicic & Petkovic, 2023), but this model has not been empirically tested within a UK SME setting.

This study responds to these gaps by tracking, rather than merely describing, digital marketing maturity over time, through a multi-theoretical lens integrating TOE, Dynamic Capabilities Theory and the DASAT model. The aim is to establish how digital marketing tools are strategically integrated by UK SMEs, and to examine the internal organisational and external environmental dynamics that shape this integration process over time. Three objectives follow: (1) to classify the digital marketing tools adopted by UK SMEs according to TOE dimensions and identify the drivers of adoption at different maturity levels; (2) to compare digital integration practices across sector, organisational size and maturity stage; and (3) to determine the influence of internal capabilities (absorptive capacity, marketing competence, leadership digital literacy, organisational culture) and external forces (competitive intensity, customer expectations, regulatory requirements) on integration effectiveness. Correspondingly, the study addresses three research questions: RQ1 — which digital tools have UK SMEs adopted, and what factors explain adoption at different maturity levels? RQ2 — how does digital integration vary by sector, size and maturity? RQ3 — how do internal capabilities and external forces relate to integration effectiveness over the integration lifecycle?

The study is bounded to UK-registered SMEs (fewer than 250 employees, per the UK Companies Act 2006) operating across manufacturing (B2B and B2C), retail, professional services, technology and hospitality sectors, and focuses on the marketing function — customer acquisition and retention, market intelligence, brand positioning, and performance measurement. This scope reflects the UK's mature digital infrastructure, active SME digitalisation policy environment, and stringent data-protection regime (UK GDPR), all of which create a theoretically and practically significant context for examining maturity progression (Department for Business and Trade, 2023).

2 LITERATURE REVIEW

2.1 Digitalisation and Marketing Orientation in SMEs

Digitalisation is conceptualised in the literature as a wholesale organisational change spanning processes, structures, skills and strategic orientation, rather than a simple technology purchase (Matarazzo et al., 2021). Because SMEs face resource constraints, owner-manager centralisation, and heightened environmental vulnerability, their digitalisation trajectories differ systematically from those of large organisations (Clemente-Almendros et al., 2024). Empirical work on UK SMEs illustrates the resulting tension. Tawil et al. (2023), studying 85 UK SMEs, found that most firms collected substantial customer data through digital touchpoints but lacked the analytical expertise and organisational routines needed to convert that data into marketing insight — a capability gap rather than a technology gap. In contrast, Bargoni et al. (2024) identified a cohort of European SMEs with advanced segmentation, predictive analytics, and omnichannel capability, challenging assumptions of uniform SME digital immaturity and pointing to substantial within-group heterogeneity. Reconciling these divergent findings requires understanding what distinguishes advancing from stagnant firms — a question existing cross-sectional studies, which capture a single point in time, cannot answer (Mohamed & Weber, 2020).

2.2 The TOE Framework: Explanatory Power and Limits

The TOE framework attributes adoption decisions to technological (complexity, compatibility, relative advantage), organisational (leadership, resources, culture) and environmental (competition, customer expectations, regulation) factors (Tornatzky & Fleischer, 1990). Compatibility and relative advantage have been shown to shape both the decision to adopt e-commerce and the success of its implementation (Bening et al., 2023), while resource constraints and risk-averse organisational cultures continue to inhibit uptake among SMEs specifically (Abbasi et al., 2022; Mohamed & Weber, 2020). However, TOE's central limitation for this study is structural: it was designed to explain a single, largely binary adoption decision, not the subsequent trajectory of integration, learning and value realisation (Kruger & Steyn, 2024). Digitalisation, by contrast, is increasingly understood as an ongoing process that begins, rather than ends, with adoption (Radicic & Petkovic, 2023).

