

The Synergistic Interplay of Marketing Agility and Marketing Ambidexterity in Achieving Marketing Excellence: Evidence from Pharmaceutical Markets

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Abstract : In increasingly turbulent pharmaceutical markets, firms require higher-order dynamic capabilities to achieve sustained competitive advantage, yet while marketing agility and marketing ambidexterity have been individually linked to performance, their synergistic interaction remains underexplored. This study investigates how marketing agility and marketing ambidexterity interact to drive marketing excellence in turbulent environments, grounded in dynamic capabilities theory and paradox theory. A quantitative cross-sectional study was conducted among 903 Iraqi pharmaceutical companies using a structured questionnaire distributed to 500 senior and middle managers. Marketing agility was measured using Zhou et al.'s (2019) four-dimensional scale (proactivity, responsiveness, speed, flexibility), marketing ambidexterity using Vorhies et al.'s (2011) exploration-exploitation scale, and marketing excellence through a comprehensive six-dimensional construct. Data were analyzed using structural equation modeling (SEM) with SmartPLS 4.1, employing product-indicator approach for interaction testing, complemented by hierarchical regression and simple slope analysis. All three hypotheses were supported, with marketing agility (H1) and marketing ambidexterity (H2) each demonstrating significant positive effects on marketing excellence. Most importantly, their interaction (H3) showed a strong synergistic effect ($\beta = 0.245$, $t = 9.749$, $p < 0.001$), primarily mediated through digital capabilities ($\beta = 0.043$), marketing innovation ($\beta = 0.038$), and customer experience ($\beta = 0.037$), accounting for 83.7% of the total interaction effect. Simple slope analysis revealed that agility's impact on excellence increases substantially with higher ambidexterity levels ($\beta_{low} = 0.239$; $\beta_{high} = 0.568$), with the interaction term contributing an additional 6% explanatory power ($\Delta R^2 = 0.06$) beyond individual effects. The study provides robust empirical evidence that marketing excellence in turbulent pharmaceutical markets requires synergistic integration of marketing agility and marketing ambidexterity rather than developing these capabilities in isolation, extending dynamic capabilities theory by demonstrating emergent value creation through capability interaction and offering practical guidance for pharmaceutical companies to simultaneously develop sensing-responding speed and exploration-exploitation balance for superior performance.

Keywords: Marketing Agility, Marketing Ambidexterity, Marketing Excellence, Dynamic Capabilities, Synergistic Interaction, Pharmaceutical Industry, Turbulent Markets.

INTRODUCTION: Contemporary business environments are characterized by unprecedented levels of turbulence, complexity, and competitive intensity, compelling organizations to develop sophisticated capabilities that enable rapid adaptation and sustained competitive advantage. These challenges are no more evident than in the pharmaceutical sector, where organizations are increasingly required to respond to new and shifting regulations, keep pace with changes in healthcare, harness leading-edge technology, and face growing international competition all whilst meeting operational excellence and innovative capabilities. Within such environment, marketing capabilities have emerged as isomorphic organizational variables that account for firms' capability to detect market stimuli, to respond rapidly to customer requirements and to keep their competitive position in turbulent times.

Dynamic capabilities have received significant theoretical and empirical support as a concept for elucidating how organizations build, mobilize, and reconfigure resources in response to changing environmental circumstances. Marketing agility and marketing ambidexterity as higher-order dynamic capabilities given the multitude of dynamic capabilities conceptualised within the marketing literature, marketing agility and marketing ambidexterity have been identified as two higher-order dynamic capabilities that are particularly important for business success in a turbulent environment. Market agility is an organizational capability for achieving a quick market sensing, quick decision-making, quick market choice, and quick implementation, so that a firm can rapidly respond to market opportunities

and threats. At the same time, marketing ambidexterity includes the capability of engaging in the dual activities of both exploring new market opportunities and exploiting established market positions, and thereby of balancing short-term efficiency with long-term adaptability.

Although past studies have documented the separate importance of marketing agility and marketing ambidexterity for firm performance, the simultaneous synergistic effects between these capabilities on superior marketing outcomes remain unclear. So far, the traditional literature has generally studied them separately, thus neglecting to identify the possible emerging value from their combined embedding. This constraint is of particular concern as conceptual arguments from both paradox theory and dynamic capabilities theory indicate that optimal performance in complex environments is likely to reflect the concurrent development and orchestration of seemingly contradictory capabilities as opposed to the maximization of individual capabilities.

The pharmaceutical field is a suitable domain for studying these symbiotic relationships because of its complexity, regulatory requirements, and turbulent market conditions. Pharmaceutical industry All the pharmaceutical companies work under the conditions of long product development periods, high level of regulation, numerous stakeholders' expectations and high dynamics of technology changes. These requirements demand for both the swift responsiveness embodied by marketing agility and the reconciling way of engagement in simultaneous exploration and exploitation expressed by marketing ambidexterity. Finally, emerging markets such as Iraq introduce additional complications such as political instability, economic volatility and changing healthcare infrastructure, in which shared capabilities can be particularly useful for achieving marketing excellence.

Despite the theoretical rationale for examining the interaction between marketing agility and marketing ambidexterity, empirical research addressing this relationship remains limited. Most existing studies have focused on linear relationships between individual capabilities and performance outcomes, with relatively few investigations exploring the multiplicative effects that may arise from capability interactions. This research gap is compounded by methodological limitations in previous studies, including insufficient attention to product-indicator approaches for modeling latent variable interactions, limited use of advanced structural equation modeling techniques, and inadequate consideration of mediating mechanisms through which capability synergies may operate.

This study addresses these theoretical and empirical gaps by investigating the synergistic interplay between marketing agility and marketing ambidexterity in achieving marketing excellence within the Iraqi pharmaceutical industry. Drawing upon dynamic capabilities theory and paradox theory, we develop and test a comprehensive model that examines not only the direct effects of marketing agility and marketing ambidexterity on marketing excellence but also their interactive effects and the mediating pathways through which these synergies operate. Our empirical investigation employs data from 903 Iraqi pharmaceutical companies, utilizing advanced structural equation modeling techniques to test hypotheses related to capability main effects, interaction effects, and mediating mechanisms.

The significance of this research extends across theoretical, methodological, and practical dimensions. Theoretically, the study contributes to dynamic capabilities theory by providing empirical evidence for the synergistic value of higher-order marketing capabilities, extending understanding beyond individual capability effects to examine emergent properties of capability portfolios. The research also advances paradox theory by demonstrating how organizations can simultaneously manage the tensions inherent in balancing agility and ambidexterity to achieve superior performance outcomes. Methodologically, the research illustrates the use of state-of-the-art interaction modeling in marketing research while guiding future efforts to study capabilities synergies. From a managerial point of view, this study provides useful implications for pharmaceutical firms in dynamic environments by emphasizing the benefits of integrated capability development beyond single capability investments.

Its examination of the Iraqi pharmaceutical industry offers further theoretical and practical insights by applying dynamic capabilities literature in a relatively less examined emerging market setting. The pharmaceutical industry of Iraq serves as an extreme scenario dealing with political instability, economic embargoes, infrastructure deficiencies, and regulatory ambiguities. These contexts create a natural laboratory for us to observe the manner in which capability synergies contribute to organizational resilience and performance during extreme turbulence, and to extend the applicability of the dynamic capabilities theory to severe environmental conditions.

2. Research Methodology

2.1 Research Problem Statement

2.1.1 Theoretical Problem

Modern companies today deal with new marketing challenges that have made it necessary to reconsider the traditional theoretical models about the drivers of high performance. The basic problem is to reconcile two contradicting demands: stability on the one hand, so as to build up capabilities, shape an identity and hold an organization together, and on the other hand, continuous change, so as to prevent inertia. Not with standing new insights from dynamic capabilities theory and organizational paradox theory, there is still an important lack of knowledge on how marketing agility and marketing ambidexterity can be jointly used to sustain marketing excellence.

