

Causal factors of digital marketing, market orientation, and entrepreneurial personality affecting the performance of hormone therapy business

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Abstract: Currently, health products, especially hormone therapy products designed to enhance male sexual performance, are attracting growing attention as solutions to various health concerns. However, the development of these products is challenged by the lack of detailed consumer demographic data in this niche market. The objectives of this study were: 1) to examine the causal factors of digital marketing, market orientation, and entrepreneurial personality affecting the performance of the hormone therapy business, 2) to investigate the influence of causal factors of digital marketing, market orientation, and entrepreneurial personality on hormone therapy business performance, and 3) to develop marketing strategies based on the causal factors of digital marketing, market orientation, and entrepreneurial personality affecting the performance of the hormone therapy business. The researcher collected data through interviews and online questionnaires targeting male subjects between March and April 2025, with a sample size of 360 respondents. The analysis results indicate that digital marketing, market orientation, and entrepreneurial personality had a strong and positive relationship with business performance. Therefore, digital marketing, market orientation, and entrepreneurial personality played a meaningful and direct role in driving business success in this growing health product category.

Keywords: Business performance, Digital marketing, Entrepreneurial personality, Market orientation.

1. Introduction

Erectile dysfunction (ED), commonly referred to as impotence, is a condition characterized by the inability of the male sexual organ to achieve or maintain a sufficient erection during sexual intercourse. This condition can affect men of any age, although its prevalence increases with advancing age. The etiology includes both physical factors (such as vascular disease, diabetes, hormonal imbalances, neurological disorders, and side effects of medications) and psychological components (including stress, anxiety, depression, and relationship issues). While occasional erectile difficulties are considered normal and not indicative of chronic problems, persistent symptoms warrant consultation with medical specialists, as treatment approaches vary depending on the underlying causes of erectile dysfunction.

Current epidemiological data regarding the global prevalence of erectile dysfunction lack precise figures. However, estimates from 1995 suggested that over 152 million men worldwide experienced ED, with projections indicating this number would increase to approximately 322 million by 2025 [1]. A 2021 study surveying 153 Thai males receiving COVID-19 treatment found that the prevalence of erectile dysfunction was 64.7%. However, this study focused specifically on COVID-19 patients and may not reflect the general population [2].

The hormone therapy business sector includes various medications containing active ingredients such as tadalafil (Cialis), produced by both domestic and international manufacturers, contributing to a substantial market size. According to Market.us [3] the growth of the global erectile dysfunction drug market is driven by the increasing adoption of online pharmacy distribution channels and the rising prevalence of erectile dysfunction. The global market is projected to exceed approximately USD 6.1

billion by 2032, up from USD 3.2 billion in 2022. Additionally, recent data from 2024 show that the Thai erectile dysfunction drug market has the following market share: (1) Viagra (sildenafil citrate) holds the highest share at 61.59%, while (2) the remaining share is divided among other medications such as Cialis (tadalafil), Levitra/Staxyn (vardenafil), Stendra/Spedra (avanafil), Zyderna (udenafil), and others. In 2024, Thailand's revenue from the erectile dysfunction drug market accounts for 1.1% of the global market [4].

Given the increasing trend toward online business operations, researchers are interested in identifying the factors that contribute to the success of hormone therapy businesses, particularly in relation to digital marketing, market orientation, and entrepreneurial personality traits. Studies have found that many companies are leveraging social media for marketing, allowing for broader customer reach and enhanced responsiveness to customer needs. Social media can also be a powerful tool for building brand image and showcasing innovation [5, 6] ultimately reflecting business performance in line with Kaplan and Norton [7] Balanced Scorecard framework.

In light of the issues and importance discussed above, this study investigates how the causal factors of digital marketing, market orientation, and entrepreneurial personality affect hormone therapy business performance. A review of the literature reveals that no previous studies have examined these specific factors in relation to hormone therapy business outcomes. Therefore, this research develops and investigates empirical variables that influence hormone therapy business performance by integrating digital marketing theory, market orientation concepts, and entrepreneurial personality frameworks. The researcher believes this study will offer practical insights for hormone therapy businesses and contribute to academic advancement for scholars, researchers, and students interested in further development and integration of these concepts.

2. Research Objectives

1. To examine the causal factors of digital marketing, market orientation, and entrepreneurial personality affecting the performance of hormone therapy business.
2. To investigate the influence of causal factors of the digital marketing, market orientation, and entrepreneurial personality on hormone therapy business performance.
3. To develop marketing strategies based on the causal factors of digital marketing, market orientation, and entrepreneurial personality affecting the performance of hormone therapy business.