2.3 Dynamic Capabilities and the DASAT Model

Dynamic Capabilities Theory addresses this gap by conceptualising organisational adaptation as a continuous cycle of sensing opportunities, seizing their value, and transforming organisational assets and routines to fit a changing environment (Teece et al., 1997; Teece, 2007). Within SME digitalisation, absorptive capacity — the ability to identify, assimilate and apply external knowledge — has been shown to determine whether digital investment translates into performance gains (Muller et al., 2021), while dynamic marketing capabilities have been found to sustain continuous value creation for digitalising manufacturing SMEs (Matarazzo et al., 2021). Nonetheless, the theory remains conceptually abstract when applied to marketing functions specifically, and empirical work has not clarified how SMEs acquire these capabilities in practice (Muller et al., 2021; Oduro & Mensah-Williams, 2023).

The DASAT model offers a more granular, process-oriented account, conceptualising digitalisation as a cyclical progression through awareness, strategy formulation, adoption and transformation stages rather than a single episodic event (Radicic & Petkovic, 2023). This model directly addresses TOE's static orientation and Dynamic Capabilities Theory's conceptual abstraction by specifying an observable developmental sequence. Empirical tests of the model, however, remain scarce, and none to date has been conducted in a UK SME marketing context.

2.4 UK Empirical Evidence and the Research Gap

UK-specific evidence reinforces the adoption–integration disconnect. Mohamed and Weber (2020), studying 53 West Midlands SMEs, found widespread access to analytics and CRM technologies alongside a persistent inability to convert data into actionable marketing decisions. Sharabati et al. (2024) similarly found that digital marketing tools improved SME performance only when integrated strategically; tactical, ad hoc use produced negligible returns. Despite this convergence of evidence, three gaps remain unresolved. First, TOE-based studies continue to privilege first-adoption decisions over integration trajectories (Kruger & Steyn, 2024). Second, Dynamic Capabilities research offers limited operational guidance for marketing-specific capability development in SMEs (Muller et al., 2021). Third, the DASAT model's cyclical logic has not been empirically validated using longitudinal or quasi-longitudinal maturity data (Radicic & Petkovic, 2023), leaving the mechanisms of SME digital marketing progression — as opposed to its antecedents — theoretically under-specified.

This study addresses these gaps by integrating TOE, Dynamic Capabilities Theory and the DASAT model into a single analytical framework, and by tracking digital marketing maturity across four consecutive quarters in a sample of UK SMEs spanning multiple sectors, sizes and business models. In doing so, it moves the empirical focus from why SMEs adopt digital tools to how their digital marketing capability subsequently develops.

3 METHODOLOGY

3.1 Research Design

This study adopted a quantitative, cross-sectional survey design suited to testing the relationships proposed by the TOE, Dynamic Capabilities and DASAT frameworks across a heterogeneous sample of organisations (Saunders et al., 2019; Bryman & Bell, 2015). Quarterly maturity scores were collected retrospectively for four consecutive quarters (Q3–Q6), enabling within-subject comparison of maturity change over time despite the single data-collection point.

3.2 Sample and Sampling Strategy

A purposive sample of 100 UK SMEs was recruited via professional networks, business associations and technology-vendor referrals. Purposive sampling was selected over probability sampling to ensure sufficient variation across theoretically meaningful categories — sector, size and business model — rather than statistical representativeness alone (Saunders et al., 2019). Screening questions confirmed that respondents held marketing or strategic decision-making authority. Sample characteristics are summarised in Table 1.

Table 1: Sample profile (n = 100)

Characteristic	Category	n	%
Employment size	1–9 employees	21	21.0
	10–49 employees	28	28.0
	50–249 employees	26	26.0
	250–999 employees	15	15.0
	1,000+ employees	10	10.0
Industry sector	Technology	21	21.0
	Professional services	19	19.0
	Manufacturing (B2B)	18	18.0
	Retail	16	16.0
	Manufacturing (B2C)	12	12.0
	Hospitality	9	9.0
	Other	5	5.0
Business model	B2B	43	43.0
	B2C	37	37.0
	Hybrid (B2B + B2C)	20	20.0

3.3 Data Collection and Measures

Data were collected via an online survey (approximately 15–20 minutes) administered to marketing executives and owner-managers, incorporating attention checks, response-time monitoring and CAPTCHA verification to safeguard data quality. Digital marketing maturity was measured on a seven-point ordinal scale at each of the four quarters. Employment size was coded ordinally (1 = 1–9 employees to 5 = 1,000+ employees); industry and business model were coded as nominal variables; e-commerce migration was coded as a binary indicator. Derived variables captured quarter-on-quarter and total (Q6–Q3) maturity change. Electronic informed consent was obtained from all participants; responses were anonymised, and data were stored on encrypted institutional servers in accordance with UK GDPR.

