

A Study on the Optimisation and Application of the 4P Marketing Strategy Theory in the Digital Economy Era

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Abstract

With the rapid development of the digital economy, the upgrading of consumer demand and the restructuring of the competitive landscape, the traditional 4P marketing strategy theory is facing numerous challenges and opportunities for restructuring. Based on classical theories of marketing, this paper systematically traces the origins and core essence of the 4P marketing strategy theory, thoroughly analyses the characteristics of the market environment in the digital economy era and its impact on the 4P marketing strategy theory, and proposes pathways for the optimisation and innovation of the 4P marketing strategy theory.

Keywords

4P marketing strategy theory, marketing, digital economy, optimisation and innovation.

1. Introduction

The 4P marketing strategy theory proposed by Jerome McCarthy [1] distils complex marketing activities into four core elements—Product, Price, Place and Promotion—thereby establishing a concise and clear framework for marketing analysis. The introduction of this theory marked the transition of marketing from fragmented practical experience to a systematic theoretical framework, exerting a profound influence on the marketing practices of enterprises worldwide. With the rapid development of digital technologies such as big data and artificial intelligence, the global economy has entered the era of the digital economy. The pervasive adoption of digital technologies has reshaped market transaction models, presenting entirely new challenges to traditional marketing theory and practice, whilst the limitations of the traditional 4P marketing strategy theory have gradually become apparent. Therefore, systematically tracing the evolutionary trajectory of the 4P marketing strategy theory, conducting an in-depth analysis of the expansion of its connotations in the digital economy era, and exploring pathways for its optimisation and innovation in light of the characteristics of the modern market environment holds significant theoretical and practical significance for the marketing practices of modern enterprises.

Against this backdrop, this thesis systematically traces the origins, evolutionary process and core essence of the 4P marketing strategy theory; explores the restructuring and innovation of the 4P marketing strategy theory in the digital economy; thoroughly analyses the challenges posed by changes in the market environment of the digital economy era to the 4P marketing strategy theory; and examines its theoretical adaptability within the modern market environment. This aims to enrich and refine the theoretical framework of marketing, providing a new research perspective for the contemporary development of the 4P marketing strategy theory. Concurrently, by analysing corporate case studies, this thesis examines the current application of the 4P marketing strategy theory across different industries and identifies

existing issues. It proposes targeted innovation strategies and optimisation pathways, offering practical solutions for enterprises to adapt to the digital marketing environment, optimise marketing strategies and resource allocation, and enhance market competitiveness.

2. Literature Review

2.1. Origins and Evolution of the 4Ps Marketing Strategy Theory

The development of marketing theory has undergone several stages, evolving from the early production and product-oriented perspectives, through the sales-oriented perspective, to the modern marketing-oriented perspective, with its core concepts continuously evolving. In the 1950s, the discipline of marketing was in a phase of rapid development, and scholars began to attempt to construct a systematic theoretical framework for marketing. In 1960, Jerome McCarthy first proposed the 4P marketing strategy theory, summarising the elements of marketing into four core components: Product, Price, Place and Promotion, thereby establishing a concise and clear core framework for marketing theory. Since then, as the market environment has continued to change, scholars have continually expanded and refined the 4Ps marketing strategy theory, successively proposing theories such as the 6Ps, 7Ps, 4Cs and 4Rs [2]. Although these theories have emerged in succession, subsequent marketing theories have all been developed as extensions and expansions of the 4Ps strategy. As the foundational framework of marketing theory, the 4Ps marketing strategy theory retains its central position, providing a clear analytical framework for enterprises to conduct marketing activities.