3. Literature Review

The concepts and theories used in this research include digital marketing, market orientation, and entrepreneurial personality affecting hormone therapy business performance, which serve as variables in defining the conceptual framework.

3.1. Digital Marketing

In the distribution of hormone therapy products, effective communication with consumers is essential, particularly in the current digital era that emphasizes online communication channels. Digital marketing plays a vital role in modern business operations, offering the ability to communicate directly with consumers through computers and mobile devices. This is especially important in the context of erectile dysfunction (ED), as many men may feel embarrassed or uncomfortable purchasing ED medications, particularly through face-to-face transactions at pharmacies.

Embarrassment when buying erectile dysfunction medications may stem from fear of judgment, some individuals may worry that others, including pharmacists and fellow customers, will view them as having a health problem or perceive them as lacking masculinity. Social norms that treat sexual issues as private or taboo, especially in certain cultures, along with a general lack of confidence in discussing such topics, can make men feel insecure. Therefore, the availability of information and purchasing

options through online platforms may help alleviate these concerns and potentially boost the sales of erectile dysfunction medications.

Digital marketing is a widely used strategy for promoting products and services and for reaching consumers via various digital channels. It extends beyond internet marketing to include mobile phones (e.g., SMS and MMS), social media marketing, display advertising, marketing analytics, and various forms of digital media. Digital platforms provide consumers with access to information anytime and anywhere, increasing their autonomy in decision-making. With the rise of digital media, consumers are no longer limited to relying solely on sellers for information about brands, they can also turn to social media, peer recommendations, and real-time digital content for insights [8].

Findings from Singh and Sinha [9] indicate that many companies now use social media alongside traditional media for marketing purposes. This approach allows for wider customer reach and more effective responsiveness to individual needs. Social media also provides businesses with tools to build brand image and showcase innovation [5]. These capabilities demonstrate how digital marketing facilitates convenient and efficient interactions between buyers and sellers, offering value in terms of speed, accessibility, cost-effectiveness, and ease of decision-making. It also contributes to reducing operational costs for businesses.

3.2. Market Orientation

Market orientation plays a critical role in shaping successful business strategies, particularly in increasingly competitive and customer-driven markets. It emphasizes not only understanding customer needs but also responding to them effectively and sustainably. Rather than focusing solely on sales, a market-oriented business approach considers broader consumer behaviors, preferences, and long-term satisfaction. This orientation incorporates comprehensive market research efforts to uncover genuine customer needs, enabling firms to align their offerings more precisely with market demands. In this way, marketing becomes a strategic tool for fostering value creation rather than merely a sales function.

Narver and Slater [10] in their influential framework, identify three core components of market orientation that contribute to competitive advantage and long-term profitability. The first component, customer orientation, involves a deep understanding of the desires, expectations, and changing preferences of target customers. Firms that actively listen to and anticipate their customers' needs are better positioned to deliver superior products and services. The second component, competitor orientation, entails monitoring and analyzing the strengths, weaknesses, strategies, and capabilities of competitors. By maintaining awareness of the competitive landscape, businesses can adapt and differentiate effectively. The third component, inter-functional coordination, stresses the importance of internal collaboration across departments, such as marketing, sales, production, and customer service, to ensure a unified and efficient response to market demands.

Empirical research supports the significant role of market orientation in enhancing business outcomes. For example, Naowrangsi [11] found that small and medium-sized enterprises (SMEs) in Thailand with strong market orientation capabilities experienced improved competitive positioning and customer satisfaction. Similarly, Phasuk [12] reported that manufacturing firms with higher levels of market orientation achieved better organizational performance, particularly in terms of innovation, profitability, and customer retention. These findings suggest that market orientation not only drives performance but also contributes to a firm's adaptability and sustainability in dynamic environments.

In conclusion, adopting a market orientation strategy equips businesses with a structured approach to understanding market dynamics, fostering inter-departmental collaboration, and responding effectively to customer and competitive pressures. As such, it remains a foundational element of modern marketing strategy and a key determinant of long-term success.

3.3. Entrepreneurial Personality

Entrepreneurial personality plays a crucial role in determining the success and sustainability of businesses, especially within competitive and innovation-driven markets. According to Frese, et al. [13]

and Rauch and Frese [14] the concept of Entrepreneurial Orientation (EO) encompasses six primary personality dimensions that influence entrepreneurial behavior and performance outcomes. These traits not only define how entrepreneurs act but also shape how they respond to challenges, manage innovation, and make strategic decisions.

