The Impact of Artificial Intelligence on the Marketing Mix: Introducing the Digital Marketing Mix 4.0

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Abstract:

This study examines the transformative role of Artificial Intelligence (AI) in the traditional marketing mix, proposing "Performance" as an essential fifth element in Marketing Mix 4.0. By leveraging data for smarter decision-making, personalization, and automation, AI enhances each dimension of the mix—Product, Price, Place, and Promotion—enabling quick adjustments and improved customer engagement. A survey of academic professionals reveals widespread support for Performance as a new dimension, highlighting its impact on making marketing more effective and adaptable. Findings indicate that integrating Performance with AI and Big Data provides marketers with a dynamic, responsive, and agile framework, essential for achieving a sustainable competitive advantage in the digital landscape.

Keywords: Artificial Intelligence (AI), Marketing Mix, Marketing 4.0, Digital Marketing, Big Data.

Introduction:

In recent years, Artificial Intelligence (AI) has emerged as a transformative force across various industries, with marketing being one of the most significantly impacted fields. The advent of AI allows marketers to embrace data-driven insights, automation, and personalization into their initiatives, optimizing strategies and improving customer engagement (Davenport & T. H, 2020) (Huang, M & Rust, R, 2021) This correlates with the trend of marketing to evolve into a more agile, adaptive, dynamic and customer-centric function. These technological advancements are challenging traditional models like the 4Ps of the marketing mix—Product, Price, Place, and Promotion (Kotler, P & Armstrong, G, 2018) (Kotler, P & Keller, K. L, 2018).

A compelling argument has been made for the addition of "Performance" as a fifth element in the marketing mix, reflecting the enhanced effectiveness and adaptability enabled by AI-driven analytics (Jabeen, 2022) (Nanayakkara, 2020). Speaking of Marketing 4.0, this statement indicates that the strategy in this new age must be flexible and adaptive, allowing the strategy to be adjusted to the present consumer behaviour and preference trends. Thus, AI no longer plays a simple supportive role in shifting the mechanism of traditional marketing practices, as it goes further to redefine aspects at the core of the marketing strategy of any organization itself (Russell, S & Norvig, P., 2016).

This study explores how AI can elevate marketing performance, focusing on whether "Performance" should be formally recognized as a fifth dimension in the marketing mix. The study aims to answer the following research question: ***How does Artificial Intelligence impact the traditional marketing mix, and is there a need to incorporate 'Performance' as a fifth element?*** In this sense, the topic is current, as we envision that AI presents the opportunity to be a catalyst of paradigm shift in the sphere of Marketing, towards a more personalized, optimized and efficient model.

This research aims to add to the academic literature and practical implications through answering these questions. It offers lessons for marketers and companies wanting to prepare for a future where AI will not only assist but actually redefine their strategic underpinnings. This study underscores the importance of recognizing "Performance" as an integral element in achieving a sustainable, competitive advantage in the digital era.

Definitions:

1. Marketing Evolution: The marketing mix has significantly evolved over time, adapting to shifts in consumer behavior and advances in technology:

- **Marketing 2.0**: Price — We are now in the product-led marketing phase. Then marketing used to be a heavily one-way channel companies would blabber about their products but the consumer had no semi block regarding her nearest brands. They were better just at the attempts to benefit through better products as oppose to directly getting into the consumers face(Kotler, P & Armstrong, G, 2018).

- **Marketing 3.0**: The real transition started from Marketing 2.0 to Marketing 3.0 where most of the companies understood what it means to put the customers at center and what it means to know their needs and values. This age illustrated the need to build relationships, where customers were reached out through various channels and the focus was on creating value. Customer focus– Digital technologies facilitated greater customization of marketing and better interactions, positioning customer satisfaction as a competitive priority (Kotler, P & Armstrong, G, 2018).

- **Marketing 4.0**: At Marketing 4.0, digital technologies are incorporated throughout the entirety of marketing, with a focus on connectivity, engagement, and data-driven decision-making. This period of time changed such an established advertising mix by enabling true and constant changes in marketing, now more partaking and instant. AI is

an important part in which, marketers use big data to identify consumer insights, automate a number of marketing tasks, and provide personalized experiences at a scale. The internet and changing trends in our lives also led to change in the manner of customer engagement and therefore, marketing became a two-way stream instead of one-way only due to the rise of social media platforms.(Nanayakkara, 2020) (Jabeen, 2022).