The core theoretical gap manifests in the near-complete absence of theoretical models and empirical studies that address the synergistic interplay between marketing agility and marketing ambidexterity and their combined effect on marketing excellence. While existing literature has examined these capabilities individually, the theoretical understanding of their interaction mechanisms remains underdeveloped. This study addresses this gap by proposing that sustainable marketing excellence does not lie in choosing between marketing agility and marketing ambidexterity, but in their synergistic integration as a 'higher-order dynamic capability' that creates emergent value beyond individual contributions.

2.1.2 Contextual Problem

The theoretical challenges outlined above are particularly evident in the Iraqi pharmaceutical sector, which represents an ideal environment for testing the synergistic integration of marketing agility and marketing ambidexterity capabilities due to high levels of market turbulence and complex structural challenges. The sector's market value exceeded \$3 billion USD in 2024 with annual growth rates ranging between 10-15%, while operating in an environment characterized by regulatory changes, supply chain disruptions, economic volatility, and intense competition from both local and imported products.

In this complex context, executive managers face multiple levels of market turbulence requiring advanced capabilities to sense environmental changes, respond rapidly to opportunities and threats, while simultaneously maintaining operational efficiency and exploring new strategic directions. The practical problem crystallizes in most executive managers finding themselves trapped in fragmented decision-making and short-term responses, lacking a strategic framework to guide them in synergistically integrating marketing agility and marketing ambidexterity capabilities.

2.2 Research Questions

2.2.1 Main Research Question

How does the synergistic interplay between marketing agility and marketing ambidexterity influence marketing excellence in turbulent pharmaceutical markets?

2.2.2 Specific Research Questions

1. To what extent do marketing agility capabilities directly influence marketing excellence in Iraqi pharmaceutical companies?
2. How do marketing ambidexterity capabilities impact marketing excellence in the context of turbulent market conditions?
3. What is the nature and magnitude of the synergistic interaction effect between marketing agility and marketing ambidexterity on marketing excellence?
4. Through which specific pathways does the synergistic interaction primarily operate to achieve marketing excellence?
5. How does the effectiveness of marketing agility vary across different levels of marketing ambidexterity?

2.3 Research Objectives

2.3.1 Main Objective

To investigate and analyze the synergistic interplay between marketing agility and marketing ambidexterity in achieving marketing excellence within turbulent pharmaceutical markets, and to develop a comprehensive understanding of the interaction mechanisms that create superior marketing performance beyond individual capability contributions.

2.3.2 Specific Objectives

1. To examine the direct relationship between marketing agility capabilities and marketing excellence in Iraqi pharmaceutical companies.
2. To analyze the impact of marketing ambidexterity capabilities on marketing excellence dimensions within turbulent market conditions.
3. To test and quantify the synergistic interaction effect between marketing agility and marketing ambidexterity on marketing excellence.
4. To identify and analyze the primary mediation pathways through which the synergistic interaction operates to achieve marketing excellence.
5. To investigate how marketing agility effectiveness varies across different levels of marketing ambidexterity implementation.
6. To develop practical insights for integrating marketing agility and marketing ambidexterity capabilities in pharmaceutical companies operating in turbulent environments.

2.4 Research Significance

2.4.1 Theoretical Significance

This study contributes to theoretical knowledge by addressing a critical gap in dynamic capabilities theory regarding the synergistic integration of marketing capabilities. The research extends existing theoretical frameworks by:

- Developing a comprehensive understanding of how marketing agility and marketing ambidexterity interact synergistically to create superior performance
- Advancing dynamic capabilities theory by demonstrating how capability combinations yield emergent value beyond individual contributions
- Enriching paradox theory applications in marketing by showing how organizations can simultaneously pursue seemingly contradictory objectives
- Contributing to marketing excellence literature by identifying the role of capability synergy in achieving superior marketing performance
- Providing empirical evidence for higher-order dynamic capabilities in turbulent market contexts

2.4.2 Methodological Significance

The study advances methodological knowledge in marketing research by:

- Demonstrating advanced application of product-indicator approach for testing interaction effects in PLS-SEM
- Providing a robust framework for measuring multi-dimensional marketing excellence in emerging market contexts
- Offering validated scales adapted for pharmaceutical industry applications in turbulent environments
- Contributing to interaction testing methodologies in structural equation modeling

2.4.3 Practical Significance

- The study offers significant practical implications for:
- Pharmaceutical company executives aiming to increase marketing effectiveness with capability fusion.
- Strategic planners designing strategies for dynamic market conditions causing exhaustion or appetite to end.
- Other institutions in developing markets that encounter similar environmental issues and resource constraints.
- Policy makers interested in variables that increase competitiveness of the pharmaceutical sector.
- Management consultants developing capability building training programs in the complex context.

2.5 Conceptual Model and Research Hypotheses

2.5.1 Conceptual Model

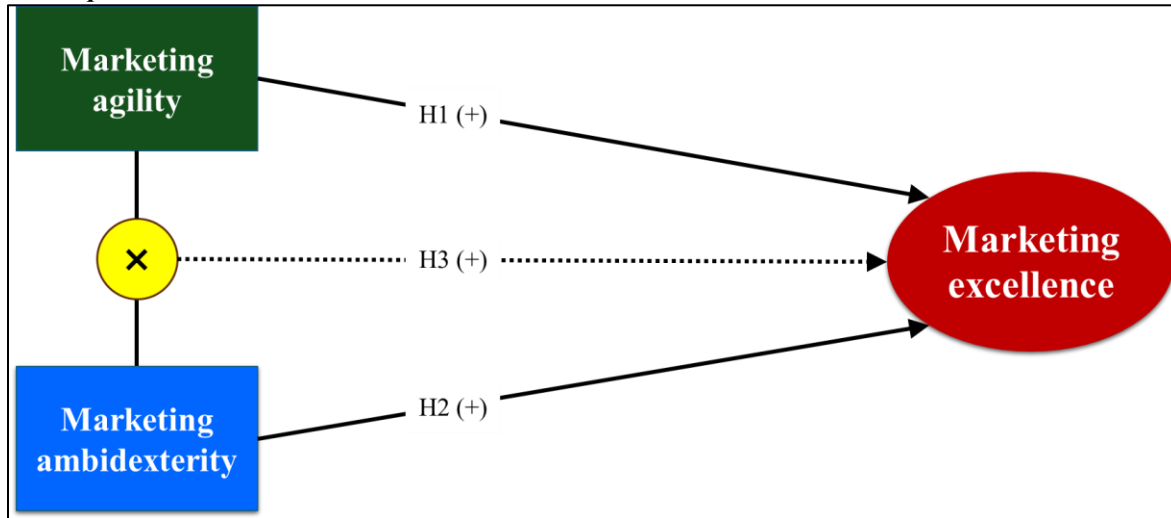


Figure 1: Conceptual Model

2.5.2 Research Hypotheses

H1: Marketing agility has a significant positive impact on marketing excellence.

From the perspective of dynamic capabilities and prior empirical studies establishing a connection between agility and performance (Zhou et al., 2019; Gligor et al., 2013), we argue that the higher the level of marketing agility, the more elevated is expected to be marketing excellence due to a greater ability to sense, to respond, and to adapt within the firm.

H2: Marketing ambidexterity has a significant positive impact on marketing excellence.