The first dimension is autonomy, which refers to an individual's ability and willingness to independently pursue business opportunities, work without constant supervision, and make important decisions under pressure. Entrepreneurs with strong autonomy are often proactive and resilient, characteristics that help maintain business operations through difficult times. However, excessive autonomy can lead to poor coordination and reduced collaboration within a team or organization. The second dimension, innovativeness, reflects the entrepreneur's initiative in developing new products, services, markets, or technologies. Innovativeness is essential for businesses operating in dynamic environments, as it enables them to remain competitive by constantly adapting to market needs and trends.

Risk-taking is the third trait and refers to the willingness to engage in ventures with uncertain outcomes. Entrepreneurs high in this trait are prepared to invest substantial personal or borrowed resources in their businesses despite low probabilities of immediate success. This includes taking financial risks, strategic risks, or entering unfamiliar markets. The fourth dimension is competitive aggressiveness, which involves a combative stance toward competitors, with a strong drive to outperform them and secure market leadership. Entrepreneurs with high competitive aggressiveness often initiate bold actions to disrupt the market and make it difficult for new entrants to compete.

The fifth dimension, stability and learning orientation, describes an entrepreneur's ability to stay grounded during crises and to view challenges as learning opportunities. These individuals are typically self-reflective and committed to continuous learning, which helps them improve decision-making and sustain long-term business leadership. Finally, achievement orientation highlights an individual's drive to accomplish goals, embrace challenges, and continually improve business performance. Entrepreneurs with this trait seek excellence, take responsibility for outcomes, and are motivated by the desire to succeed beyond previous achievements.

Empirical research has consistently shown a strong relationship between entrepreneurial personality traits and business success. For instance, Gorsanan and Tongrod [15] found that Thai entrepreneurs with higher levels of EO characteristics, particularly in achievement orientation and innovativeness, were more likely to achieve sustainable business outcomes. Similarly, Yongprakit [16] concluded that entrepreneurial personality traits positively influenced key business performance indicators such as profitability, growth, and organizational resilience. These findings affirm the importance of personality-based factors in entrepreneurial success and suggest that cultivating EO dimensions may offer strategic benefits for business owners and managers across various industries.

3.4. Business Performance

In various business operations, including hormone therapy businesses, operational success is often reflected through measurable business performance. A prominent framework identified in the literature for evaluating such performance is the Balanced Scorecard, developed by Kaplan and Norton [7]. This model revolutionized traditional organizational evaluation by introducing a comprehensive approach that goes beyond financial indicators. Instead of relying solely on profit and loss figures as indicators of organizational success, the Balanced Scorecard incorporates four critical perspectives: Financial, Customer, Internal Business Processes, and Learning and Growth. Kaplan and Norton [7] argued that while positive financial results are essential, they should not be the sole indicator of organizational performance. Customer satisfaction and fostering a culture of organizational learning and adaptability are equally vital to long-term success.

The four perspectives of the Balanced Scorecard provide a holistic view of performance. First, the Financial Perspective remains crucial, especially for profit-oriented businesses, as it reflects whether strategic goals and implementation efforts are yielding desired economic outcomes. This includes

objectives such as increasing revenue and reducing operational costs. Second, the Customer Perspective focuses on identifying and meeting the needs of target customer groups by delivering value propositions that align with customer expectations. Third, the Internal Business Process Perspective requires organizations to identify critical internal processes that enable them to provide value to customers and achieve strategic goals. Finally, the Learning and Growth Perspective emphasizes the long-term sustainability of the organization by focusing on human capital, information systems, and organizational culture. This includes employee skills and capabilities, satisfaction levels, and retention rates, as well as technological infrastructure and motivation systems that support continuous improvement and innovation.

This multidimensional evaluation model has been widely accepted and implemented across various industries in both the United States and Europe. In the context of Thailand, research by Pohthong [17] highlights the relevance of the Balanced Scorecard in the local entrepreneurial landscape. Thai entrepreneurs are encouraged to adopt innovative management practices, such as e-commerce and digital transformation, in alignment with the Learning and Growth perspective. These practices are essential in adapting to the dynamic business environment and achieving competitive advantage. Pohthong further recommends focusing on internal restructuring and fostering a flexible organizational culture to enhance cost leadership, credibility, and responsiveness to change. These internal initiatives correspond to the Internal Process perspective and are supported by additional operational frameworks from Rauch and Frese [14].