2.2. The Core Essence of the 4P Marketing Strategy Theory

The core essence of the 4P marketing strategy theory is manifested in a marketing orientation centred on the enterprise. Product is the core element of the 4P strategy, referring to the totality of tangible products and intangible services provided by the enterprise to the market to satisfy consumer needs. It focuses on the enterprise's product development and design, emphasising the fulfilment of general market demands; Price involves formulating pricing strategies based on the enterprise's cost and profit objectives, referring to the transaction price set by the enterprise for its products or services, which directly influences the enterprise's profit levels and market competitiveness; Place refers to the pathways and stages through which a product is delivered from the enterprise to the consumer; by focusing on the distribution channels, it aims to achieve efficient distribution as its core objective; Promotion refers to the various communication activities undertaken by the enterprise to stimulate consumer purchasing desire and boost product sales; it emphasises conveying product information to consumers through means such as advertising, public relations and personal selling, thereby stimulating consumer demand. The four key elements of the 4P marketing strategy theory are interrelated and mutually influential, forming an organic whole. The introduction of this theory also marked the transition of the discipline of marketing from fragmented concepts and methods towards systematisation and standardisation, exerting a profound influence on both marketing theory and practice.

2.3. Recent Research Developments on the 4P Marketing Strategy Theory

In recent years, scholars both domestically and internationally have conducted extensive research on the 4P marketing strategy theory, yielding a wealth of findings. These studies have primarily focused on three areas: research into the applicability of the 4P marketing strategy theory, research into innovative applications of the 4P marketing strategy theory, and research into the integration of the 4P marketing strategy theory with other marketing theories.

Research on the applicability of the 4P marketing strategy theory. Some scholars argue that, having originated in the industrial era, the 4P marketing strategy theory is no longer suited to the market environment of the digital economy and should be replaced by emerging marketing

theories; others contend that the core logic of the 4P marketing strategy theory remains valid and serves as the foundational framework of marketing theory [3], requiring innovation in line with contemporary characteristics.

Research on the Innovative Application of the 4P Marketing Strategy Theory. Numerous scholars have explored innovative strategies for the 4P marketing mix by examining different industries and types of enterprises [4]. At the same time, some scholars have integrated the 4P marketing strategy theory with digital technologies such as big data and artificial intelligence, proposing innovative models such as precision marketing and personalised marketing.

Research on the integration of the 4P marketing strategy theory with other marketing theories. Some scholars have attempted to combine the 4P marketing strategy theory with theories such as the 4Cs and 4Rs to construct a more comprehensive marketing theoretical framework.

3. Characteristics of the Market Environment in the Digital Economy Era and Their Impact on the 4Ps Marketing Strategy Theory

3.1. Characteristics of the Market Environment in the Digital Economy Era

The digital economy is an economic model in which data resources serve as a key element and digital technology acts as the core driving force. In the digital economy era, the market environment exhibits the following notable characteristics:

3.1.1. Diversification of Marketing Models

The integration of online and offline consumption scenarios has formed an omnichannel consumer ecosystem. Online marketing models enable the rapid dissemination and precise targeting of product information. At the same time, big data technology assists enterprises in accurately analysing consumer needs and identifying market trends, facilitating the formulation of personalised marketing strategies for different target customer groups and providing robust support for marketing decision-making. With the development of the digital economy, enterprises' marketing channels have become increasingly diversified, whilst marketing methods have grown more flexible and efficient.

3.1.2. Personalisation of Consumer Demand

The rapid development of digital technology has driven the rise of the digital economy. Whilst giving rise to a series of new marketing models, it has also enabled consumers to access product information and express their needs more conveniently. Consumers are no longer satisfied with standardised products, but instead seek personalised and customised products and services.

3.1.3. Fragmentation of Information Dissemination

In the digital age, information dissemination channels have become increasingly diverse, with social media emerging as the primary vehicle for information transmission. Information now travels faster and reaches a wider audience, whilst simultaneously exhibiting a fragmented nature. This fragmentation allows consumers to rapidly access vast amounts of product information, but it also leads to their attention being widely scattered and information overload, making it difficult for them to filter out relevant information. At the same time, consumers are no longer passive recipients of information; instead, they can actively post product reviews and share their consumption experiences through channels such as social media, thereby exerting a significant influence on the purchasing decisions of other consumers.

