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Digital Marketing Capability Disclosure, Revenue Growth, and Firm Value: A Longitudinal Study of Indonesian State-Owned Pharmaceutical Cases

Muhammad Iqbal Ismail¹, Denies Susanto², Juhaeri³

¹Department of Management, Universitas Pamulang, South Tangerang, Indonesia, iqbalismail1771@gmail.com

²Department of Management, Universitas Pamulang, South Tangerang, Indonesia, dosen02890@unpam.ac.id

³Department of Management, Universitas Pamulang, South Tangerang, Indonesia, juhaeri@unpam.ac.id

Corresponding Author: iqbalismail1771@gmail.com¹

Abstract: Digital marketing narratives and improving revenue may appear to imply higher firm value, yet market valuation and book based ratios can move differently. This study examines digital marketing capability disclosure, revenue growth and valuation in Kimia Farma and Phapros through a documentary longitudinal comparison. Public reports provide revenue context for 2021–2025 and comparable market and equity information for 2024–2025. Phapros' 2025 revenue increased by 26.34 percent, while its reported year end market capitalization declined by 7.41 percent. Kimia Farma's revenue fell by 7.20 percent and market capitalization declined by 10.74 percent, but its price to parent book equity ratio increased from approximately 0.98 to 1.04 because the book equity denominator contracted faster. Reported digital channels establish customer access arrangements, not a measured marketing capability or a market valuation effect. The contribution is an accounting and market reconciliation that separates commercial recovery, market capitalization and changes in book denominators. The cases demonstrate why a higher valuation multiple cannot automatically be interpreted as value creation from digital marketing.

Keywords: Digital Marketing Disclosure, Revenue Growth, Market Capitalization, Price To Book Equity, Pharmaceutical Firms.

INTRODUCTION

A revenue rebound is a commercial event; an increase in firm value is a different outcome. When annual reports combine digital channels with performance narratives, that distinction can become blurred. The present article examines the relationship as a reporting and measurement problem in Kimia Farma and Phapros. It asks whether revenue recovery, digital customer access and reported market valuation move together, and how book equity changes alter the interpretation of a valuation multiple. The study narrows the proposed capability construct to capability disclosure because the available documents do not directly measure organisational marketing competence.

Digital transformation involves changes in organisational arrangements and value creation as well as the adoption of technology. Reviews distinguish this process from the narrower conversion of information into digital form and show why its consequences depend on strategy, organisational design and the environment (Vial, 2019; Verhoef et al., 2021; Hanelt et al., 2021; Gong & Ribiere, 2021; Nadkarni & Prügl, 2021; Kraus et al., 2021; Kraus et al., 2022). The distinction matters for corporate reporting: describing an application is evidence of disclosure, but it does not establish the application's use, quality or financial contribution.

The resource based view explains why a purchased system does not automatically generate an advantage. Complementary skills, routines and organisational assets shape the use of technological resources (Barney, 1991; Bharadwaj, 2000; Wade & Hulland, 2004; Melville et al., 2004). Dynamic capabilities provide a related account of how firms identify opportunities and reconfigure resources (Teece et al., 1997; Teece, 2007). Information systems research also distinguishes system quality and information quality from organisational learning and strategic integration (DeLone & McLean, 2003; Tippins & Sohi, 2003; Bharadwaj et al., 2013). These distinctions require a reporting measure to be narrower than the capability it is intended to represent.

Marketing research connects market orientation and marketing capabilities to performance, while financial approaches examine how market based assets and advertising expenditure may enter shareholder value (Morgan et al., 2009; Morgan, 2012; Srivastava et al., 1998; Joshi & Hanssens, 2010). In digital settings, social media strategy, content, analytics and customer value creation provide different pathways rather than a single marketing expenditure mechanism (Dwivedi et al., 2021; Li et al., 2021; Hollebeek & Macky, 2019; Saura, 2021; Matarazzo et al., 2021; Ritter & Pedersen, 2020). Selling expenses therefore cannot be treated as a direct measure of digital marketing capability.

Evidence on analytics and artificial intelligence reinforces the need to measure resources and their organisational deployment separately. Reviews and capability studies address the processes through which information is converted into operational choices (Collins et al., 2021; Mikalef & Gupta, 2021; Mikalef et al., 2020; Wamba et al., 2017). A pharmaceutical firm can describe a digital infrastructure while leaving the extent of data integration, managerial adoption and customer conversion unreported. Pharmaceutical innovation also carries development costs and long lead times, making a contemporaneous revenue comparison a limited representation of the innovation process (DiMasi et al., 2016).