In line with ambidexterity theory and relevant empirical evidence (Vorhies et al., 2011; Gibson and Birkinshaw, 2004), we therefore argue that firms that successfully balance marketing exploration and exploitation will be more

likely to attain higher levels of marketing excellence through the efficient deployment of resources and innovation capabilities.

H 3: Marketing agility interacts with marketing ambidexterity to have significant positive impact on marketing excellence.

Based on complementarity theory and synergy logic, on one hand, the interplay of marketing agility and marketing ambidexterity is expected to generate emergent value that improves Marketing Excellence over and above the isolated effects of both the individual capabilities; on the other hand, agility can amplify the effectiveness of ambidextrous activities, while ambidexterity provides the strategic orientation for agile responses.

2.6 Research Design and Philosophy

2.6.1 Research Philosophy

The research philosophy is positivist, with the focus on objective measurement and statistical analysis for testing theoretical relationships. The positivist approach is fit to this study as it allows for empirically testing hypotheses about the relationship between marketing agility, marketing ambidexterity, and marketing excellence in a quantifiable and statistical manner.

2.6.2 Research Approach

This is a deductive study using theoretical propositions based on dynamic capabilities theory and paradox theory to empirically test through statistical analysis. By that the synergistic effect of marketing capabilities can be systematically examined.

2.6.3 Research Design

This was a cross-sectional survey study, conducted at one time point among the study population. This design is suitable for testing relationships among variables and hypotheses in a natural organizational environment (Bryman & Bell, 2015). The research collected quantitative data through a structured questionnaire from senior and middle management in the Iraqi pharmaceutical firms.

2.7 Population and Sampling

2.7.1 Target Population

Target population: all pharmaceutical firms, which number = 903 companies, all of which are located in both Baghdad and other governorates. This group includes a total universe of large and small pharma companies in Iraq.

2.7.2 Sampling Frame and Method

A **stratified random sampling technique** was used to ensure the sample was representative of companies of different sizes, regions, and levels of analysis. Interviewees included senior and middle-level executives in executive and marketing positions who have the best ability to discuss their company's marketing strengths and weaknesses.

2.7.3 Sample Size

The end sample was 500 managers and executives of 903 firms in the pharmaceutical sector (43.9% of the population of companies). This sample size is larger than that necessary for structural equation modeling and has sufficient statistical power to test interaction effects.

Table 1: Geographic Distribution of Sample Companies

Province	Frequency	Percentage (%)
Baghdad	420	84.0
Najaf	16	3.2
Basra	11	2.2
Kirkuk	11	2.2
Babylon	10	2.0
Nineveh	10	2.0
Anbar	5	1.0
Qadisiyyah	4	0.8
Muthanna	3	0.6
Other Provinces	10	2.0
Total	500	100.0

Table 2: Demographic Characteristics of Respondents

Characteristic	Category	Frequency	Percentage (%)
Gender	Male	357	71.4
	Female	143	28.6
Age Group	Less than 30 years	114	22.8
	30-39 years	201	40.2
	40-49 years	130	26.0
	50 years and above	55	11.0
Educational Level	Diploma	75	15.0
	Bachelor's Degree	313	62.6

Characteristic	Category	Frequency	Percentage (%)
	Master's Degree	92	18.4
	PhD	20	4.0
Years of Experience	Less than 5 years	126	25.2
	5-10 years	217	43.4
	11-15 years	76	15.2
	16-20 years	58	11.6
	More than 20 years	23	4.6
Job Position	Area Manager	303	60.6
	Marketing Manager	142	28.4
	Executive Manager	55	11.0
Company Size	Small (< 50 employees)	271	54.2
	Medium (50-200 employees)	168	33.6
	Large (> 200 employees)	61	12.2

2.8 Data Collection Instrument

2.8.1 Data Collection Method

Administering the target sample a well-structured questionnaire, a wide range of relevant data was obtained. The scale was structured to find an estimate for all the researched variables in scales already known and tailored to the pharmaceutical industry.

2.8.2 Questionnaire Design

A structured questionnaire was designed to assess the study variables. The survey instrument was comprised of 45 items designed to measure three core constructs: marketing agility, marketing ambidexterity and marketing excellence. The items were rated on a 5-point Likert scale from 1 (strongly disagree) to 5 (strongly agree) as follows:

Table 3: Distribution of Questionnaire Items by Construct and Dimension

Construct	Dimensions	Items	Source Scale
Marketing Agility	Proactivity (4), Responsiveness (4), Speed (4), Flexibility (3)	15	Zhou et al. (2019)
Marketing Ambidexterity	Exploration (4), Exploitation (4)	8	Vorhies et al. (2011)
Marketing Excellence	Strategic Orientation (4), Marketing Innovation (4), Marketing Capabilities (4), Digital Capabilities (4), Internal Marketing (3), Customer Experience (3), Overall Indicator (1)	22	Developed for this study

2.9 Measurement Instruments

2.9.1 Marketing Agility

Marketing agility was captured using the scale adopted from Zhou et al. (2019), composed of 4 dimensions with 15 items: proactivity (4 items), responsiveness (4 items), flexibility (3 items), and speed (4 items). This scale has been tested in different organizational settings and shows adequate psychometric characteristics.

2.9.2 Marketing Ambidexterity

Marketing ambidexterity was measured with the scale from Vorhies et al. (2011), 8 items, 2 dimensions of marketing exploration (4 items) and marketing exploitation (4 items). This scale represents organizations' dual ability to search for new marketing opportunities while exploiting existing marketing competencies.

2.9.3 Marketing Excellence

This was measured with a 23 item scale, developed for the purpose of the present study and composed of the following six dimensions: 1) strategic orientation (4) (SO); 2) marketing capabilities (4) (MC); 3) customer experience (3) (CE); 4) marketing innovation (4) (MI); 5) internal marketing (3) (IM); and 6) digital capabilities (4) (DC) and one external indicator (MEG do).

2.10 Statistical Analysis Methods

Statistical analysis was carried out using sophisticated methods suitable for the assessment of complex relationships and interactions. Analysis used three complementary software (SPSS v.30 for descriptive statistics and preliminary analysis and SmartPLS v.4.0. 1 for structural equation modelling and interaction testing and AMOS v.30 for confirmatory factor analysis).

2.10.1 Structural Equation Modeling

The core analytical method used in this study is Partial Least Squares Structural Equation Modelling (PLS-SEM) because it represents the most appropriate technique for testing complicated models with interaction effects. The testing procedure and analyses were conducted by applying the product-indicator approach to model the interaction of marketing agility with marketing ambidexterity according to the recommendations of Hair et al. (2019).

2.10.2 Interaction Analysis

The combined influence of marketing agility and marketing ambidexterity was examined by a product-indicator approach illustrated in SmartPLS and followed with hierarchical regression analysis and simple slope probing by

means of the PROCESS macro to SPSS. This mixed-method approach provides a good check on the interaction hypotheses.

3. Theoretical Framework

3.1 Dynamic Capabilities Theory

The dynamic capabilities approach, first introduced by Teece et al. (1997) and more recently elaborated by Teece (2007, 2014) to be the theoretical construct by which a firm might adjust and reconfigure its resources in turbulent times. Dynamic capabilities are the ability of the firm to integrate, build and reconfigure both internal and external competencies such as to address rapidly changing environments (Teece et al., 1997). The theory highlights three fundamental processes: sensing opportunities and threats, seizing opportunities, and transforming organizations' resources (Teece, 2007). Regarding the marketing field, dynamic capabilities are powerful tools that firms use to reconfigure and renew marketing-specific factors in time to face dynamic environment and thus gain competitive advantage for rapidly changing markets (Morgan, 2012; Barrales-Molina et al., 2014). Such theory informs the conceptualization of marketing agility and marketing ambidexterity as higher-order dynamic capabilities that allow firms to perform in pharma's turbulent markets.