2. Artificial Intelligence (AI): Definition: The word AI is a machine that shows the intelligence to make it simulates some cognitive and affective functions that humans association gives (Russell, S & Norvig, P., 2016). While artificial intelligence (AI) has grown potentially leaps and bounds over several decades, big data analytics and machine learning in particular have automated many repetitive tasks and aided in the decision-making process across range of sectors (Verma, 2021). These AI systems are designed to absorb lots of data and analyze it for mission-critical decisions. By leveraging historical data, these systems can observe, understand and respond to their environments to forecast future needs such as predicting equipment failures or understanding consumer behavior patterns and trends (Davenport & T. H, 2020).

Artificial Intelligence consists of a few key technologies, like machine learning, natural language processing (NLP), neural networks, etc., which give it versatility. For example, machine learning enables systems to learn and improve with experience, while natural language processing (NLP) enables better interaction between humans and computers by making machines capable of understanding and generating human language. Neural networks, which act in a similar way to the human brain, give AI the ability to recognize more complex patterns and to make more accurate predictions (Russell, S & Norvig, P., 2016).

3. Artificial Intelligence in Marketing: AI has immensely changed the landscape of marketing, providing data-driven, consumer-focused marketing approach in recent years. The increasing volume of customer data though has necessitated AI-driven tools that are used to process the data, optimize the strategies and provide personalized customer experience (Jarek, K & Mazurek, G, 2019). The following are some of the major applications of AI in marketing:

- **Analytical AI:** Processes large datasets to generate insights that inform marketing strategies, helping brands target the right customers and enhance decision-making (Kietzmann, J, Paschen, J, & Treen, E, 2021).

- **Generative AI:** Generates original content including text, images and videos and enable low-cost and efficient content generation (Huang, M & Rust, R, 2021).

- **Natural Language Processing (NLP):** Powers bots and virtual assistants to offer personalized, efficient customer service and improved satisfaction and retention levels (Grewal, D, Hulland, J, Kopalle, P. K, & Karahan, 2020).

- **Predictive Analytics:** uses AI-based models to predict customer behavior, market trends, and preferences to enable marketers to anticipate consumer needs and respond accordingly (Davenport & T. H, 2020).

Table 01: Summary of Key Studies on the Application of Artificial Intelligence in Marketing

Author(s)	Study Based On	Findings
Gacanin & Wagner (2019)	Autonomous CEM	Establishment of critical business drivers through AI and ML
Nguyen & Sidorova (2018)	Enhancement of customer experience through AI	Improved customer experience through AI-driven chatbots
Maxwell et al. (2011)	Data processing through AI and ML algorithms	Enhanced marketing decisions via AI and ML-based data processing
Chatterjee et al. (2019)	Application of AI in marketing	Analysis of customer habits and purchases through AI applications
Seranmadevi & Kumar (2019)	AIUI in CRM	Evolution of CRM functions through AI User Interface (AIUI)
Sujata et al. (2019)	Smart retail stores	Enhanced customer experience and supply chain management in smart retail
Sha & Rajeswari (2019)	Advanced AI in e-commerce	Advanced AI-enabled systems enhance e-commerce by simulating human senses

Source: (Sanjeev Verma, 2021).

Through these applications, AI allows marketers to understand consumer habits, preferences, and purchasing behaviors on a more granular level, enabling them to tailor offerings and enhance customer experiences (al, 2011) (Chatterjee, 2019). The use of AI in Customer Relationship Management (CRM) has also evolved with AI User Interface (AIUI) applications, providing personalized engagement that strengthens brand loyalty (Seranmadevi, 2019). ven, the role of AI in smart retail environments has shown how traditional stores can turn to be autonomous and customer-centric (Sujata, 2019).

4. Artificial Intelligence in Marketing Mix: AI has impacted the traditional marketing mix (4Ps: Product, Price, Place, Promotion) by adding a new dimension to each of the 4Ps through advanced analytics and automation.