3.1.4. Globalisation of Market Competition

Digital technology has broken down geographical barriers, accelerating the process of global economic integration. The market competition faced by enterprises is no longer confined to domestic markets but extends to competitors from across the globe, making competition far more intense. This intensification of market competition has squeezed corporate profit margins,

necessitating the optimisation of marketing strategies and the enhancement of product competitiveness to capture market share.

3.2. The Impact of the Market Environment on the 4P Marketing Strategy Theory

The 4Ps marketing strategy theory originated in the industrial era; today, standardised marketing theories and strategies struggle to adapt to the market environment of the digital economy. The impact of the market environment on the 4Ps marketing strategy theory is specifically reflected in the following four dimensions:

3.2.1. Product Dimension

Traditional product development models struggle to respond to personalised demands. Under traditional product strategies, companies place greater emphasis on their own production capacity, with product R&D and design often based on the firm's technological strengths and production conditions. Furthermore, companies adopt a 'produce first, sell later' model, relying on the firm's experience and general market demand, resulting in a high degree of product standardisation. This makes it difficult for traditional product development models to respond to and satisfy consumers' personalised needs. In the market environment of the digital economy, consumer demands have become increasingly diverse and personalised, with a growing demand for product customisation. This requires companies to shift their product R&D philosophy from a "company-centric" to a "consumer-centric" approach, analysing consumer needs through big data technology to undertake personalised product development. Furthermore, the development of digital technology has led to greater diversity in product forms. In addition to traditional tangible products, the market demand for intangible service products and digital products is constantly growing; enterprises need to expand their product ranges to meet consumers' diverse needs. Moreover, consumers' expectations regarding product quality and safety are continuously rising; enterprises must strengthen quality control, enhance product quality, and establish a positive brand image.

3.2.2. Pricing Dimension

Traditional pricing strategies lack flexibility and struggle to adapt to the demands of market competition. Under traditional pricing strategies, enterprises predominantly adopt cost-oriented pricing, which is primarily based on costs, profit targets and competitors' prices to formulate pricing strategies. Prices are relatively fixed, making it difficult to respond flexibly to market competition and changes in consumer price sensitivity. In the digital economy era, market competition has intensified. E-commerce platforms and price comparison software have increased price transparency, enabling consumers to quickly and easily access product pricing information from different companies via the internet, resulting in fiercer price competition [4]. This necessitates a shift in enterprises' pricing philosophy, moving from a cost-oriented approach to one driven by demand and competition, and allowing for flexible price adjustments based on consumer price sensitivity and market conditions.

3.2.3. Channel Dimension

Traditional offline channels are facing pressure from emerging channels. Traditional channel strategies have primarily relied on physical offline channels, with enterprises depending mainly on offline distributors and retailers for product distribution. These strategies involve multiple tiers of distribution, and products must pass through numerous intermediaries before reaching consumers, resulting in high channel costs and low efficiency. In the modern market environment, the development of the digital economy has given rise to online channels, with emerging online channels such as e-commerce platforms and live-streaming sales constantly emerging; these channels have become important avenues for product sales. As online channels possess advantages such as fewer tiers, high distribution efficiency, low costs, wide coverage,

and the ability to rapidly deliver products to consumers, they have had a significant impact on traditional offline channels [5]. At the same time, consumers' channel choices have become more diverse, and they have higher expectations regarding convenience and experience; the service models of traditional channels are no longer sufficient to meet consumer demands. This necessitates that enterprises establish an omnichannel marketing system integrating online and offline channels, consolidating resources across both to achieve complementary advantages. Concurrently, channel diversification also requires enterprises to strengthen channel management, optimise channel structures, enhance channel efficiency, and avoid channel conflicts.