Indonesian studies help locate the analysis in its commercial and accounting setting. Research on over the counter medicines examines consumer responses to halal labels, brands and prices; it does not estimate the financial return to digital transformation (Ismail et al., 2022). Work on impairment allowances in state owned pharmaceutical firms highlights a separate financial reporting issue (Sova et al., 2023). A recent study of online reviews, website quality and trust provides consumer level evidence about purchasing mechanisms, rather than a transferable firm level coefficient (Ismail et al., 2026). These three studies motivate attention to trust, product signals and reporting quality without supplying observations for the present cases.

METHODS

The study is an exploratory longitudinal documentary comparison, conducted from publicly accessible reports retrieved on 2 October 2026. Kimia Farma and Phapros are purposively selected because their reports contain financial statements, technology narratives, product information and share trading summaries. Phapros is consolidated within Kimia Farma; the cases are analytically nested and are never pooled as independent firms. Bio Farma and Indofarma are outside the analysed corpus. The design follows document analysis and case based theory development, with literature used as an interpretive framework rather than

presented as a systematic review (Bowen, 2009; Eisenhardt, 1989; Eisenhardt & Graebner, 2007).

The archive includes Kimia Farma's 2021, 2022, 2023 and 2025 annual reports, its reissued 2023 financial statements, and Phapros' 2021, 2022, 2024 and 2025 reports (PT Kimia Farma Tbk, 2022; PT Kimia Farma Tbk, 2023; PT Kimia Farma Tbk, 2024a; PT Kimia Farma Tbk, 2024b; PT Kimia Farma (Persero) Tbk, 2026; PT Phapros Tbk, 2022; PT Phapros Tbk, 2023; PT Phapros Tbk, 2025; PT Phapros Tbk, 2026). Revenue context covers 2021–2025. Main financial comparisons use the latest accessible 2023–2025 comparative figures; the detailed expense, cash flow and valuation comparisons use 2024–2025. Earlier figures are not combined indiscriminately with later restatements. Amounts are converted to billions of Indonesian rupiah; ratios are recalculated from the underlying amounts.

Narrative evidence is read in context and classified as an organisational responsibility, an implemented activity or a quantified outcome. Searches in extracted report text locate candidate passages; inspection of the surrounding section determines eligibility. Training for community partners is excluded from company capability evidence. A missing disclosed amount remains missing, and the study does not invent a technology budget, customer conversion rate or innovation outcome. Coding is a single analytical reading; no independent second coder or interrater statistic is claimed.

The analysis uses transparent ratios and within case changes, with no regression coefficients or significance tests. A few nested corporate cases do not provide a basis for conventional cluster robust inference (Colin Cameron & Miller, 2015). Nor can contemporaneous annual comparisons identify a causal indirect effect, which requires stronger assumptions and a defensible temporal structure (VanderWeele, 2016). Corporate disclosure and earnings quality literature inform the separation of reported narratives, measurement choices and financial outcomes (Healy & Palepu, 2001; Dechow et al., 2010). The literature synthesis is purposive and its scope is disclosed explicitly (Snyder, 2019).

Market capitalization equals the quarter four closing price reported in the annual report multiplied by the corresponding shares outstanding. The price to book ratio divides this capitalization by equity attributable to the parent, excluding noncontrolling interests. Calculations are annual snapshots for 2024–2025 and are not abnormal returns, total returns or an event study.

RESULTS AND DISCUSSION

Table 1. Measurement scope and evidential status

Measure	Observed evidence	Interpretation
Digital capability	Systems, governance and channel narratives	Disclosure evidence; direct capability unmeasured
Financial outcomes	Latest comparable statements for 2023–2025	Descriptive outcomes within each reporting perimeter
Expense and valuation detail	Comparable 2024–2025 notes and share summaries	Observed ratios; no identified treatment effect
Reporting context	Revenue and archive for 2021–2025	Statement vintages retained; no interpolation

Source: Authors' measurement audit of the public reports (PT Kimia Farma (Persero) Tbk, 2026; PT Phapros Tbk, 2026; PT Kimia Farma Tbk, 2024b; PT Phapros Tbk, 2025).