Moreover, enhancing internal processes can lead to increased customer satisfaction by delivering high-quality products and services that consistently meet evolving customer expectations. This aligns with the Customer Perspective, which is reinforced by Pohthong [17] concept of market demand conditions and supported by the ideas of Wakweya, et al. [18]. These scholars emphasize the importance of creating distinctive, hard-to-imitate offerings that foster customer loyalty. In addition, coordinated efforts among academic, government, and private sectors are critical for supporting Thai entrepreneurs. Entrepreneurs are encouraged to leverage institutional support, whether through crisis-related financial assistance or efforts to expand into new markets, thereby strengthening their Financial Perspective. By integrating these multidimensional strategies, businesses can effectively measure, manage, and enhance their overall performance.

The concepts and theories employed in this research encompass digital marketing, market orientation, and entrepreneurial personality, business performance, as outlined in the background and significance of the study. These variables were used to construct the conceptual framework, and the relationships among them are considered as follows:

Hypothesis 1: The Relationship between Digital Marketing and Business Performance.

Yuksel, et al. [19] found that the majority of bioidentical hormone therapy websites emphasized individualized and “natural” treatment messaging as part of their digital marketing. The study highlighted that these persuasive strategies significantly influenced consumer perceptions and strengthened the business performance of hormone therapy providers.

Webociti [20] reported that a hormone therapy clinic in Georgia, USA, experienced a 3,788% ROI after revamping its digital marketing strategy. By optimizing its website, improving SEO, and implementing PPC and social media campaigns, the clinic attracted over 700 recurring monthly clients, with 90% of new leads coming directly from online marketing efforts.

Curry [21] stated that the hormone health brand Happy Healthy You leveraged digital tools, including online hormonal assessments, 24/7 virtual consultations, and e-commerce advertising, to reach hundreds of thousands of customers. The company's strategic use of digital marketing significantly increased customer acquisition and revenue, establishing it as a leader in Australia's hormonal wellness sector.

Hypothesis 2: The Relationship between Market Orientation and Business Performance.

Akintola, et al. [22] conducted a study on the Nigerian telecommunications sector, revealing that customer orientation and inter-functional coordination significantly enhance organizational

performance. Utilizing Structural Equation Modeling (SEM), the research demonstrated that these dimensions of market orientation positively influence business outcomes, whereas competitor orientation did not show a significant effect.

Dahmiri, et al. [23] examined Micro, Small, and Medium Enterprises (MSMEs) in Indonesia and discovered that market orientation directly improves marketing performance. Furthermore, the study identified that competitive advantage serves as a moderating variable, strengthening the positive relationship between market orientation and marketing performance, thereby underscoring the strategic importance of market-oriented practices.

Wakweya, et al. [18] found that market orientation positively impacts both competitive advantage and firm performance. The study highlighted that competitive advantage partially mediates the relationship between market orientation and performance, indicating that market-oriented strategies contribute to superior business outcomes through enhanced competitiveness.

Hypothesis 3: The Relationship between Entrepreneurial Personality and Business Performance.

McCarthy, et al. [24] analyzed a large-scale global sample of startups to examine the impact of founder personalities on company success. The study found that certain personality traits, including a preference for variety, novelty, and starting new things (openness to adventure), as well as higher activity levels, are significant predictors of a firm's ultimate success. Startups founded by individuals with these traits were more likely to succeed, highlighting the importance of entrepreneurial personality in business performance.

Sarwoko and Nurfarida [25] conducted a study on small and medium-sized enterprises (SMEs) in Indonesia, revealing that entrepreneurial personality traits such as extraversion, conscientiousness, and openness to experience significantly influence business performance. Their findings indicate that entrepreneurs exhibiting these traits tend to achieve higher levels of success, particularly in terms of sales growth, customer acquisition, and profitability.

4. Research Framework

This study employs both qualitative and quantitative research approaches. The research framework is based on systems theory, which conceptualizes the process as comprising four essential components: (1) Input, (2) Output, and (3) Feedback. Each component is defined and explained as follows:

Input refers to the critical factors influencing business performance, specifically digital marketing, market orientation, entrepreneurial personality. Digital marketing includes five dimensions: social media marketing, search engine optimization, online branding, email marketing, and online advertising; market orientation includes three dimensions: customer orientation, competitor orientation, and inter-functional coordination; entrepreneurial personality includes six dimensions: autonomy, innovativeness, risk-taking, competitive aggressiveness, stability and learning orientation, and achievement orientation.

Output refers to business performance, which is measured using four key performance dimensions: financial perspective, customer perspective, internal process perspective, and learning and growth perspective.