- **Product:** AI-powered analytics allows a brand to gauge what its consumers want and present personalized product recommendations and tailor its offerings. Through perusing customer data, machine learning algorithms personalize product recommendations to enhance relevance and satisfaction (Dekimpe, 2020).

- **Price:** AI supports dynamic pricing by analyzing demand, market trends, and competitor prices in real-time, allowing businesses to adjust prices to maximize revenue. Techniques such as Bayesian inference enable quick price adjustments in competitive markets (Bauer & Jannach, D, 2018).

- **Place:** AI optimizes logistics and distribution by automating repetitive tasks through packaging robots, drones, and IoT tracking systems, improving the efficiency of supply chains and product availability (Huang & Rust, R, 2020).

- **Promotion:** AI enhances promotion strategies by enabling hyper-personalized marketing campaigns that align with customer preferences and behaviors. Emotive AI algorithms track real-time customer sentiment on social media, helping marketers refine messages for greater engagement (Tripathi & Verma, S, 2018).

Brands can utilize more of an agile marketing strategy that is responsive and efficient by integrating AI into their mix. The process is even supported in a way of redefining customer engagement with the help of AI which leads to a personalized dimension of thinking and brings a personalized aspect of dealing with a client that would really make a difference in such a market as of the present where no one wants to be sold (Gacanin & Wagner, K, 2019). This transition points out AI in the new age of conducting business as an enabler of customer experiences, customer loyalty, and of course, business profitability.

Marketing Mix 4.0, also known as the digital marketing mix, extends the traditional 4Ps to incorporate new elements driven by digital transformation and AI. Key components include:

- **Personalization**: Leveraging AI and data analytics to customize products, services, and communications to match individual preferences (Taraghi & Scarso, A, 2024). (Al Sayed, 2024).

- **Participation**: Encouraging active customer engagement through social media, user-generated content, and collaborative platforms, fostering a sense of community and loyalty (Guendouz, 2023) (Puspaningrum, 2024).

- **Peer-to-Peer**: Employing peer endorsements, online reviews and influencer collaborations for gaining trust and credibility with consumers (Singh, 2023).

- **Predictive Analytics**: Applying AI and machine learning to interpret data, predict customer behavior, and fine-tune marketing strategies in real-time to ensure that every decision is taken in advance (Al Sayed, 2024) (Guendouz, 2023).

Enhancing the elements of the marketing mix from Marketing 2.0 product-oriented to Marketing 4.0 data-driven and interactive mix showcase changes brought in marketing by AI. The impact of the digital era is apparent in the consumer market, where smart AI-driven tools in Marketing Mix 4.0 are enabling firms to gain effective and optimum balance in interaction with the end consumer.

Methodology:

Research Aim: This research aims to examine how academic professionals perceive the role of AI in marketing, particularly focusing on AI's impact on the traditional marketing mix and the introduction of Performance as a fifth P. The study draws insights from respondents who are experts in AI, marketing, and academia. Based on survey responses collected from participants who submitted accepted entries to two conferences:

1. **International Conference**: *Toward the Adoption of Artificial Intelligence in Industrial Institutions and Achieving Sustainable Leadership* (November 7-8, 2023, University 20 August 1955, Algeria).

2. **National Conference**: *Applications of Artificial Intelligence in Startups – Field Studies and Leading Experiences* (February 8, 2024, University Ziane Achour, Algeria).

The respondents are experts in AI, marketing, and academia, providing valuable insights into the role of AI in marketing and product development.

Survey Design: The survey captured participants' perceptions of AI's role in marketing, its impact on the traditional marketing mix, and the importance of adding Performance as a new dimension.

- **Sample Size:** 52 respondents, comprising PhD students, and university professors.

- **Survey Questions:**

    - **Survey Section 1:** Demographics.
    - **Survey Section 2:** Familiarity and Knowledge of AI.
    - **Survey Section 3:** AI's Impact on Marketing.
    - **Survey Section 4:** AI and the Fifth "P" in Marketing.

- **Data Collection:** Data was collected via an online survey distributed through academic mailing lists.