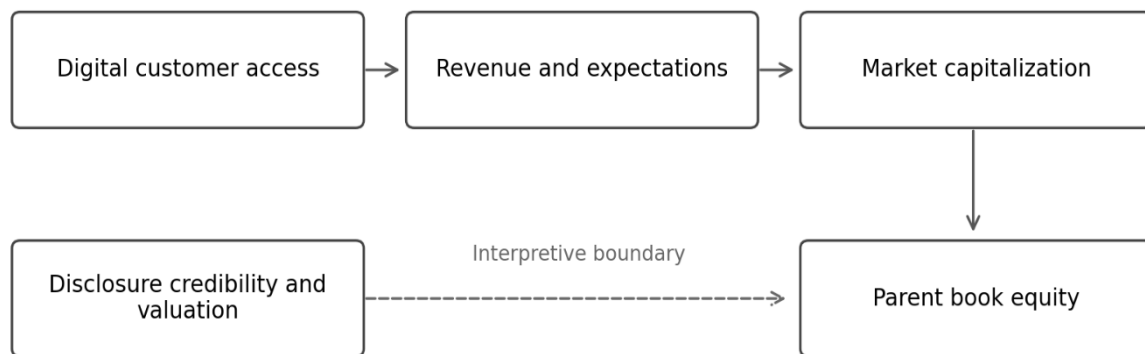
What the digital marketing measure observes

Phapros' 2025 report describes electronic commerce and social media as channels through which its products and information reach customers. Kimia Farma reports digital

application responsibilities and customer related systems within a broader technology organisation. These disclosures are observable statements about arrangements for customer access. The quality of customer targeting, content execution, experimentation and channel integration remains unmeasured (PT Phapros Tbk, 2026; PT Kimia Farma (Persero) Tbk, 2026).

This distinction follows the marketing capability literature: a capability is an organisational ability to deploy resources reliably, while a disclosure is an account of an activity or intention. Total selling expenditure is also not a direct substitute. It includes distribution, salaries and depreciation in these reports. Without digital channel revenue, conversion, acquisition cost and retention measures, a numerical digital capability index would exceed what the corpus establishes (Morgan, 2012; Li et al., 2021; Saura, 2021).

The cited Indonesian consumer research is useful at this boundary. Product signals, prices, online information and trust can enter a purchasing decision, but the firm must still turn those decisions into profitable and persistent revenue. A survey coefficient from one consumer sample cannot be inserted as a financial response coefficient for a listed pharmaceutical firm (Ismail et al., 2022; Ismail et al., 2026). The present analysis therefore retains the commercial pathway as a theoretical interpretation rather than a transferred estimate.



Source: Authors' conceptual synthesis. Arrows represent proposed links, not estimated effects.

Figure 1. Interpretive framework and its measurement boundary

Market value and the correct equity denominator

The reported quarter four closing price is multiplied by the report's corresponding number of shares outstanding to obtain market capitalization. Book equity attributable to the parent is then used as the denominator for the price to book ratio. Total consolidated equity would include noncontrolling interests that are not represented by the quoted parent shares. The distinction is material in Kimia Farma, whose 2025 noncontrolling interest is negative.

For Kimia Farma, the reported closing price changes from 605 to 540 rupiah and the share count changes only slightly. Market capitalization declines from approximately 3,367.78 to 3,005.96 billion rupiah. Parent attributable equity falls from 3,426.74 to 2,885.67 billion. The resulting book based ratio increases from 0.983 to 1.042 even though the market capitalization declines. This increase is explained arithmetically by a faster contraction of its denominator (PT Kimia Farma (Persero) Tbk, 2026).

For Phapros, the reported quarter four closing price decreases from 324 to 300 rupiah with 840 million shares outstanding in both years. Market capitalization falls from 272.16 to 252.00 billion rupiah. Parent equity increases from 379.75 to 414.52 billion, so the price to book ratio declines from 0.717 to 0.608. The two cases produce contrasting multiple movements, but both show lower reported year end market capitalization (PT Phapros Tbk, 2026).

These calculations describe two annual snapshots. They do not establish market efficiency, an abnormal return or a response to a specific digital announcement. Dividend payments, the timing of price formation, trading interruptions, market conditions and expectations are not controlled. A market value increase should therefore not be inferred from the book ratio alone. The market based asset literature provides a conceptual link, but not an identified valuation effect in this dataset (Srivastava et al., 1998; Joshi & Hanssens, 2010; Healy & Palepu, 2001).