3.2.4. Promotion Dimension

Traditional one-way promotional models lack interactivity, making it difficult to establish effective connections with consumers and achieve meaningful communication. Under traditional promotional strategies, enterprises predominantly employ one-way information dissemination methods to conduct promotional activities, resulting in low transmission efficiency and poor accuracy, and making it difficult to establish effective interaction with consumers. In the market environment of the digital economy, information dissemination has become fragmented, consumers' channels for obtaining information have become more diverse, and their receptiveness to one-way promotional messages is gradually declining. At the same time, consumers are increasingly inclined to obtain product information through social media and user reviews, placing greater emphasis on interactive communication with businesses. Consequently, the effectiveness of traditional promotional methods is gradually diminishing. This necessitates a shift in corporate promotional philosophy, moving from one-way communication to two-way interaction, and strengthening communication and engagement with consumers. Furthermore, the role of public relations within promotional strategies is becoming increasingly prominent; businesses need to enhance brand image building and improve brand reputation through charitable activities and the fulfilment of social responsibilities.

4. Optimisation and Application of the 4.4P Marketing Strategy Theory

4.1. Optimisation and Innovation of Product Strategy

In the digital economy era, consumer demands are characterised by personalisation and diversity [6]. Consequently, products should be driven towards a transformation from standardisation to personalisation, intelligence and service-oriented models. Specific pathways for optimisation and innovation are as follows:

Undertake research and development of personalised and customised products. Enterprises should shift their product development philosophy to place consumer needs at the core. By utilising big data technology and artificial intelligence, they can gain precise insights into consumer demands, collect and analyse information on consumer habits, and accurately identify individualised needs to provide customised products and services. Concurrently, enterprises should strengthen research and development of core technologies to enhance the technical sophistication and differentiated competitiveness of their products, thereby avoiding product homogenisation.

Improve product quality control systems and undertake intelligent product upgrades. Enterprises should strengthen product quality control by establishing a comprehensive quality management system, exercising strict oversight at every stage—from raw material procurement and production processing to finished product inspection and after-sales service—to ensure product quality. At the same time, enterprises should prioritise product safety and environmental sustainability, ensuring compliance with relevant national standards and meeting consumers' environmental expectations. Building on this, enterprises should

integrate digital technologies such as artificial intelligence and the Internet of Things to enhance the intelligence of their products. Through intelligent products, they can achieve smart interaction with consumers, thereby enhancing the consumer experience. Furthermore, smart products can be used to collect consumer usage data, providing support for product optimisation and marketing decisions.

Extending products through service-oriented approaches. Transitioning from the sale of standalone products to a 'product + service' model enhances product value. Companies can utilise digital platforms to provide consumers with comprehensive services, including online consultations and after-sales support, thereby improving service convenience and efficiency and strengthening consumer loyalty.

Strengthening brand building. Enterprises should prioritise brand building, clarify brand positioning, and shape a distinctive brand image. Whilst strengthening brand communication and utilising multiple channels to conduct brand promotion activities to enhance brand awareness and reputation, enterprises must also reinforce brand maintenance, pay attention to consumer feedback, and promptly address brand crises to safeguard the corporate brand image.

4.2. Optimisation and Innovation of Pricing Strategies

In the digital economy era, price transparency and intensifying market competition are driving a shift in pricing strategies and mechanisms from fixed pricing towards differentiated pricing and dynamic pricing. Specific pathways for optimisation and innovation are as follows:

Implementing a differentiated pricing strategy. Companies should implement a differentiated pricing strategy based on factors such as consumer price sensitivity, the degree of product differentiation, and market competition. Furthermore, by adopting a product bundling pricing strategy—grouping related products together for pricing—they can increase overall product sales.

Establishing a dynamic pricing mechanism. Dynamic pricing enables enterprises to respond swiftly to market changes and enhance their competitive edge. By utilising artificial intelligence, big data and algorithmic technologies, enterprises can establish a dynamic pricing mechanism to adjust product prices in real time based on market demand, competitive conditions, inventory levels and consumer behaviour. Concurrently, enterprises should strengthen monitoring of market prices, keep abreast of competitors' price movements, and flexibly adjust their own pricing strategies to avoid price wars.