Data Analysis: Descriptive statistics were performed in order to inspect the distribution of perceptions associated with each of the types of academic roles and each of the types of fields of expertise. Then, open-ended responses were coded for qualitative data on what themes emerged in marketing as the impact of AI.

Results & Discussion:

Survey Keys: In this part, the focus is on the most important survey findings about AI in marketing mix and the suggested fifth element, which is "Performance"

Section 1: Demographics
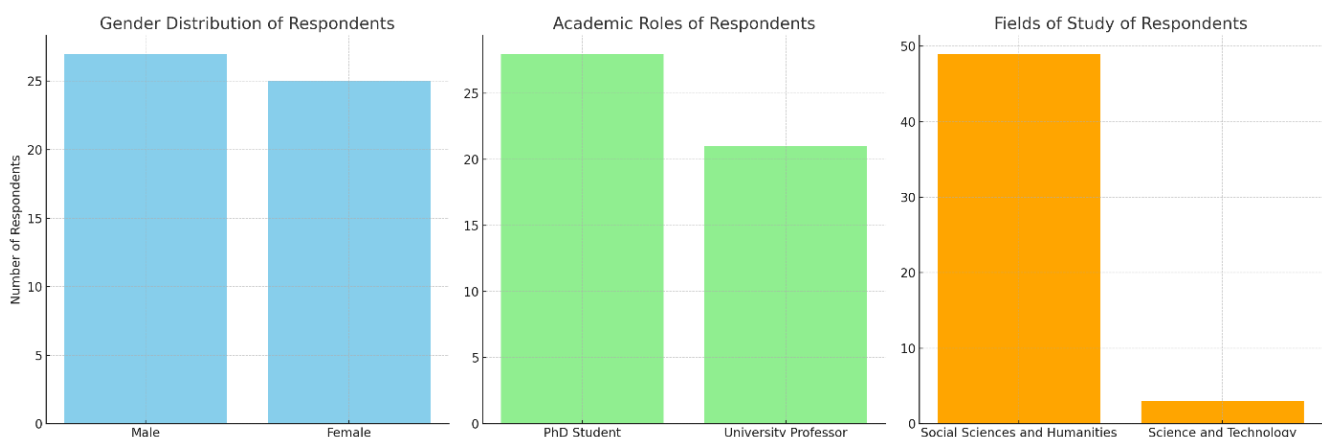
The combined chart displays the distributions of gender, academic roles, and fields of study in three side-by-side bar graphs of respondents for each category:

1. **Gender Distribution**: Shows the balance between male and female respondents.
   - **Males**: 27 respondents
   - **Females**: 25 respondents
2. **Academic Roles**: Displays the breakdown between PhD students and university professors.
   - **PhD Students**: 28 respondents
   - **University Professors**: 24 respondents
3. **Fields of Study**: Highlights the dominance of social sciences and humanities among the respondents.
   - **Social Sciences and Humanities**: 49 respondents
   - **Science and Technology**: 3 respondents

Section 2: Familiarity and Knowledge of AI.