3.4 Analytical Strategy

Data were analysed in SPSS version 28.0. Descriptive statistics profiled the sample and maturity distribution. Paired-samples t-tests assessed the statistical significance of quarter-on-quarter maturity change. Cross-tabulation and chi-square tests examined associations between categorical variables (sector, size, e-commerce migration status) and maturity progression. Spearman rank correlation coefficients were used given the ordinal measurement of maturity. One-way ANOVA compared mean maturity change across industry sectors. Multiple linear regression identified significant predictors of total maturity change (baseline maturity, e-commerce migration, employment size, industry, business model), with diagnostic checks confirming linearity, independence (Durbin–Watson = 1.89), homoscedasticity, normality, and the absence of multicollinearity (VIF = 1.12–1.87).

3.5 Limitations of the Design

The cross-sectional, retrospective design captures perceived rather than externally verified maturity change and may be subject to recall and social-desirability bias; a genuinely longitudinal design would strengthen causal inference. The purposive sample, while adequate for detecting the reported effects, constrains statistical generalisability to the wider UK SME population, and self-selection toward more digitally engaged respondents cannot be ruled out.

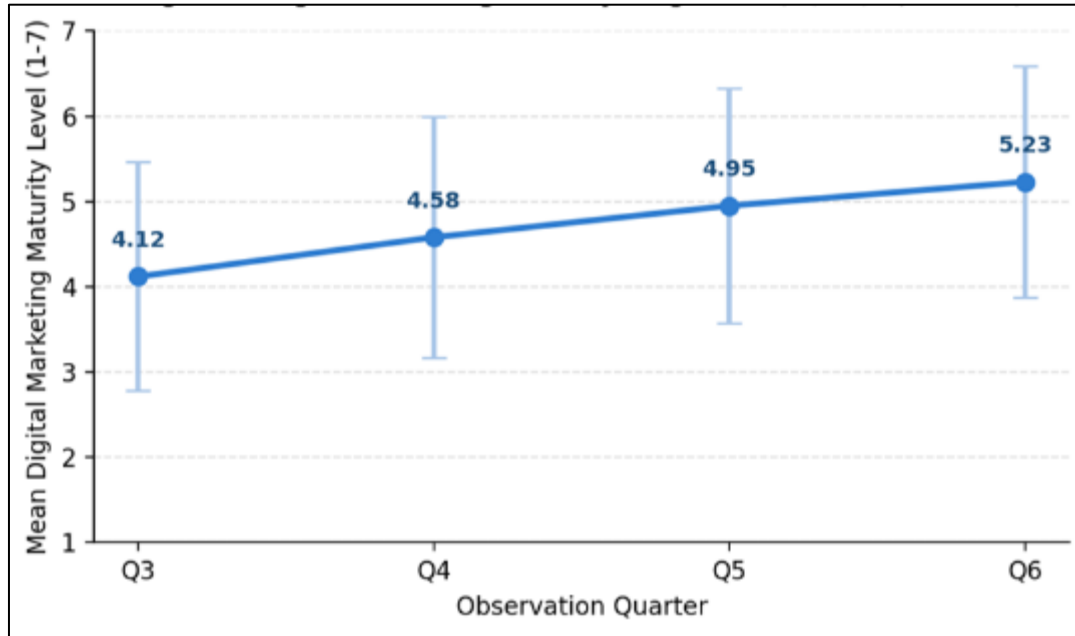
4 RESULTS

4.1 Maturity Progression, Q3–Q6

Mean digital marketing maturity rose consistently across all four observation points, from $M = 4.12$ ($SD = 1.34$) at Q3 to $M = 5.23$ ($SD = 1.36$) at Q6 — a 27.0% improvement (Table 2; Figure 1). The modal maturity category shifted from Level 4 (31.0% of firms at Q3) to Level 5 (31.0% at Q6), the proportion of firms at Levels 6–7 rose from 8.0% to 28.0%, and no firms remained at Level 1 by Q6.