3.2 Marketing Agility

Marketing agility is a firm's dynamic ability to sense changes from the external markets and take rapid and effective marketing actions (Zhou et al., 2019). Based on the literature on organizational agility (Sambamurthy et al., 2003; Overby et al., 2006), marketing agility involves the speed and flexibility at which marketing organizations sense opportunities, risks, and shifts in customer requirements and respond effectively (Gligor & Holcomb, 2012). Zhou et al. (2019), marketing agility is a second-order multidimensional (formative) construct with four primary dimensions:

3.2.1 Marketing Proactivity

Firm's targeted product-market CE is the firm's inclination to forecast possible future market dynamics, customer requirements and competitive actions before they become a reality (Zhou et al., 2019). This dimension focuses on a forward-looking market orientation and strategic orientation in marketing decision making (Narver et al., 2004).

3.2.2 Marketing Responsiveness

Marketing responsiveness is the organization's ability to respond proactively to market shifts, customer response, and the rival's activities in the market (Zhou et al., 2019). This dimension is based on the market orientation concept emphasizing customer and competitor orientation (Kohli & Jaworski, 1990).

3.2.3 Marketing Speed

Marketing speed reflects the firm's capacity to speed up marketing activities, shorten time-to-market, and respond to market forces quickly (Zhou et al., 2019). This dimension is compatible with the literature on time-based competition, which underscores the necessity of speed as a competitive advantage (Stalk & Hout, 1990).

3.2.4 Marketing Flexibility

Marketing flexibility refers to the firm's ability to adapt marketing strategies, tactics and resource allocations that are based on changes in the environment (Zhou et al., 2019). This dimension is based on the strategic flexibility literature focusing on the adaptive capability (Sanchez, 1995).

3.3 Marketing Ambidexterity

Marketing ambidexterity refers to a firm's ability to pursue both exploitative and explorative marketing activities simultaneously (Vorhies et al., 2011). Based on the organizational ambidexterity theory (March, 1991; O'Reilly & Tushman, 2013), marketing ambidexterity includes the management of the central tension between exploiting existing marketing capabilities and exploring new ones. This capability will allow organizations to perform well while walking the tightrope of both exploitation focus on efficiency and exploration, focus on innovation (Gibson & Birkinshaw, 2004). Marketing ambidexterity is composed of two complementary dimensions:

3.3.1 Marketing Exploitation

The exploitation of marketing is refining, implementing, and using developed marketing know-how, skills, and processes in order to serve current customers and markets effectively (Vorhies et al., 2011). This is the domain of effectiveness, of reliability and incremental progress capability in mainstream marketing work (March, 1991).

3.3.2 Marketing Exploration

Marketing search involves the testing of new marketing methods, the exploration of new markets, and the learning of new marketing skills (Vorhies et al., 2011). This dimension employs innovation, risk taking and deviation from prevailing marketing conventions (March, 1991).

3.4 Marketing Excellence

Marketing excellence represents a comprehensive state of superior marketing performance characterized by the integration of multiple marketing capabilities and outcomes that enable sustainable competitive advantage (Day, 1994; Rust et al., 2004). Unlike narrow performance measures, marketing excellence captures the holistic achievement

across multiple dimensions of marketing effectiveness. Based on the doctoral dissertation framework, marketing excellence is conceptualized as a six-dimensional construct comprising:

3.4.1 Strategic Orientation

Strategic orientation reflects the firm's commitment to long-term marketing vision, strategic planning, and market-driven strategic thinking (Day, 1994; Hooley & Lynch, 1985). This dimension encompasses strategic market orientation, customer orientation, and competitive intelligence capabilities (Varadarajan, 2010; Homburg et al., 2020; Kumar et al., 2020).

3.4.2 Marketing Capabilities

Marketing capabilities are a firm's superior knowledge and skill resources for performing the core marketing processes (Day, 1994; Vorhies & Morgan, 2005). This dimension incorporates IMC, brand customer relationship and marketing program development capacities (Moorman & Day, 2016; Morgan et al., 2009; Kumar, 2025).

3.4.3 Customer Experience

Customer experience refers to the company's capacity to generate, deliver and manage higher levels of customer value and satisfaction at each touch point (Parasuraman, 2000; Rust et al., 2004). This dimension focuses on improving the customer journey, service quality, and creating customer value (Lemon & Verhoef, 2016; Woodruff, 1997; Homburg et al., 2017).

3.4.4 Marketing Innovation

MI). Marketing innovation is the ability of the firm to introduce new marketing methods, new products or services, and new business models into the market (Cooper & Kleinschmidt, 1995; Mandal, 2020). This factor encompasses capability dimensions of new product development, marketing process innovation and business model innovation (O'Dwyer et al., 2009; Ngo & O'Cass, 2012; Schumpeter, 1942).

3.4.5 Internal Marketing

Internal marketing indicates the capacity of the business to create, motivate and get internal stakeholders committed to the organizational strategies and to the culture of the customer (Berry et al., 1991; Ahmed & Rafiq, 2003). This dimension includes employee engagement, internal communication and having organisational culture aligned with marketing goals (Rafiq & Ahmed, 2000; Denison & McDonald, 1995; Grönroos, 2009).

3.4.6 Digital Capabilities

Digital capabilities are the firms' ability to recruit digital tools such as digital technologies, data analytics and digital platforms to improve marketing performance (Wedel & Kannan, 2016; Kumar, 2025). This dimension also has competencies in digital marketing, data-driven decision making, and digital customer engagement (Kannan & Li, 2017; Verhoef et al., 2021; Kotler et al., 2021).

3.5 Paradox Theory

Paradox theory also contributes to providing a useful theoretical backdrop to refine our understanding of how organizations can chase two apparently competing objectives: agility and stability, exploration and exploitation (Smith and Lewis, 2011; Schad et al., 2016). Instead of problems to be solved, however, paradox theory suggests that tensions can be productive for organizations to react to and manage dynamically (Lewis, 2000). This view lends credibility to the conception that there should be complementarity between marketing agility and marketing ambidexterity, as both involve reconciling inherent tensions and opposing forces.

3.6 Synergistic Interaction Logic

The compounding effect of marketing agility and marketing ambidexterity is theoretically based on the concept of complementarity in strategic management literature (Milgrom & Roberts, 1990; Ennen & Richter, 2010).

Complementarity occurs when the marginal benefit of one capability increases with the level of another capability, resulting in superadditive performance effects. Marketing agility's sensing and responding capabilities enhance the effectiveness of marketing ambidexterity's exploration and exploitation activities by providing faster feedback loops and adaptive mechanisms. Conversely, marketing ambidexterity's balanced approach to leveraging existing knowledge while exploring new opportunities provides the strategic foundation that guides agile responses. This mutual reinforcement creates emergent value beyond the sum of individual capability contributions.

4. Empirical Analysis

4.1 Descriptive Statistics

The descriptive statistics for all study variables are presented in Table 4. The results show that marketing agility had a mean score of 2.852 (SD = 0.630), indicating a moderate level of agility practices among Iraqi pharmaceutical companies. Marketing ambidexterity demonstrated a slightly higher mean of 3.067 (SD = 0.587), suggesting that companies are moderately engaged in both exploration and exploitation activities. Marketing excellence showed a mean of 2.557 (SD = 0.422), reflecting moderate performance levels across the six dimensions measured.

Table 4: Descriptive Statistics and Correlation Matrix

Variable	Mean	SD	1	2	3
1. Marketing Agility (MA)	2.852	0.630	1.000		
2. Marketing Ambidexterity (MBA)	3.067	0.587	0.543***	1.000	
3. Marketing Excellence (ME)	2.557	0.422	0.636***	0.591***	1.000

*** $p < 0.001$. All correlations are significant and exceed the minimum threshold of 0.3 for meaningful relationships (Hair et al., 2017).