With a **(100% of whom are familiar with AI and its applications),** The sources were:
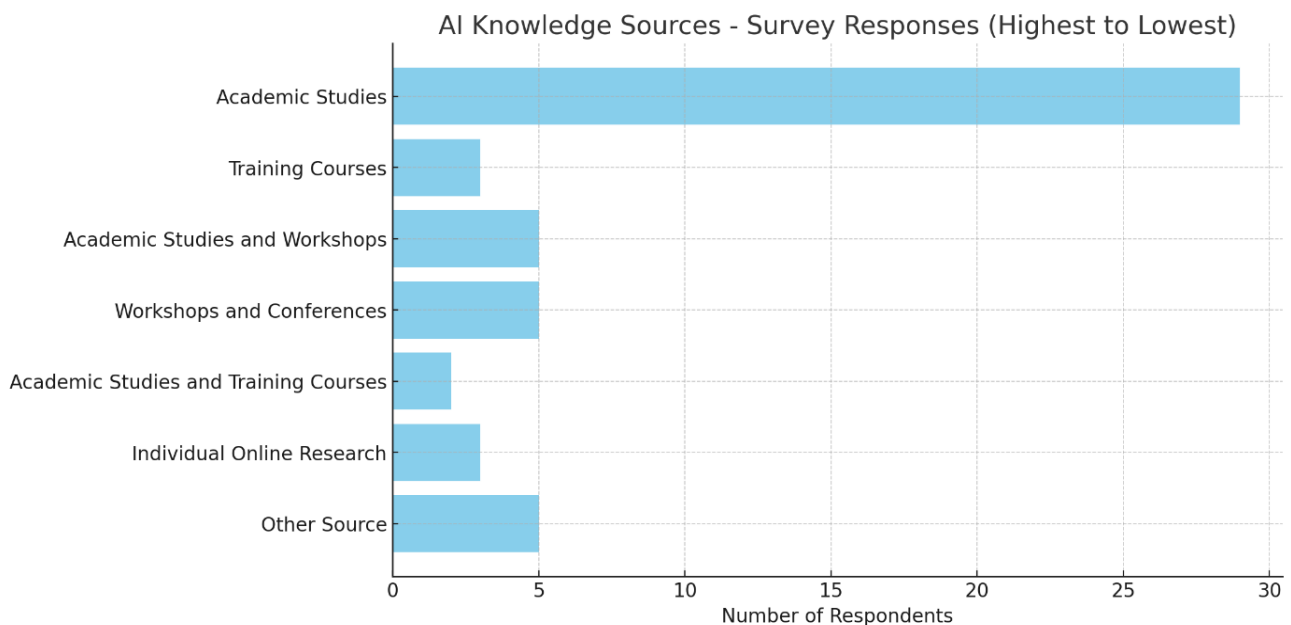

This bar chart visualizes the sources from which respondents gained knowledge about Artificial Intelligence (AI), ranked from highest to lowest based on the respondents.

- **Academic Studies (29 respondents)**: The majority of respondents (55.8%) identified academic studies as their primary source of AI knowledge, emphasizing the importance of formal education and research in understanding AI concepts and applications.

- **Workshops and Conferences (5 respondents)**: A smaller group indicated that workshops and conferences were a key source of knowledge, reflecting the value of practical, hands-on learning in real-world settings.

- **Academic Studies and Workshops (5 respondents)**: This category suggests that a combined approach, where formal education is supplemented by workshops, is beneficial for some respondents.

- **Training Courses (3 respondents)**: Training courses were less common as a primary source, but they still played a role in providing structured learning.

- **Individual Online Research (3 respondents)**: A few respondents relied on self-guided online research, indicating that independent learning is a supplemental method for understanding AI.

- **Academic Studies and Training Courses (2 respondents)**: Some respondents reported gaining knowledge from a blend of formal education and structured courses.

- **Other Sources (5 respondents)**: These responses indicate that alternative or unclassified sources also contribute to the AI knowledge base.

Formal education, particularly through academic studies, is the dominant means by which respondents learn about AI. Practical learning experiences such as workshops and conferences also play an important role, though they are secondary to academic research. The prevalence of academic studies suggests that AI in marketing is seen as a sophisticated subject requiring deep academic engagement.