Table 2: Descriptive statistics of digital marketing maturity by quarter

Quarter	M	SD	Min	Max
Q3	4.12	1.34	1	7
Q4	4.58	1.41	1	7
Q5	4.95	1.38	2	7
Q6	5.23	1.36	2	7


Figure 1: Mean digital marketing maturity progression, Q3–Q6 (error bars = ± 1 SD).

Paired-samples t-tests confirmed that each quarter-on-quarter change, and the overall Q3–Q6 change, was statistically significant (Table 3; all $p < .001$), with 95% confidence intervals excluding zero throughout. Overall, 84.0% of organisations recorded a positive maturity change, 12.0% remained static, and 4.0% regressed; 38.0% advanced by exactly one level and 46.0% advanced by two or more levels. The rate of quarterly advancement decelerated over time, from a mean gain of 0.46 levels (Q3–Q4) to 0.28 levels (Q5–Q6), consistent with a consolidation dynamic in which marginal gains diminish as organisations approach higher maturity.

Table 3: Paired-samples t-test results for quarterly maturity change

Comparison	Mean diff.	t	df	p	95% CI
Q3 → Q4	-0.46	-6.30	99	< .001	[-0.61, -0.31]
Q4 → Q5	-0.37	-5.44	99	< .001	[-0.50, -0.24]
Q5 → Q6	-0.28	-4.31	99	< .001	[-0.41, -0.15]
Q3 → Q6	-1.11	-9.41	99	< .001	[-1.34, -0.88]

4.2 Contextual and Correlational Patterns

Cross-tabulation by industry sector showed descriptive variation in the proportion of firms advancing two or more levels — from 66.7% in Technology and 55.6% in Hospitality to 27.8% in Manufacturing B2B — but this association did not reach statistical significance ($\chi^2(24) = 18.47$, $p = .775$), a result corroborated by one-way ANOVA on mean maturity change across sectors ($F(6, 93) = 1.75$, $p = .117$). Employment size showed a similar descriptive-but-non-significant pattern ($\chi^2(16) = 11.23$, $p = .794$), with medium-small firms (50–249 employees) showing the highest rate of substantial advancement (57.7%). Independent-samples t-tests found no significant difference between B2B and B2C organisations in either baseline maturity ($t(78) = -0.63$, $p = .532$) or total maturity change ($t(78) = -0.64$, $p = .525$).

Spearman correlations (Table 4) showed a strong positive association between Q3 and Q6 maturity ($r_s = .712$, $p < .01$), indicating considerable stability in relative maturity position over time, and a moderate positive association between e-commerce migration and both total maturity change ($r_s = .412$, $p < .01$) and Q6 maturity ($r_s = .487$, $p < .01$).

Table 4: Spearman correlation matrix ($p < .01$)**

Variable	1	2	3	4	5
1. Q3 Maturity	—	.712**	-.142	.286**	.203
2. Q6 Maturity		—	.441**	.319**	.487**
3. Total Change			—	.098	.412**
4. Employment Size				—	.178
5. E-commerce Migration					—

A chi-square test confirmed a significant relationship between e-commerce migration and advancing two or more maturity levels ($\chi^2(1) = 11.32$, $p = .001$, Cramer's $V = .337$; Table 5): 64.4% of e-commerce adopters advanced two or more levels compared with 30.9% of non-adopters, an odds ratio of 2.08.

Table 5: E-commerce migration and maturity advancement

Migration status	Did not advance 2+ levels	Advanced 2+ levels	Total	% advanced 2+
No e-commerce	38	17	55	30.9%
E-commerce adopted	16	29	45	64.4%
Total	54	46	100	46.0%

Organisational challenges were dominated by resource constraints (38.0%), implementation difficulty (26.0%), cultural resistance (21.0%) and access to resources (15.0%); a chi-square test found no significant association between organisational size and challenge type ($\chi^2(12) = 9.87$, $p = .628$), indicating that these barriers are broadly distributed rather than concentrated among smaller or larger firms.