Feedback refers to the influence of business performance (output) on the continuous improvement of digital marketing, market orientation, entrepreneurial personality. In this system, business growth serves not only as an outcome but also as a reinforcing mechanism that enhances the capability of the input and process components.

All four components are interconnected and indispensable. Any changes in one component will directly affect the others. Deficiencies or errors in one component will consequently impact the entire system. The details are as follows:

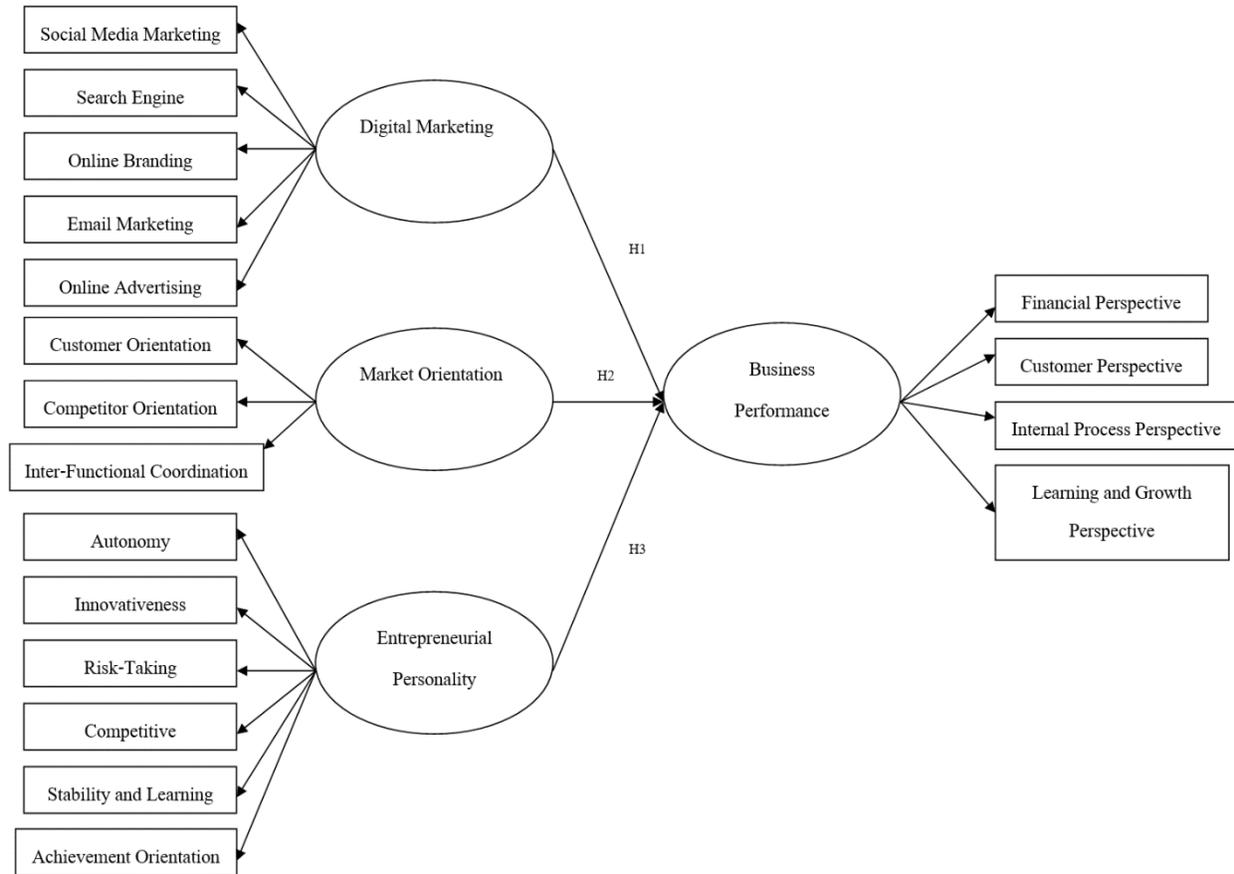


Figure 1.
Research Framework.

5. Research Methodology

This research adopts a mixed-methods approach. The study area involves data collection from male subjects.

The population is infinite. The sample group comprises 360 male respondents, selected using structural equation modelling (SEM) techniques. Based on the research framework, there are four latent variables and eighteen observed variables. According to Hair, et al. [26] the recommended sample size for multivariate analysis should be 15 to 20 times the number of observed variables. Therefore, an appropriate and sufficient sample size for this study should range from 270 (15×18) to 360 (20×18).