Table 2. Market capitalization and parent book equity

Case and year	Price rupiah	Market cap	Parent equity	Price / book
Kimia Farma 2024	605	3,367.78	3,426.74	0.983
Kimia Farma 2025	540	3,005.96	2,885.67	1.042
Phapros 2024	324	272.16	379.75	0.717
Phapros 2025	300	252.00	414.52	0.608

Source: Authors' calculations from reported quarter four prices and share counts; currency amounts in billion rupiah (PT Kimia Farma (Persero) Tbk, 2026; PT Phapros Tbk, 2026).

Revenue recovery and investor valuation diverge

Phapros' 2025 revenue rebound of 26.34 percent coexists with a 7.41 percent decline in reported market capitalization. Its net margin becomes positive, but the annual price snapshot does not mirror that improvement. The evidence is compatible with several explanations, including expectations about the persistence of recovery, required returns or market wide movements. It does not select among them. Describing the year as a digitally induced increase in value would contradict the market capitalization observation.

Kimia Farma's revenue and market capitalization both decline, while its net loss margin narrows. A reader who uses only its rising book ratio could tell a different story from a reader who uses market capitalization. The comparison shows why a variable's numerator and denominator should be disclosed alongside the ratio. It also shows why profit recovery and value creation should be evaluated separately.

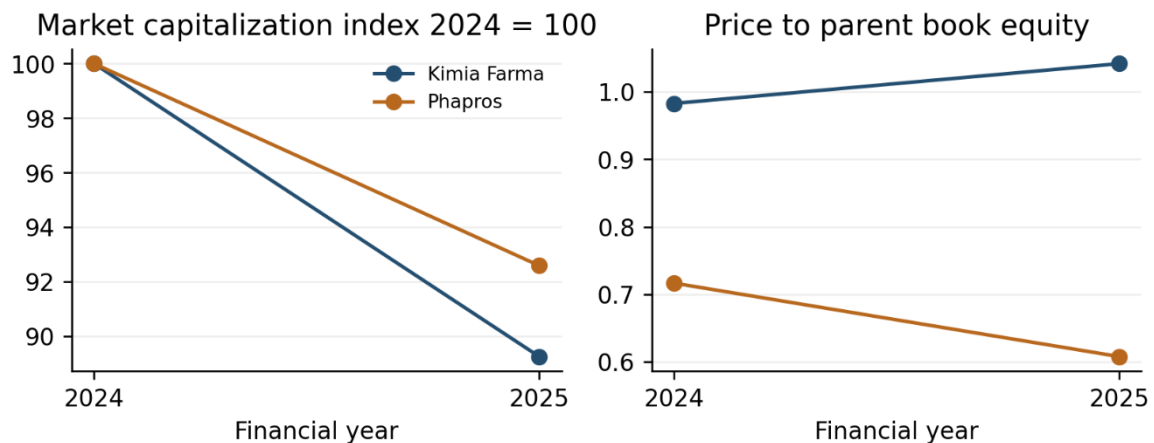
Marketing finance research allows marketing resources to affect expectations about future cash flows and risk, rather than only current sales. The present annual snapshots cannot observe those expectations. Likewise, digital content and social media research describe customer mechanisms that may precede financial results. That theoretical timing is a reason to obtain better data rather than a reason to label the observed price change as a delayed marketing effect (Hollebeek & Macky, 2019; Dwivedi et al., 2021; Morgan et al., 2009).

The longitudinal revenue context remains informative: the 2025 recovery in Phapros follows a substantial 2024 contraction, while the group has not returned to its selected 2021 revenue level. These trajectories indicate that a one year growth percentage can describe recovery from a low base rather than sustained market expansion. A valuation model should address the level and durability of revenue, not just its latest percentage change.

Table 3. Contrasts in the 2025 commercial and valuation record

Case	Revenue growth %	Market cap change %	Book multiple change %
Kimia Farma	-7.20	-10.74	+5.99
Phapros	+26.34	-7.41	-15.17

Source: Authors' calculations. Market capitalization change is not a total shareholder return.



Source: Authors' calculations from the identified public reports (PT Kimia Farma (Persero) Tbk, 2026; PT Phapros Tbk, 2026; PT Phapros Tbk, 2025).