Section 3: AI's Impact on Marketing - **The Expected Benefits of AI in the Marketing Mix**
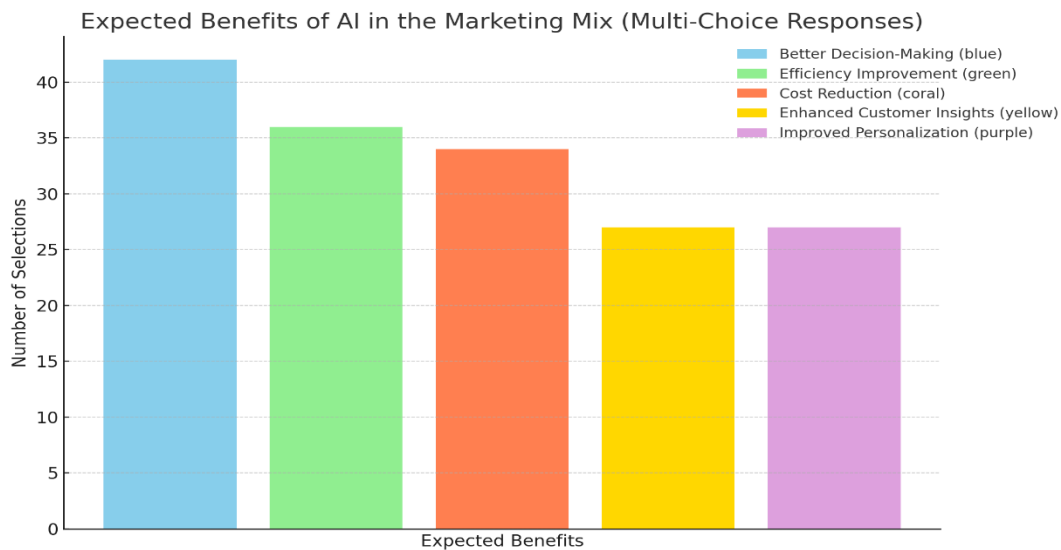
The bar chart shows what people believe the marketing mix effects of AI will involve, based on survey results. The chart presents the benefits they can expect grouped by how many people selected each one, thus highlighting the popular and niche expectations.

- **Better Decision-Making (blue, 41 selections)**: This was the most popular response and indicates the clear opinion that this group has on AI as a decision-making aid. Analysis of big data followed with predictive insights by AI is widely sought after because they help us develop marketing strategies that are data-driven, informed, timely and inexpensive

- **Efficiency Improvement (green, 37 selections)**: The second most selected benefit, efficiency improvement, reflects how AI can automate and optimise many tasks, making processes more efficient. Less manual interventions translate to speed and replicable processes, leading to a more agile marketing function powered by AI.

- **Cost Reduction (coral, 34 selections)**: Many respondents expect that AI will help reduce costs through improved resource allocation and increased overall efficiency. This shows the frugality mindset around AI when it comes to marketers making the same decision around AI where effectiveness has to be balanced out with cost savings over the long run.

- **Enhanced Customer Insights (yellow, 25 selections)**: The ability of AI to provide richer insights into customer behaviors and preferences is seen as a likely use case by a large number of respondents, which gives rise to the hope that AI will deliver great insights into customers. It allows campaigns and interactions to be more targeted and personalized that enhance customer engagement.

- **Improved Personalization (purple, 24 selections)**: Tied to customer intelligence, personalization is important because it helps align marketing efforts with the individual preferences of customers. AI enables data-driven insights to help marketers create personalized experiences that increase customer satisfaction and lead to more conversions.

The primary anticipated benefits of AI in the marketing mix focus on better decision-making and efficiency improvement. Overall, these findings underscore the perceived value of AI as a tool for enhancing marketing effectiveness and delivering more data-driven, focused on what customers want.

Section 4: AI and the Fifth "P" in Marketing

Agreement on adding the Fifth P "Performance" to the marketing mix:

Agreement on Adding the Fifth P "Performance"
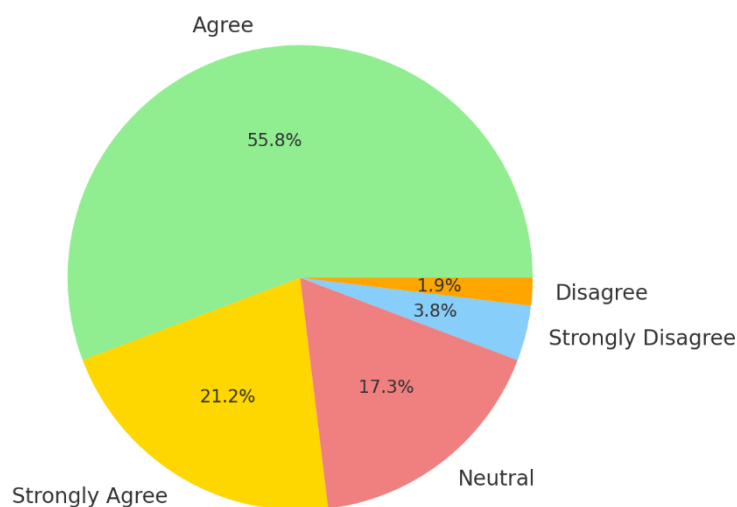
- The majority of respondents either **Agree** or **Strongly Agree** with the inclusion of "Performance" as a new element in the marketing mix, emphasizing its relevance in modern marketing strategies.