Two instruments were used in this study:

1) Questionnaire, which included five parts: Part 1: General Organizational Information of Respondents, Part 2: Digital Marketing, Part 3: Market Orientation, Part 4: Entrepreneurial Personality, Part 5: Business Performance.

The researcher submitted the draft questionnaire to five experts for evaluation of content validity by calculating the Item-Objective Congruence (IOC) index, which resulted in a score of 0.80. The reliability of the research instrument was also tested, yielding a reliability coefficient of 0.99. These tools were used to study the causal factors of digital marketing, market orientation, and entrepreneurial personality affecting the performance of hormone therapy business.

2) Interview - The interview questions were designed to explore key aspects related to the research variables. The questions were as follows:

- How has your clinic integrated digital marketing tools (e.g., SEO, social media, online consultations) into your customer acquisition strategy?
- What types of digital content or platforms have proven most effective in engaging your hormone therapy clients? Why?
- How does your business gather and respond to customer needs, preferences, or feedback regarding hormone therapy services?
- In what ways do you monitor competitor activities and adapt your offerings accordingly?
- How do your personal traits or mindset, such as risk-taking, innovativeness, or proactiveness, shape how you run your hormone therapy business?
- Can you describe a time when your personal drive or vision led to a major change or breakthrough in your business performance?
- Based on your experience, which of these factors, digital marketing, market orientation, or entrepreneurial personality, has had the strongest impact on your clinic's performance? Why?

The researcher collected data through in-depth interviews conducted between March 2025 and April 2025. The data was analyzed and synthesized, then presented in descriptive narrative form, along with content analysis to support the development of the model derived from the quantitative phase.

6. Research Results

Table 1 presents a summary of the key research findings based on the study's three primary objectives, focusing on digital marketing, market orientation, and entrepreneurial personality affecting the performance of hormone therapy business. The table is organized by objective and details how various factors, demographic characteristics, and analytical models contribute to business performance.

Objective 1: To examine the causal factors of digital marketing, market orientation, and entrepreneurial personality affecting the performance of hormone therapy business.

Table 1.
Research Findings.

Variable	Demographic Factors
Digital Marketing by age, marital status, occupation, and chronic disease status	Males with different ages, marital status, occupations, and chronic disease status showed significantly different levels of digital marketing opinions at the .001 level. Males aged 51-60, single males, unemployed males, and males without chronic diseases had the highest levels of digital marketing opinions for hormone therapy businesses.
Market Orientation by age, marital status, occupation, and chronic disease status	Males with different ages, occupations, and chronic disease status showed significantly different market orientation opinions at the .001 level. Males aged 20-30, single males, and unemployed males had the highest market orientation opinion levels for hormone therapy businesses.
Entrepreneurial Personality by age, marital status, occupation, and chronic disease status	Males with different ages, marital status, occupations, and chronic disease status showed significantly different entrepreneurial personality opinions at the .001 level. Males aged 20-30, single males, unemployed males, and males without chronic diseases had the highest entrepreneurial personality opinion levels for hormone therapy businesses.
Business Performance by age, marital status, occupation, and chronic disease status	Males with different ages, occupations, and chronic disease status showed significantly different business performance opinions at the .001 level. Males aged 20-30, married males, unemployed males, and males without chronic diseases had the highest business performance opinion levels for hormone therapy businesses.
Variable	Relationship with Business Performance
Digital Marketing	The sample showed high-level overall digital marketing opinions. When considered by dimensions, 4 dimensions were at high levels and 1 dimension at moderate level. The dimension with the highest average score was Search Engine Optimization, followed by Online Branding. Digital marketing showed positive relationships with hormone therapy business performance with statistical significance at the .01 level (Pearson correlation coefficient = .897).
Market Orientation	The sample showed high-level overall market orientation opinions across all 3 dimensions. The dimension with the highest average score was Competitor Orientation, followed by Customer Orientation. Market orientation showed positive relationships with hormone therapy business performance with statistical significance at the .01 level (Pearson correlation coefficient = .895).
Entrepreneurial Personality	The sample showed high-level overall entrepreneurial personality opinions, with 1 dimension at the highest level and 5 dimensions at high levels. The dimension with the highest average score was Stability and Learning Orientation, followed by Innovativeness. Entrepreneurial personality showed positive relationships with hormone therapy business performance with statistical significance at the .01 level (Pearson correlation coefficient = .923).

Objective 2: To investigate the influence of causal factors of the digital marketing, market orientation, and entrepreneurial personality on hormone therapy business performance.