4.3 Predictors of Total Maturity Change: Multiple Regression

The overall regression model was statistically significant, $F(5, 94) = 7.51$, $p < .001$, explaining 28.5% of the variance in total maturity change ($R^2 = .285$, adjusted $R^2 = .247$; Table 6). Two predictors were significant: e-commerce migration was the strongest positive predictor ($\beta = .356$, $p < .001$), while baseline (Q3) maturity showed a significant negative coefficient ($\beta = -.314$, $p = .002$), indicating a ceiling effect whereby lower-maturity organisations retained greater capacity for absolute progression. Employment size ($p = .468$), industry classification ($p = .137$) and business model ($p = .409$) were not significant predictors (Figure 2).

Table 6: Multiple regression results predicting total maturity change (Q3–Q6)

Predictor	B	SE	β	t	p
(Constant)	2.14	0.48	—	4.46	< .001
Q3 Maturity (baseline)	-0.28	0.09	-.314	-3.11	.002
E-commerce migration	0.76	0.21	.356	3.62	< .001
Employment size	0.08	0.11	.071	0.73	.468
Industry (Technology)	0.42	0.28	.147	1.50	.137
Business model (B2C)	0.19	0.23	.079	0.83	.409

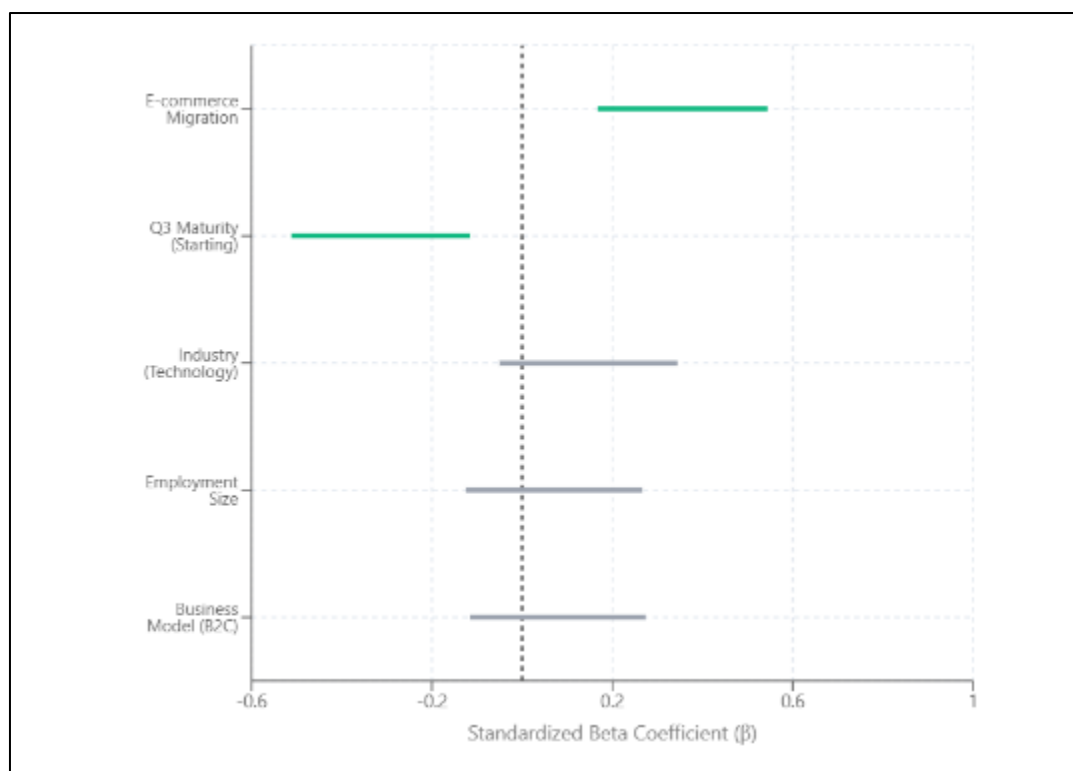


Figure 2: Standardised regression coefficients (β) with 95% confidence intervals.