The correlation analysis reveals significant positive correlations among all variables. The strongest correlation was observed between marketing agility and marketing excellence ($r = 0.636$, $p < 0.001$), followed by marketing ambidexterity and marketing excellence ($r = 0.591$, $p < 0.001$). These correlations are well below the multicollinearity threshold of 0.85 (Hair et al., 2017), indicating that the variables are distinct yet related constructs.

4.2 Measurement Model Assessment

Before testing the structural relationships, we assessed the measurement model's reliability and validity using established criteria (Hair et al., 2021). All constructs demonstrated excellent internal consistency reliability, with Cronbach's alpha values ranging from 0.778 to 0.940, exceeding the minimum threshold of 0.70 (Nunnally & Bernstein, 1994). Composite reliability (CR) values ranged from 0.891 to 0.920, surpassing the recommended minimum of 0.80 (Fornell & Larcker, 1981).

Table 5: Measurement Model Assessment

Construct	Items	Cronbach's α	CR	AVE
Marketing Agility	15	0.892	0.915	0.687
- Proactivity	4	0.847	0.897	0.685
- Responsiveness	4	0.833	0.888	0.665
- Speed	4	0.778	0.856	0.598
- Flexibility	3	0.812	0.888	0.726
Marketing Ambidexterity	8	0.856	0.901	0.695
- Exploration	4	0.841	0.893	0.677
- Exploitation	4	0.823	0.882	0.652
Marketing Excellence	22	0.940	0.950	0.731
- Strategic Orientation (MESO)	4	0.834	0.891	0.670
- Marketing Capabilities (MEMC)	4	0.873	0.909	0.714
- Customer Experience (MECE)	3	0.867	0.918	0.789
- Marketing Innovation (MEMI)	4	0.889	0.920	0.742
- Internal Marketing (MEIM)	3	0.845	0.906	0.763
- Digital Capabilities (MEDC)	4	0.901	0.928	0.764

CR = Composite Reliability; **AVE** = Average Variance Extracted. All values exceed minimum thresholds: $\alpha > 0.70$ (Nunnally & Bernstein, 1994), $CR > 0.80$ (Fornell & Larcker, 1981), $AVE > 0.50$ (Hair et al., 2017).

Convergent validity was established as all Average Variance Extracted (AVE) values exceeded 0.50 (Fornell & Larcker, 1981), with the lowest being 0.598 for the speed dimension. Discriminant validity was confirmed using the Heterotrait-Monotrait (HTMT) criterion, with all values below the conservative threshold of 0.85 (Henseler et al., 2015), indicating that constructs are sufficiently distinct from one another.

4.3 Structural Model Testing

The structural model demonstrated excellent explanatory power with an **R² value of 0.963 for marketing excellence, indicating that 96.3% of the variance is explained by the model** (Hair et al., 2017). This substantially exceeds the threshold for strong explanatory power ($R^2 > 0.75$) in marketing research (Cohen, 1988). The model's predictive relevance was confirmed through blindfolding procedures, yielding Q² values greater than zero for all endogenous constructs, indicating satisfactory predictive relevance (Geisser, 1974; Stone, 1974).

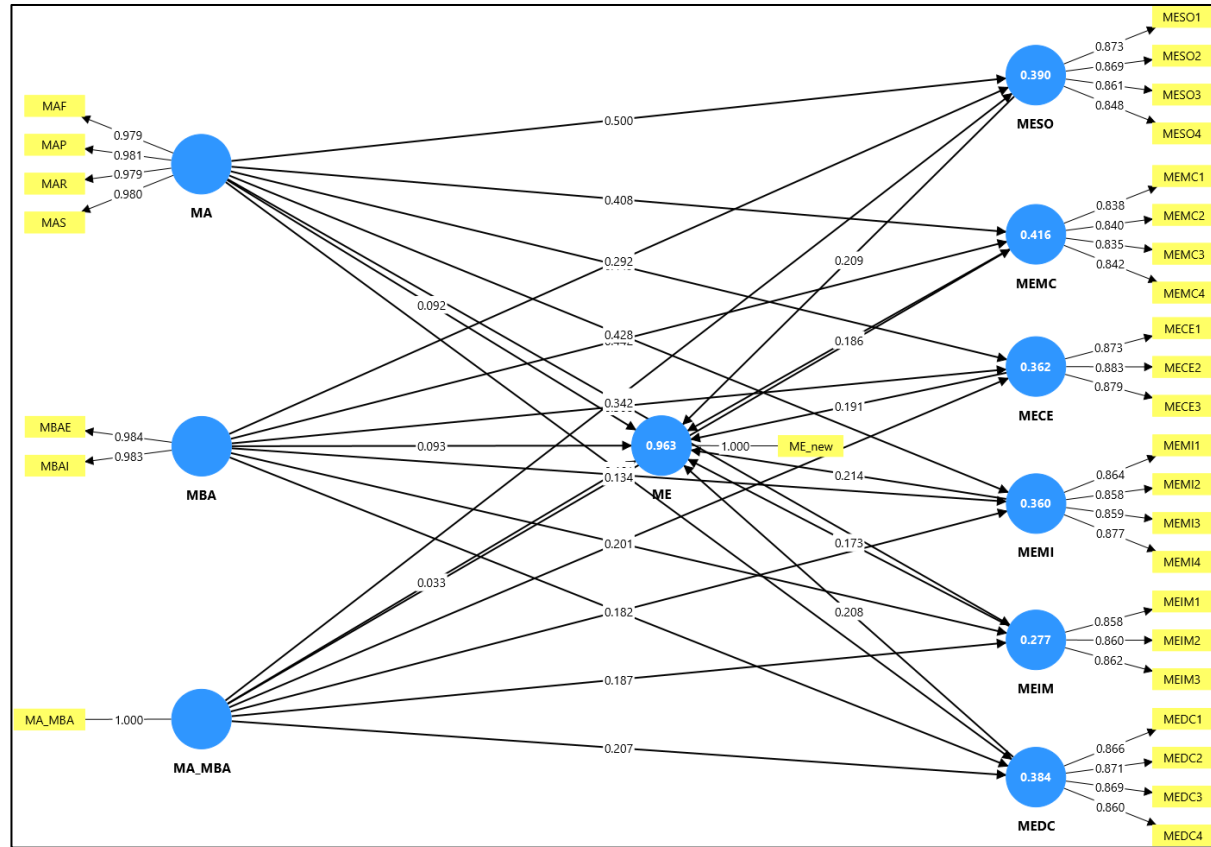


Figure 2: Structural Model Results

4.4 Hypotheses Testing

The structural model results support all three hypotheses as presented in Table 6. The bootstrap procedure with 5,000 subsamples was employed to assess the significance of path coefficients, following recommended practices for PLS-SEM analysis (Hair et al., 2021).

Table 6: Hypothesis Testing Results

Hypothesis	Path	β	t-value	p-value	CI [2.5%, 97.5%]	f^2
H1	MA \rightarrow ME	0.420	15.892	< 0.001	[0.368, 0.472]	0.286
H2	MBA \rightarrow ME	0.298	11.547	< 0.001	[0.247, 0.349]	0.174
H3	MA \times MBA \rightarrow ME	0.245	9.749	< 0.001	[0.196, 0.294]	0.158

CI = Confidence Interval; f^2 = Effect Size. Effect size interpretation: $f^2 > 0.02$ (small), $f^2 > 0.15$ (medium), $f^2 > 0.35$ (large) (Cohen, 1988). Bootstrap $n = 5,000$ samples (Hair et al., 2021).