Table 2.
Research Findings.

Variable	Influence on Business Performance
Digital Marketing	Digital marketing significantly influenced hormone therapy business performance with a coefficient of 0.67 at the .01 significance level.
Market Orientation	Market orientation significantly influenced hormone therapy business performance with a coefficient of 0.60 at the .01 significance level.
Entrepreneurial Personality	Entrepreneurial personality significantly influenced hormone therapy business performance with a coefficient of 0.70 at the .01 significance level.

Objective 3: To develop marketing strategies based on the causal factors of digital marketing, market orientation, and entrepreneurial personality affecting the performance of hormone therapy business.

The findings from this research, using Structural Equation Modeling (SEM), reveal that digital marketing capabilities, market orientation, and entrepreneurial personality traits all have statistically significant and positive influences on hormone therapy business performance. These causal factors not only exert direct effects but also reinforce each other to create synergies that support higher business

outcomes. This evidence provides a strong foundation for developing integrated marketing strategies rooted in the dynamics of the digital health marketplace.

In terms of internal and external analysis, a SWOT framework shows that the strengths of hormone therapy businesses include responsiveness to customer needs, high engagement on digital platforms, and the ability to personalize service offerings. However, weaknesses remain in the form of limited credibility among new customers and possible regulatory constraints related to health product advertising. Opportunities are emerging from growing public awareness of male wellness, especially among younger demographics, and the increased use of digital health platforms. Meanwhile, threats include market competition, misinformation in online health forums, and evolving government regulations.

The PESTEL analysis further highlights relevant macro-environmental factors. Politically, telemedicine and digital pharmaceutical sales are gradually becoming more accepted, though regulations remain complex. Economic trends suggest that rising disposable income and greater willingness to invest in preventive health solutions offer growth potential. Socially, increased openness about male hormonal health, especially among men aged 20–30, encourages demand. Technologically, developments such as mobile diagnostics, wearable health devices, and AI-based health assessments are creating new opportunities for innovation. Legal and environmental considerations, such as advertising compliance and ethical sourcing, must also be managed carefully.

Marketing goals for hormone therapy businesses should include: (1) increasing online conversion rates and repeat purchase behavior, (2) expanding the customer base among digital-native male consumers, and (3) strengthening brand trust and credibility. To support these objectives, the STP (Segmentation, Targeting, and Positioning) model should be applied strategically. Segmentation should focus on age, lifestyle, and digital behavior—particularly among health-conscious men in the 20–30 and 40–50 age ranges. Targeting should emphasize tech-savvy customers who value discretion and convenience. The positioning statement could be: “Your trusted digital partner in male vitality—safe, discreet, and medically informed.”

The 7Ps marketing strategy should then be aligned to support this positioning. In terms of Product, businesses should offer customized hormonal wellness programs combining virtual consultations and medically reviewed supplements. Pricing strategies should include tiered subscription models and promotional trials. Place should focus on delivering a seamless online experience via apps and teleconsultation platforms. Promotion should prioritize SEO, social media campaigns, influencer endorsements, and informative webinars. People involved in the service process should be trained health advisors and digital customer care agents. Process optimization is essential, including streamlined digital diagnostics and reliable delivery systems. Physical Evidence can be enhanced through packaging, website design, customer testimonials, and medical endorsements.

Finally, implementation should follow quarterly action plans with clearly defined budgets for digital campaigns, platform development, and brand-building initiatives. Key performance indicators (KPIs) such as conversion rate, cost per lead, return on ad spend (ROAS), customer satisfaction score (CSAT), and customer lifetime value (CLV) will provide real-time insights into strategy effectiveness. This performance-based approach ensures that hormone therapy businesses remain agile and adaptive to market shifts, public health concerns, or economic fluctuations. By basing marketing strategies on robust causal factors, businesses in this sector are better equipped to achieve sustainable long-term growth in the competitive digital health landscape.

7. Discussion

Hypothesis 1: The Relationship between Digital Marketing and Business Performance.

The results support Hypothesis 1, confirming that digital marketing has a direct and significant impact on the performance of hormone therapy businesses. This is evident from its ability to drive customer acquisition, boost visibility, and build trust through accurate health-related content. Digital tools such as search engine optimization (SEO), pay-per-click (PPC) advertising, social media

campaigns, and interactive websites allow businesses to target specific audiences effectively, according to Yuksel, et al. [19]; Webociti [20] and Curry [21].

Hypothesis 2: The Relationship between Market Orientation and Business Performance.