4.4 Summary of Key Findings

- Maturity gains were statistically significant across all intervals, averaging 1.11 levels (27.0%) over the study period.
- E-commerce migration was the leading predictor of advancement; adopters were 2.08 times more likely to progress substantially.
- A significant ceiling effect meant lower-maturity firms retained greater growth potential.
- Organisational size, sector and business model showed no significant independent influence on progression.
- Maturity position was relatively stable over time ($r_s = .712$).
- Organisational challenges were evenly distributed regardless of firm characteristics.
- The regression model, while significant, left 71.5% of variance unexplained, implying a substantial role for unmeasured factors such as leadership commitment and organisational culture.

5 DISCUSSION

5.1 Digital Maturity Progression as a Systemic, Iterative Process

The consistent, statistically significant maturity gains recorded across all four quarters support the DASAT model's characterisation of digitalisation as a cyclical progression through awareness, strategy, adoption and transformation, rather than a single episodic decision (Radicic & Petkovic, 2023). The observed deceleration in quarterly gains — from 0.46 levels (Q3–Q4) to 0.28 levels (Q5–Q6) — is consistent with the view that later-stage capability development requires increasingly complex managerial reconfiguration rather than simple asset accumulation (Muller et al., 2021), and aligns with Dynamic Capabilities Theory's distinction between the relatively rapid 'seizing' phase and the more demanding 'transforming' phase of capability development (Teece et al., 1997). Rather than indicating stagnation, this pattern is more plausibly read as consolidation: organisations embedding capabilities gained in earlier quarters before pursuing further advancement.

5.2 E-Commerce Migration as the Primary Catalyst

E-commerce migration emerged as the single strongest predictor of maturity advancement, both in the regression model ($\beta = .356$) and in the odds of substantial progression ($OR = 2.08$). This finding is consistent with the TOE framework's premise that adoption decisions addressing multiple dimensions simultaneously — technological (systems integration), organisational (process and workforce reconfiguration) and environmental (competitive and customer pressure) — generate disproportionate downstream effects (Bening et al., 2023; Tornatzky & Fleischer, 1990). Because e-commerce adoption compels the kind of cross-functional reorganisation that Dynamic Capabilities

Theory identifies as necessary for sustained adaptive capacity (Teece et al., 1997), it appears to function less as one digital tool among many and more as a structural platform that catalyses broader maturity development. This finding also extends TOE's applicability beyond its traditional focus on the initial adoption decision (Kruger & Steyn, 2024) to the subsequent maturity trajectory, supporting calls in the literature for the framework's conceptual scope to be widened across the full digitalisation lifecycle.

5.3 The Ceiling Effect and the Limits of Compounding Advantage

The significant negative relationship between baseline maturity and subsequent change ($\beta = -.314$) indicates a convergence dynamic: organisations starting from a lower maturity position retained more absolute room to grow, while already-mature organisations faced diminishing marginal returns. This pattern complicates assumptions, common in the broader digital-transformation literature, that early movers accrue compounding advantages over time. It is, however, consistent with diffusion-of-innovation theory, in which later adopters benefit from the accumulated institutional knowledge, de-risked technologies and established vendor ecosystems created by earlier adopters, thereby narrowing the gap over time (Rogers, 2003). At the same time, the strong positive correlation between Q3 and Q6 maturity ($r_s = .712$) shows that this convergence operates within a stable rank order: organisations progress largely in parallel, and early movers retain their relative position even as absolute gaps narrow — consistent with Dynamic Capabilities Theory's emphasis on path-dependent, organisation-specific capabilities that are difficult for later movers to replicate precisely (Teece et al., 1997).