Precision pricing and value-based pricing strategies. Implement differentiated pricing based on consumers' ability to pay, with a focus on their perceived value rather than cost. By analysing consumer profile data and purchase history, companies can accurately assess consumers' perceived value and ability to pay, thereby setting different prices for different consumer segments. Building on this, companies can enhance consumers' perceived value by improving product quality, functionality and service, thereby justifying higher prices.

Standardising the pricing system. Companies should establish a comprehensive pricing management system to standardise prices across online and offline channels and avoid price inconsistencies. At the same time, they should strengthen price communication and explanation, clarifying the composition and value of product prices to consumers. This helps consumers understand the relationship between price and value, thereby increasing their acceptance of pricing.

4.3. Optimisation and Innovation of Channel Strategies

In the digital economy era, the convergence of online and offline consumption scenarios is driving a transformation in the channel landscape from a single offline channel to an

omnichannel model integrating both online and offline channels. Specific pathways for optimisation and innovation are as follows:

Omnichannel deployment to promote the deep integration of online and offline channels. An omnichannel strategy enables enterprises to achieve comprehensive coverage of consumers and enhance the convenience of their shopping experience. Enterprises should break down the barriers between online and offline channels, integrating multiple channels such as physical stores, online e-commerce platforms and live-streaming sales to share and consolidate channel resources, thereby building an omnichannel distribution network. At the same time, enterprises should strengthen the integration and analysis of channel data, using big data technology to analyse consumer shopping behaviour and channel preferences, and optimise channel layout and operational strategies.

Optimise channel structures and undertake digital upgrades. Enterprises should strengthen control over their channels by establishing robust management systems. Building on this foundation, they should digitally transform traditional offline channels, optimise the allocation of channel resources, reduce the number of distribution tiers, lower channel costs, improve channel efficiency, and enhance the consumer experience.

Actively expand into emerging channels. Enterprises should prioritise the development of emerging channels, continuously innovate channel models, and actively expand into emerging channels such as live-streaming e-commerce and community group buying to adapt to changes in the market environment and broaden the market reach of their products.

4.4. Optimisation and Innovation of Promotional Strategies

In the digital economy era, the socialised and fragmented nature of information dissemination has driven the transformation of promotional strategies from one-way communication to targeted, two-way interactive promotions. Specific pathways for optimisation and innovation are as follows:

Conduct targeted promotional campaigns. Enterprises can utilise big data technology to build consumer profiles, analyse information such as consumer preferences and spending habits, and launch targeted promotional campaigns. By precisely identifying target consumers and pushing product promotion information to potential customers, they can achieve precise delivery of promotional messages, thereby enhancing the accuracy and effectiveness of promotions. At the same time, enterprises should continuously innovate promotional content and formats to avoid homogenisation of promotional content.

Interactive promotions to strengthen brand communication and engagement. Enterprises should shift their promotional philosophy from one-way communication to two-way interaction. By utilising social media, live streaming and short videos to conduct interactive promotional activities, they can enhance communication and engagement with consumers, whilst providing personalised services and promotional offers tailored to different customer segments, thereby increasing customer loyalty.

5. Conclusion

Based on the profound transformations in the market environment of the digital economy era, this paper systematically examines the challenges and opportunities for restructuring the classic 4P marketing strategy theory. Building on this analysis, it proposes an optimized innovation pathway encompassing the four dimensions of product, price, place, and promotion. The research indicates that while the 4P theory remains a relevant foundational framework for marketing analysis, a shift in strategic thinking is necessary. Specifically, products are evolving toward personalization, intelligence, and service-oriented models; pricing is shifting toward dynamic, differentiated strategies; channels are transitioning to an omnichannel layout

characterized by deep integration of online and offline channels; and promotions are transforming into data-driven, two-way, precision-interaction models. This optimization does not negate the classics but rather leverages digital technology to infuse them with contemporary vitality. By deeply embedding digital technology across all four dimensions to achieve synergistic optimization, it empowers enterprises to respond more flexibly to dynamic markets, thereby enhancing resource allocation efficiency and core competitiveness.

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