Findings related to Hypothesis 2 affirm that market orientation, especially customer orientation and inter-departmental coordination, plays a crucial role in driving performance. In the hormone therapy industry, where consumer needs are sensitive and trust-based, a strong market orientation enables businesses to respond promptly to customer concerns and customize services based on feedback, according to Akintola, et al. [22]; Dahmiri, et al. [23] and Wakweya, et al. [18].

Hypothesis 3: The Relationship between Entrepreneurial Personality and Business Performance.

The findings strongly support Hypothesis 3, showing that entrepreneurial personality, comprising traits such as proactiveness, openness to innovation, confidence, and self-efficacy, has a significant influence on business performance. These traits are especially critical in hormone therapy businesses, which often face regulatory challenges, market skepticism, and the need for ongoing adaptation to scientific trends and digital platforms, according to McCarthy, et al. [24] and Sarwoko and Nurfarida [25].

8. Conclusion

Contemporary hormone therapy businesses must adopt a multidimensional marketing approach, with particular emphasis on expanding their presence through digital media. Digital marketing enables businesses to reach specific target audiences via various online channels, delivering personalized messages effectively. This is especially relevant for men experiencing erectile dysfunction, a condition often underreported due to personal barriers, such as embarrassment, reluctance to seek treatment, or limited access to reliable information. These challenges are particularly pronounced among men aged 50 and younger men aged 20–30.

To address these issues, hormone therapy businesses are increasingly embracing digital transformation through strategies that emphasize digital agility, robust marketing infrastructure, entrepreneurial credibility, and customer-centric approaches. These elements help businesses adapt to the growing demand for online health services. Current challenges in the digital hormone therapy market include optimizing Search Engine Optimization (SEO), strengthening online branding, enhancing social media marketing, and improving online advertising effectiveness.

Based on data collection and analysis, the causal factors, digital marketing, market orientation, and entrepreneurial personality, demonstrate strong and positive relationships with the performance of hormone therapy businesses. All three factors directly influence business outcomes. Therefore, when hormone therapy businesses adopt these factors as strategic foundations, they are more likely to achieve efficient operations, increased profitability, and long-term success.

9. Research Contribution

This research enhances the understanding of the causal factors, digital marketing, market orientation, and entrepreneurial personality, and their relationship with hormone therapy business performance. The findings provide valuable insights into how these variables interact within the context of hormone therapy business operations in the digital era. This contributes to the development of new research questions and expands the scope of future inquiry. Moreover, the results support informed decision-making in both business policy and practice. Specifically, the study helps identify the most effective digital marketing strategies for hormone therapy businesses in Thailand.

10. Recommendation

10.1. Future Research Recommendation

The findings of this study can serve as a foundation for further academic inquiry into specialized health-related business sectors beyond hormone therapy, enabling validation and generalization of

causal relationships across various business contexts. Future research should explore additional causal variables that may directly or indirectly influence business performance. Emphasis should be placed on conducting comprehensive qualitative studies and longitudinal trend analyses to uncover deeper behavioral patterns and evolving market dynamics.

10.2. Practical and Policy Recommendation

10.2.1. Academic Benefits

This study contributes to the growing body of knowledge on digital transformation in health-related business models by integrating perspectives from digital marketing, market orientation, and entrepreneurial personality. It lays the groundwork for future interdisciplinary studies and the development of theoretical models related to business performance in niche healthcare markets such as hormone therapy.

10.2.2. Professional Benefits

Integrated Strategy Development: Hormone therapy businesses should adopt a cohesive strategic approach that combines digital marketing proficiency, strong market orientation, and entrepreneurial competencies to drive performance.

Digital Marketing Optimization: Priority should be given to enhancing search engine optimization (SEO) and online branding, as these digital tools demonstrated the strongest influence on business outcomes.

Target Market Segmentation: Businesses should strategically target younger male demographics (ages 20–30) and individuals without chronic illnesses, who have shown increased responsiveness to digital marketing.

Entrepreneurial Skill Development: Business owners should invest in structured training programs that foster traits such as innovativeness, resilience, and a learning orientation, which were significantly linked to improved performance.

10.2.3. Policy-Making Benefits

Policymakers in healthcare entrepreneurship and digital commerce can use these insights to develop guidelines and support systems for businesses operating in sensitive healthcare sectors like hormone therapy. This includes the formulation of digital ethics policies, targeted support for SME digitalization, and training initiatives aimed at enhancing entrepreneurial competencies within the health and wellness industry.

Transparency:

The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

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