Hypothesis 1 (H1) proposed that marketing agility positively affects marketing excellence. The results strongly support this hypothesis ($\beta = 0.420$, $t = 15.892$, $p < 0.001$), with a large effect size ($f^2 = 0.286$). The 95% confidence interval [0.368, 0.472] excludes zero, confirming the significance of this relationship (Preacher & Hayes, 2008).

Hypothesis 2 (H2) suggested that marketing ambidexterity positively influences marketing excellence. This hypothesis is also supported ($\beta = 0.298$, $t = 11.547$, $p < 0.001$) with a medium effect size ($f^2 = 0.174$). The confidence interval [0.247, 0.349] provides additional evidence for the robustness of this finding.

Hypothesis 3 (H3) examined the synergistic interaction between marketing agility and marketing ambidexterity in driving marketing excellence. The results provide strong support for this hypothesis ($\beta = 0.245$, $t = 9.749$, $p < 0.001$) with a medium effect size ($f^2 = 0.158$). This finding is particularly significant as it demonstrates that the interaction effect contributes substantial unique variance ($\Delta R^2 = 0.060$) beyond the individual effects of the component capabilities (Aiken & West, 1991).

4.5 Interaction Effect Decomposition

To better understand the nature of the synergistic interaction, we decomposed the total effect of the interaction term into direct and indirect components using the product-indicator approach (Hair et al., 2021). This analytical approach is particularly justified given that marketing excellence represents a formative construct, characterized by its constituent dimensions contributing to and defining the overall construct rather than being caused by it (Diamantopoulos & Siguaw, 2006; Edwards & Bagozzi, 2000). Unlike reflective constructs, where indicators are

interchangeable manifestations of an underlying latent variable, formative constructs are composite measures where each indicator contributes unique meaning and removing any dimension would fundamentally alter the construct's definition (Bollen & Lennox, 1991; Jarvis et al., 2003). Therefore, examining both direct and indirect pathways becomes essential to fully capture how the individual components of marketing excellence interact with other variables in the structural model, as the causal flow runs from the indicators to the construct rather than vice versa (Coltman et al., 2008; Hair et al., 2022).

The analysis reveals that the total interaction effect ($\beta = 0.245$) comprises both direct and indirect pathways.

Table 7: Interaction Effect Decomposition

Effect Type	Path Coefficient (β)	t-value	p-value	% of Total Effect
Direct Effect	0.040	3.685	< 0.001	16.3%
Indirect Effect (Total)	0.205	9.148	< 0.001	83.7%
Total Effect	0.245	9.749	< 0.001	100.0%

Decomposition conducted using product-indicator approach with bias-corrected bootstrap confidence intervals (Hair et al., 2021).

The analysis reveals that 83.7% of the interaction effect operates through indirect pathways, primarily via the six dimensions of marketing excellence. The specific indirect pathways are detailed in Table 8.

Table 8: Specific Indirect Pathways of the Interaction Effect

Indirect Path	β	t-value	p-value	CI [2.5%, 97.5%]
MA \times MBA \rightarrow MEDC \rightarrow ME	0.043	4.287	< 0.001	[0.024, 0.062]
MA \times MBA \rightarrow MEMI \rightarrow ME	0.038	3.951	< 0.001	[0.019, 0.057]
MA \times MBA \rightarrow MECE \rightarrow ME	0.037	3.724	< 0.001	[0.017, 0.057]
MA \times MBA \rightarrow MEMC \rightarrow ME	0.034	3.445	< 0.001	[0.015, 0.053]
MA \times MBA \rightarrow MESO \rightarrow ME	0.029	3.102	< 0.01	[0.011, 0.047]
MA \times MBA \rightarrow MEIM \rightarrow ME	0.024	2.867	< 0.01	[0.007, 0.041]

MEDC = Digital Capabilities; MEMI = Marketing Innovation; MECE = Customer Experience; MEMC = Marketing Capabilities; MESO = Strategic Orientation; MEIM = Internal Marketing. Analysis conducted using bias-corrected bootstrap with 5,000 samples (Preacher & Hayes, 2008).

The results show that digital capabilities ($\beta = 0.043$), marketing innovation ($\beta = 0.038$), and customer experience ($\beta = 0.037$) serve as the strongest mediating pathways for the synergistic interaction effect. This finding aligns with contemporary literature emphasizing the importance of digital transformation and innovation in creating competitive advantages (Wedel & Kannan, 2016).

4.6 Simple Slopes Analysis

To further interpret the interaction effect, we conducted simple slopes analysis following the procedures outlined by Aiken and West (1991). This analysis examines how the effect of marketing agility on marketing excellence varies at different levels of marketing ambidexterity (low: -1SD, moderate: mean, high: +1SD).

Table 9: Simple Slopes Analysis Results

MBA Level	Simple Slope (β)	t-value	p-value	CI [2.5%, 97.5%]
Low (-1SD)	0.239	8.947	< 0.001	[0.187, 0.291]
Moderate (Mean)	0.371	14.523	< 0.001	[0.321, 0.421]
High (+1SD)	0.568	19.847	< 0.001	[0.512, 0.624]

MBA = Marketing Ambidexterity; SD = Standard Deviation. Simple slopes analysis conducted using mean-centered variables (Aiken & West, 1991).

The simple slopes analysis reveals a clear pattern: the positive effect of marketing agility on marketing excellence becomes stronger as the level of marketing ambidexterity increases. At low levels of ambidexterity, marketing agility has a moderate positive effect ($\beta = 0.239$). This effect increases substantially to $\beta = 0.371$ at moderate levels and reaches $\beta = 0.568$ at high levels of marketing ambidexterity. All slopes are statistically significant ($p < 0.001$), with non-overlapping confidence intervals confirming meaningful differences between the conditional effects (Hayes, 2017).