5.4 The Limited Role of Structural Characteristics

Counter-intuitively, neither organisational size, nor industry sector, nor business model exerted a statistically significant independent influence on maturity progression, despite resource constraints being the most frequently cited barrier to digitalisation (38.0% of respondents). This apparent contradiction is resolved once it is recognised that resource constraints were reported at broadly similar rates across firm sizes and sectors ($\chi^2(12) = 9.87, p = .628$): the barrier is real but not differentially distributed by structural characteristics. This pattern is consistent with evidence that absorptive capacity and innovation strategy, rather than firm size, are the key determinants of digital transformation outcomes in SMEs (Muller et al., 2021), and that leadership represents the primary micro-foundation of transformation capability regardless of organisational scale (Nadkarni & Prugl, 2021). The regression model's modest explanatory power (28.5% of variance) reinforces this interpretation: the majority of variance in maturity progression is attributable to factors not captured by structural variables — plausibly leadership vision, digital literacy, and cultural orientation toward risk — pointing toward behavioural and strategic, rather than structural, determinants of digital integration success.

5.5 Theoretical Contribution

Collectively, these findings support an integrated reading of the three frameworks: TOE explains what drives initial and subsequent adoption decisions such as e-commerce migration; Dynamic Capabilities Theory explains the trajectory by which organisations convert adoption into sustained capability; and the DASAT model explains the iterative, cyclical logic underlying that trajectory. This synthesis addresses calls in the literature for theoretical integration across adoption-, capability- and process-oriented perspectives on SME digitalisation (Radicic & Petkovic, 2023; Kruger & Steyn, 2024).

6 CONCLUSION

This study set out to examine how digital marketing maturity develops among UK SMEs and what organisational and environmental factors shape that development. Three conclusions follow from the analysis. First, digital marketing maturity among UK SMEs develops substantially and systematically over time, following the iterative logic proposed by the DASAT model; the 27.0% mean improvement recorded between Q3 and Q6, sustained across every measurement interval, provides empirical support for a model previously tested largely outside the UK context. Second, e-commerce migration is the primary lever of maturity advancement, extending the explanatory reach of the TOE framework from the initial adoption decision to the full digitalisation trajectory. Third, the barriers to digital integration are distributed relatively uniformly across organisational types, indicating that the determinants of successful integration are fundamentally behavioural and strategic — rooted in leadership vision, absorptive capacity and organisational culture — rather than structural.

6.1 Recommendations for SME Managers

Three recommendations follow. First, managers should treat e-commerce migration as a strategic platform rather than an isolated marketing tool, sequencing investment so that a well-integrated e-commerce capability precedes, and underpins, further digital marketing investment (e.g., CRM, marketing automation, analytics). Second, managers of lower-maturity organisations should recognise their position as one of opportunity rather than disadvantage: the ceiling effect identified in this study suggests that, with sustained leadership commitment, such organisations can

advance rapidly by drawing on the tool ecosystems and support infrastructure already established by earlier adopters. Third, managers of higher-maturity organisations should move beyond incremental tool acquisition toward the strategic reconfiguration capabilities identified by Dynamic Capabilities Theory — embedding data-driven decision-making, ongoing digital learning, and leadership digital literacy as durable organisational priorities (Teece et al., 1997).

6.2 Recommendations for Policymakers

Because digital integration barriers are distributed relatively evenly across firm size and sector, policy design should shift from size- or sector-tiered programmes toward maturity-differentiated interventions aligned with the DASAT cycle: awareness-raising for organisations at the earliest stage, and implementation and strategic advisory support for organisations preparing to migrate to e-commerce. Given e-commerce migration's outsized predictive effect, incentives that reduce the cost and complexity of e-commerce implementation are likely to generate the largest aggregate improvement in SME digital marketing maturity.

6.3 Limitations and Future Research

This study is limited by its cross-sectional, retrospective design, its purposive (rather than probability) sample of 100 firms, and its reliance on self-reported maturity measures, which may be subject to social-desirability bias. The regression model's unexplained variance (71.5%) further suggests that unmeasured variables — leadership commitment, organisational culture, and strategic intentionality — merit direct measurement in future work. Mixed-methods longitudinal designs combining quantitative maturity tracking with qualitative investigation of leadership and cultural mechanisms would strengthen causal inference. Future studies might also trace the specific mechanisms by which e-commerce migration drives broader maturity gains, test the generalisability of these findings beyond the UK's distinctive post-Brexit regulatory and competitive environment, and extend the observation window beyond four quarters to determine whether the convergence dynamics identified here persist, reverse, or intensify over the longer term.

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