Figure 2. Market capitalization and book multiples give different signals

Implications for valuation research

A later study can improve the design by combining reconciled financial statements with daily trading observations, documented announcement dates and independently measured digital marketing activity. If the objective is a market response, an event study would require a market benchmark and an explicit event window. If the objective is long term valuation, an independent firm panel would require consistent accounting, capital structure and expectation related controls. Neither objective is addressed by the current descriptive calculation.

The ownership perimeter again prevents a simple two firm pooled regression. Phapros' results enter Kimia Farma's consolidated accounting statements, while each quoted security reflects a different residual claim. The securities are distinct, but the businesses and some information are connected. Treating the accounting records as independent would understate this structure. Capability and information systems research support the importance of organisational context, and the same principle applies to the financial unit being valued (Melville et al., 2004; Bharadwaj et al., 2013; Wade & Hulland, 2004).

The reporting recommendation is to publish consistent year end share counts, price definitions and parent attributable equity alongside any value multiple. Digital marketing disclosures should add channel specific commercial outcomes and measurement periods. This makes it possible to assess whether a customer access improvement is associated with persistent cash generation before interpreting its valuation relevance.

The study's novelty is the reconciliation of three distinct outcomes in a nested pharmaceutical setting: customer access disclosure, revenue movement and market versus book based valuation. The Kimia Farma case provides a concrete denominator effect, while Phapros provides a revenue recovery without an increase in the reported year end market capitalization. Together they define a clear boundary for annual report based claims of digital marketing value creation.

CONCLUSIONS AND RECOMMENDATIONS

Conclusion

Reported digital customer access and revenue recovery do not establish a valuation effect. Phapros' revenue rises while market capitalization falls, and Kimia Farma's book multiple rises while market capitalization also falls. The denominator reconciliation explains why a higher multiple is not itself evidence of digitally generated value.

This study investigated the relationship between digital marketing capability disclosure, revenue growth, and firm value in Indonesian state-owned pharmaceutical cases. The findings indicate that companies disclose various digital marketing activities, including digital customer

channels and technology-supported marketing initiatives. However, these disclosures represent reported activities rather than direct measurements of marketing capability or their contribution to firm value.

The financial comparison shows that revenue growth and market valuation do not necessarily move in the same direction. Changes in market capitalization and valuation ratios may also be influenced by equity changes, investor expectations, market conditions, and other external factors. Therefore, improved financial performance or valuation indicators cannot be attributed solely to digital marketing activities based on available public evidence.

The contribution of this study lies in emphasizing the importance of measurement boundaries when evaluating digital marketing and firm value. Digital marketing disclosure provides information regarding organizational efforts and strategic direction, but it does not replace direct measures of customer engagement, conversion performance, or financial return.

This study concludes that evaluating digital marketing impact requires a broader framework that combines disclosure analysis with operational marketing indicators and market-based measurements. Future research should examine how digital marketing capabilities are developed, implemented, and translated into measurable business outcomes.

Limitations

This study has several limitations. First, digital marketing capability is examined through corporate disclosure rather than direct measurement of marketing capability. Public reports provide information about digital channels and customer access initiatives, but they do not fully capture execution quality, customer engagement effectiveness, or marketing conversion performance. Second, the analysis is limited to Kimia Farma and Phapros, which represent specific state-owned pharmaceutical cases. Therefore, the findings should be understood within this organizational context and should not be generalized to all pharmaceutical companies. Third, firm value measurement is based on available market and financial information within a limited observation period. Changes in market valuation may also be affected by external factors, investor expectations, and broader economic conditions beyond digital marketing activities.

Recommendations

Future work should verify exchange prices and trading dates, record dividends and obtain channel level marketing outcomes. Researchers should use parent attributable equity consistently and analyse market capitalization beside book based ratios. A causal valuation claim requires an independent longitudinal or announcement based design.

Author Contributions

All authors contributed substantially to the conceptualization, research design, data analysis, interpretation of results, manuscript development, critical revision, and approval of the final manuscript.

AI Disclosure Statement

AI-assisted tools were used only to support writing improvement, document organization, and manuscript preparation. The authors reviewed all AI-assisted outputs and remain responsible for the research content, interpretation, and final publication.

Data Availability

The source documents are public and their direct locations are listed in the references. The accompanying evidence package records the extracted data, calculation script and source inventory. No interviews, proprietary data or invented field observations are used. Narrative interpretations are limited to the identified reports.

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