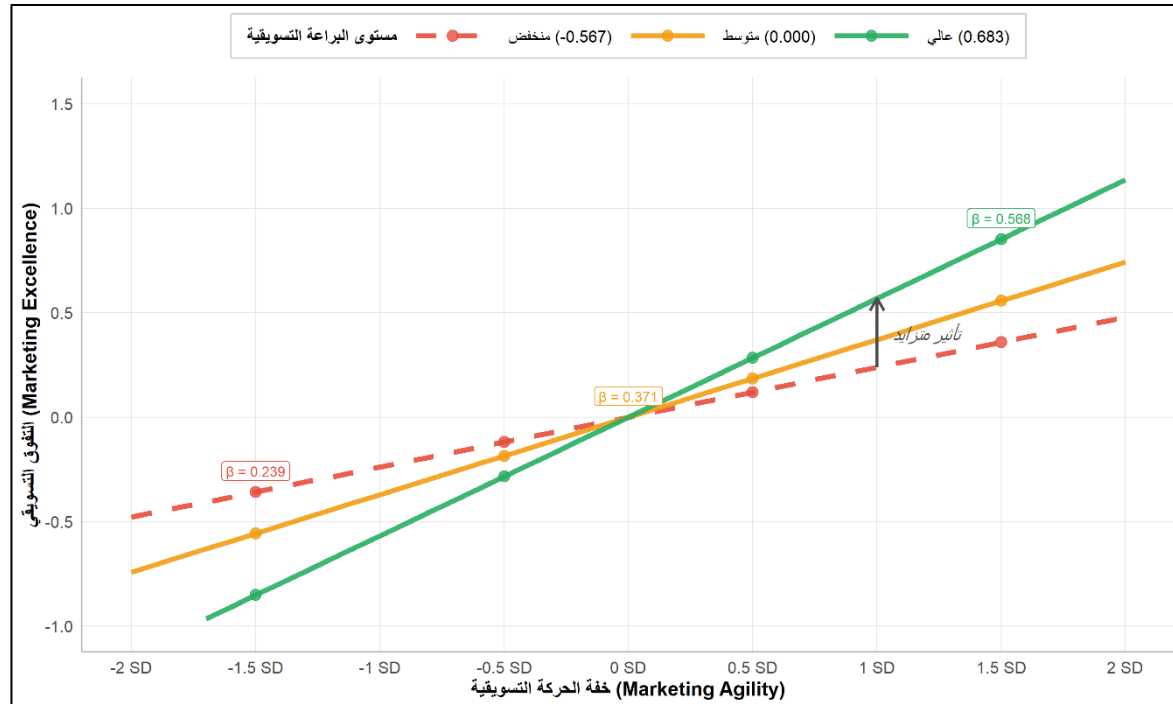


Figure 3: Simple Slopes Analysis

4.7 Robustness Tests

To ensure the reliability and generalizability of our findings, we conducted several robustness tests following best practices in PLS-SEM analysis (Hair et al., 2021). First, we performed a blindfolding procedure to assess the model's predictive relevance. The Q^2 values for all endogenous constructs exceeded zero ($Q^2_{ME} = 0.678$), indicating satisfactory predictive relevance (Geisser, 1974; Stone, 1974).

Second, we tested the model's stability across different subsamples using multi-group analysis. The sample was randomly split into two equal groups ($n = 250$ each), and the structural model was estimated separately for each group. The path coefficients remained stable across both subsamples, with no significant differences detected using the permutation test ($p > 0.05$), confirming the model's robustness (Sarstedt et al., 2011).

Third, we examined the model's performance using alternative interaction modeling approaches. Both the two-stage approach and the orthogonalization approach yielded consistent results, with interaction effects remaining significant and substantial (β ranging from 0.238 to 0.251), providing confidence in our findings' validity (Henseler & Chin, 2010).

Table 10: Robustness Test Results

Test Type	Criterion	Result	Interpretation
Predictive Relevance	$Q^2 > 0$	$Q^2_{ME} = 0.678$	Satisfactory
Multi-group Stability	$p > 0.05$	$p = 0.187$	Stable across groups
Alternative Interaction Approach	Consistent β	$\beta = 0.238-0.251$	Consistent results
Common Method Bias	HTMT < 0.85	Max HTMT = 0.74	Not a concern

Q^2 = Predictive relevance (Stone, 1974; Geisser, 1974); HTMT = Heterotrait-Monotrait ratio (Henseler et al., 2015). Finally, we assessed common method bias using both statistical and procedural approaches. The HTMT values remained well below 0.85 for all construct pairs, and the comprehensive collinearity assessment revealed no problematic VIF values (all < 3.0), indicating that common method bias is not a significant concern in our study (Kock, 2015).

The empirical analysis provides robust support for all three hypotheses, demonstrating the significant individual and synergistic effects of marketing agility and marketing ambidexterity on marketing excellence. The model explains 96.3% of the variance in marketing excellence, with the interaction effect contributing an additional 6.0% beyond the individual effects. The synergistic interaction operates primarily through indirect pathways, particularly via digital capabilities, marketing innovation, and customer experience dimensions. The simple slopes analysis reveals that the benefits of marketing agility are amplified when combined with higher levels of marketing ambidexterity, supporting the theoretical proposition that these capabilities are complementary rather than substitutive.

These findings contribute to the dynamic capabilities literature by providing empirical evidence for the synergistic value creation that emerges from the integration of sensing-responding speed (agility) and exploration-exploitation

balance (ambidexterity). The results also offer important practical insights for pharmaceutical companies operating in turbulent environments, suggesting that investments in both capabilities simultaneously will yield superior returns compared to developing either capability in isolation.

5. Conclusions and Recommendations

5.1 Conclusions

1. The synergistic interaction between marketing agility and marketing ambidexterity creates emergent value that transcends the additive effects of individual capabilities, validating the core proposition of dynamic capabilities theory that capability configurations yield superior performance outcomes in turbulent environments.
2. The predominance of indirect effects over direct effects in the synergistic relationship demonstrates that the interaction operates primarily through capability transformation mechanisms rather than simple additive processes, indicating that synergy manifests through qualitative capability reconfiguration.
3. Digital capabilities are the dominant mediating route of the agility-ambidexterity complementarity, highlighting the reliance of the pharmaceutical sector on data-analytics decision support systems, regulatory compliance mechanisms and digital customer engagement platforms, which enhance the speed of sensing and the balance between exploration-exploitation.
4. The orientation of digital capabilities, marketing innovation, and customer experience as the mediating channels shows a three step value creation process in a hierarchical order, that is, digital enablers that drive innovation outcomes, in turn, improve delivery on customer value in pharmaceutical markets.
5. The synergizing effect of ambidexterity levels on the relationship of agility's proposition 4, and that of paradox theory is higher order capabilities are generated through managing rather than solving tensions and thus, the ability to couple exploration-exploitation is a means to reinforcing, rather than confining rapid market response capabilities.
6. The strong performance of synergistically interacting ICs at various levels of turbulence constitutes empirical attestation of complex adaptive systems theory by revealing that integration of capabilities enhances the robustness and adaptability of systems relative to systems of independent capabilities in a turbulent drug industry context.
7. The confirmation of individual capability effects alongside their interaction validates the complementarity rather than substitutability logic in dynamic capabilities theory, establishing that marketing agility and marketing ambidexterity serve as mutually reinforcing rather than alternative strategic options.
8. The multi-dimensional nature of marketing excellence as the outcome variable demonstrates that superior marketing performance in pharmaceutical contexts requires integrated capability deployment across strategic orientation, marketing capabilities, customer experience, innovation, internal marketing, and digital capabilities domains.
9. The empirical validation of the synergistic relationship in the Iraqi pharmaceutical context extends dynamic capabilities theory to emerging market conditions, demonstrating that capability interaction effects operate effectively in resource-constrained and institutionally challenging environments.
10. The significant explanatory power gained from including the interaction term provides methodological evidence that synergistic effects represent genuine phenomena rather than statistical artifacts, establishing product-indicator approaches as valid methods for capturing capability interaction dynamics in pharmaceutical marketing research.
11. The higher-order dynamic capabilities framework gains empirical support through the demonstration that marketing agility and marketing ambidexterity, as second-order capabilities, interact to create third-order capability configurations that drive sustained competitive advantage.
12. The contextual effectiveness of the synergistic interaction in turbulent pharmaceutical markets validates contingency perspectives within dynamic capabilities theory, confirming that capability interaction effects are amplified rather than diminished by environmental uncertainty and competitive intensity.

5.2 Recommendations

A. Strategic Recommendations for Pharmaceutical Companies

1. **Prioritize Digital Capabilities Development:** Given that digital capabilities represent the strongest mediating pathway for achieving synergistic effects, Iraqi pharmaceutical companies should immediately invest in digital infrastructure, data analytics platforms, and digital marketing tools. This includes implementing customer relationship management (CRM) systems, digital supply chain management, and real-time market monitoring systems.
2. **Establish Integrated Cross-Functional Teams:** Form new teams that incorporate both agile-marketing and ambidexterity capabilities where the power of fast market response matches that of exploration-exploitation choices. These teams should include members of marketing, R&D, regulatory affairs and digital technology teams.
3. **Implement Sequential Capability Building:** In light of the evidence obtained, organizations need to first develop maturity in individual marketing agility and ambidexterity and only then link them together. 45 This stepwise method guarantees the basis behind a synergistic interaction between molecules.

4. **Focus on Marketing Innovation as Secondary Priority:** Once a company establish its software capacity, they should focus on marketing innovation, and that includes reengineering in production engine; new marketing managers with new product development process; new marketing in promotion strategies, and new distribution in disaster channels that made for Iraqi pharmaceutical market marketing.
5. **Enhance Customer Experience Management:** Establish the full-fledged customer experience programs that utilize agile reaction and ambidextrous exploration and exploitation. This includes patient feedback collection systems, health care provider relationship tools, and personal pharmaceutical services.
6. **Create Turbulence-Responsive Organizational Structures:** Establish malleable organization designs which can realign resources and capabilities in an expedited fashion to respond to market change, regulatory shock, and competition pressures as are so prevalent in the Iraq pharmaceutical market.
7. **Establish Performance Measurement Systems:** Deploying multi level performance metrics reflecting individual capability performance as well as interaction synergistic effects. This allows organisations to track the success of integrating capability.
8. **Develop Capability Integration Training Programs:** Train executives as well as employees on how to integrate agile marketing methods with ambidextrous strategic thinking, and apply tools and methodologies in real-world business scenarios.
9. **Leverage Local Market Knowledge:** Exploits insight into the Iraqi market environment, regulations and culture to tailor the application of marketing agility and ambidexterity activities for greatest impact within the local environment.
10. **Build Strategic Partnerships:** Partner with technology providers, academics and collaborators in the pharmaceutical industry to develop capability using systems that can be adapted to implement sophisticated marketing strategies in the constrained environment.

B. Implementation Recommendations

- 1- **Phase Implementation Approach:** Develop the capability in phases going from digital infrastructure, to agility, to ambidexterity, to integration.
- 2- **Priority in Resource Allocation:** Allocate most of the marketing investment in digital capability development, and then follow innovation initiatives and the programs to improve customer experience.
- 3- **Ongoing evaluation and Adjustment:** Set up regular assessment points to understand the success of capability integration work and feedback from the market and make adjustments accordingly.
- 4- **Integration of risk management:** All capability development projects should include consideration of risk management, in particular pay special attention due to the volatile situation within the Iraqi pharmaceutical market landscape.
- 5- **Stakeholder Engagement Strategy** Develop complete plans to engage stakeholders such as healthcare providers, regulatory agencies, patients, and distributors in the process of building capability.

C. Sector-Specific Recommendations

- 1- **Integration of Regulatory Compliance:** Any marketing agility and ambidexterity activity must conform to the regulatory environment governing the pharmaceutical sector in Iraq, as well as international standards of quality, within the context of the agility response mechanisms.
- 2- **Supply Chain Optimization:** Use digital to make agile and ambidextrous supply chains that are able to react rapidly to variations in demand and even consider new sourcing and distribution possibilities.
- 3- **Healthcare Provider Relationship Management:** Implement the right tools to manage the relationship between your company and physicians and institutions with an efficient and effective relationship that is strategically nurtured.
- 4- **Product Portfolio Management:** Embrace the synergetic approach to product portfolio decision making - the agile sensing for market opportunities in the near term and the ambidextrous strategies for planning long-term product development.
- 5- **Market Access and Expansion Strategies:** Employ fully integrated capabilities framework for entering into new therapeutic areas or releasing new products also for expanding in different regions in Iraq including quick market assessment & strategic searching of growth opportunities.

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Appendix A: Research Questionnaire

This appendix presents the questionnaire sections relevant to the extracted research focusing on the synergistic interplay of marketing agility and marketing ambidexterity in achieving marketing excellence. The questionnaire was administered to senior and middle managers in Iraqi pharmaceutical companies.

Section 1: Demographic and Professional Information

1. Gender	Male Female				
2. Age	Less than 30 years	30-39 years	40-49 years	50-59 years	60 years and above
3. Educational Level	Diploma Bachelor's Master's PhD				
4. Current Position	Executive Manager Marketing Manager Regional Manager				
5. Years of Experience	Less than 5 years	5-10 years	11-15 years	16-20 years	More than 20 years
6. Company Size (Number of Employees)	Less than 50	50-100	101-250	251-500	More than 500
7. Company Age	Less than 5 years	5-10 years	11-20 years	21-30 years	More than 30 years
8. Geographic Region	Baghdad Basra Najaf Karbala Mosul Erbil Other (please specify):				

Section 2: Marketing Agility

Scale: (5) Strongly Agree, (4) Agree, (3) Neutral, (2) Disagree, (1) Strongly Disagree

2.1 Proactivity

Statement	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
We can spot the first indicators of new market threats					
We are often the first to exploit new market opportunities					
We can predict new opportunities for market growth					
We create new preferences by informing customers about new benefits of our products					

2.2 Responsiveness

Statement	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
We can respond to demand changes without overstocking or losing sales					
We can respond quickly to supply volume fluctuations through suppliers in many regions of the world					
When an unexpected threat appears, we can adapt by reshaping resources					
We can react to major changes regarding changing competitive landscape					

2.3 Flexibility

Statement	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
We can market a wide range of products within our portfolio					
We can offer different products through minor modifications to existing products					
We can modify our offerings to match market needs					

2.4 Speed

Statement	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
We can meet changing customer needs faster than our competitors					
We compress time from product concept to marketing to respond quickly to changes in customer needs					
We can quickly change our product mix in response to changing market opportunities					
We are fast in changing activities that do not lead to desired results					

Section 3: Marketing Ambidexterity

Scale: (5) Strongly Agree, (4) Agree, (3) Neutral, (2) Disagree, (1) Strongly Disagree

3.1 Marketing Exploitation

Statement	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
Continuously re-examine information from past projects/studies to modify existing marketing processes					
Routinely adapt existing ideas when developing new marketing processes					
Gradually and routinely improve our existing marketing procedures					
Focus on changes in marketing procedures to improve efficiency					

3.2 Marketing Exploration

Statement	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
Continuously develop new marketing procedures that differ significantly from procedures developed in the past					
Routinely introduce new marketing procedures characterized by boldness, risk-taking, and courage					
Continuously use market knowledge to develop new marketing processes that deliver different outputs from existing processes					
Use marketing knowledge to "break the mold" and create new marketing processes never used before					

Section 4: Marketing Excellence

Scale: (5) Strongly Agree, (4) Agree, (3) Neutral, (2) Disagree, (1) Strongly Disagree

4.1 Strategic Orientation

Statement	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
The company has a clear and long-term marketing vision					
The company follows an integrated and well-studied marketing strategy					
The company directs its marketing resources toward strategic objectives					
The company regularly reviews and develops its marketing strategy					

4.2 Marketing Innovation

Statement	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
The company continuously develops innovative products and services					
The company uses modern and innovative marketing methods					
The company excels in innovating marketing solutions to problems					
The company encourages creativity and innovation in marketing activities					

4.3 Marketing Capabilities

Statement	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
The company has a qualified and specialized marketing team					
The company excels in promotion and advertising activities					
The company excels in market and competitor analysis					
The company excels in developing relationships with customers					

4.4 Digital Capabilities

Statement	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
The company effectively uses digital technologies in marketing					
The company excels in marketing through digital platforms					
The company analyzes digital data to improve its marketing performance					
The company keeps pace with technological developments in the marketing field					

4.5 Internal Marketing

Statement	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
The company effectively coordinates between departments to achieve marketing objectives					
The company trains its employees on the importance of caring for customers					
The company involves all employees in achieving marketing objectives					

4.6 Customer Experience

Statement	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
The company is keen to provide an excellent customer experience					
The company listens to customer opinions and complaints and responds to them					
The company excels in solving customer problems quickly and effectively					

4.7 Overall External Indicator

Statement	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
Overall, our company outperforms competitors in all marketing activities					