- A small percentage remains **Neutral**, with no significant disagreement noted.

The pie chart illustrates respondents' levels of agreement with the proposition of adding "Performance" as a fifth P in the marketing mix, driven by AI and Big Data. The data reveals the following distribution:

- **Agree (55.8%)**: A significant majority of respondents agree with incorporating "Performance" into the marketing mix, highlighting the perceived importance of this new dimension in modern marketing.

- **Strongly Agree (21.2%)**: A noteworthy portion of respondents strongly supports the inclusion, emphasizing that Performance is seen as crucial for optimizing marketing strategies with AI.

- **Neutral (17.3%)**: A smaller group remains neutral, meaning they neither strongly agree nor disagree, indicating some uncertainty or the need for more evidence on the impact of Performance..

- **Disagree (1.9%)**: A very small percentage of respondents disagree with the inclusion of Performance, indicating minimal opposition.

- **Strongly Disagree (3.8%)**: Similarly, a small portion of respondents strongly disagree, expressing a stronger stance against adding Performance to the marketing mix.

The overwhelming agreement **(77%)** from both the **"Agree"** and **"Strongly Agree"** categories suggests that the integration of "Performance" into the marketing mix is widely accepted among respondents. The new dimension of "Performance," enabled by AI and Big Data, is viewed as a necessary evolution for modern marketing strategies, particularly in enhancing personalization, optimization, and automation. The neutral and dissenting voices, though minimal, indicate areas where further discussion or clarification might be needed on the practical implementation and benefits of this addition.

2. Introducing the fifth P – performance: Given the rapid evolution of digital marketing, many traditional strategies need to adapt if they wish to remain relevant and effective. Traditional marketing mix (Product, Price, Place, Promotion) has always been the basis of successful marketing. But, with technology such as Artificial Intelligence (AI) and Big Data entering the fray, this will need to be taken to the next level to capitalize on this new world changing innovation.

Introducing Performance as the fifth P in the marketing mix acknowledges the critical role of measuring and enhancing marketing activities through these technologies. Performance encapsulates the effectiveness and efficiency of marketing strategies driven by AI and Big Data across five key dimensions:

- **Personalization, Optimization, Dynamization, Automation, and Innovation.**

Figure 01: The importance of the Fifth P (performance) – Digital marketing mix 4.0
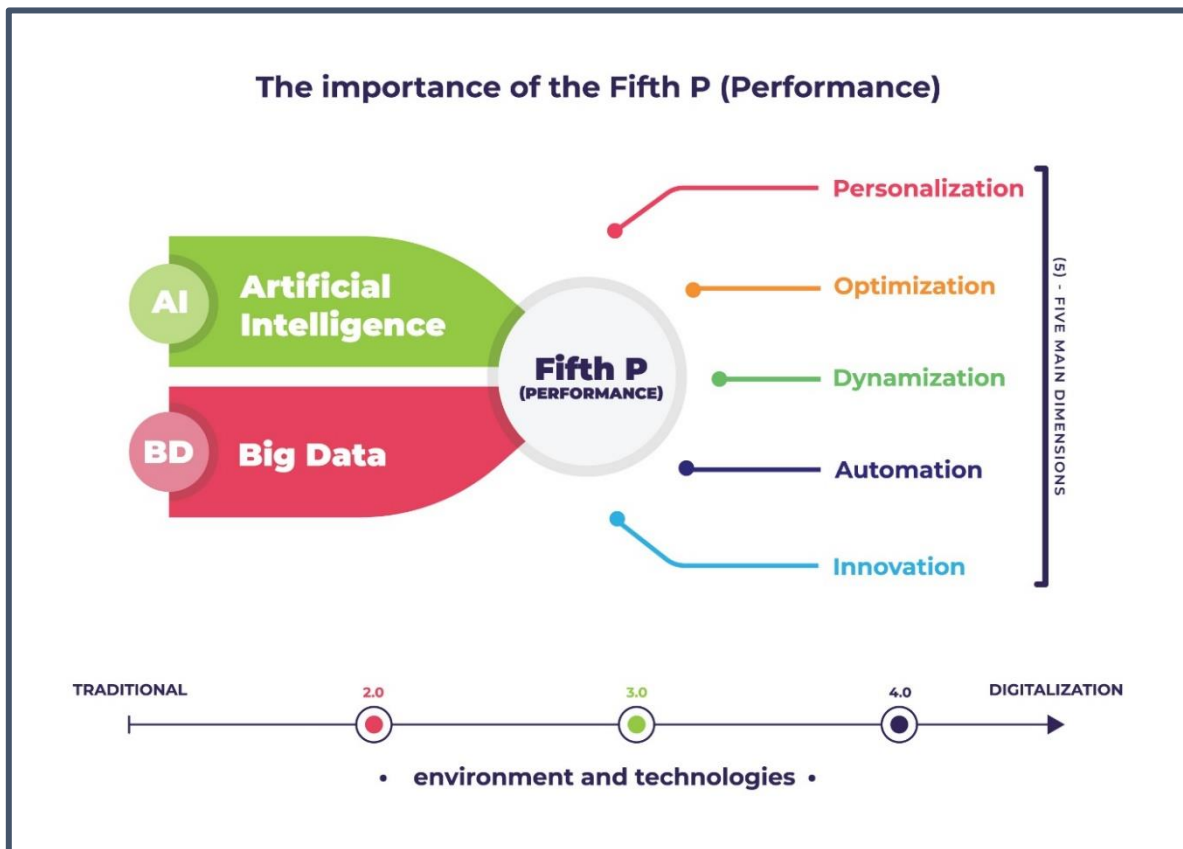
Source: By authors.

The importance of the fifth P – Performance: The central element, Performance, is depicted as the outcome of integrating AI and Big Data into marketing strategies. This central placement emphasizes the critical role of Performance in modern marketing.

Input Elements: AI and Big Data are shown as the primary sources feeding into Performance. This highlights their foundational role in driving the five key dimensions. The schema effectively demonstrates how these technologies provide the necessary insights and tools to enhance marketing efforts.

The Five Dimensions of Performance:

1. **Personalization:** AI and Big Data enable highly personalized marketing strategies, ensuring products, prices, distribution channels, and promotions are tailored to individual customer preferences.

2. **Optimization:** Real-time analytics based on both data and AI algorithms will optimize elements of the marketing mix to further drive efficiency and performance.

3. **Dynamization:** The schema shows how AI allows for quick changes in products, prices, places, and promotions based on real-time market feedback and trends.

4. **Automation:** One of the key advantages is meant to be the automation of your marketing, reducing tasks and making implementations repeatable.

5. **Innovation:** The schema highlights how AI and Big Data drive innovation across the marketing mix, leading to the development of advanced products, innovative pricing models, enhanced distribution methods, and cutting-edge promotional techniques.

Evolution of Marketing (environment and technologies): The timeline at the bottom of the schema provides context by showing the evolution of marketing from traditional practices to digitization, marked by the progression through Marketing 2.0, 3.0, and 4.0. This contextualizes the need for Performance as a new dimension in the modern, digital marketing landscape.

This update to the marketing mix is more than a superficial change; it reflects a big step toward flexibility in today's fast-changing digital world. Performance integration enables businesses to make their digital marketing much more reactive and data-driven, ultimately allowing them to add a lot of value – both into organization's pain points but also into the lives of our customers. Now, this new P, with AI and Big Data acting as gatekeeper alters the way companies think about developing their marketing strategies which means continuous improvement in anything they do will be crucial to keep ahead of its competitors.

In a rapidly changing business environment and the ever-increasing shift towards digitisation, there was one more column that needed to be added in this marketing mix — Performance.The using AI and Big Data in marketing has paved the way for this new P, which enhances and manages the traditional four Ps (Product, Price, Place, Promotion) by providing advanced capabilities in personalization, optimization, dynamization, automation, and innovation.

AI and Performance: AI enhances Performance by providing deep insights into customer behavior, preferences, and trends. It enables real-time decision-making, ensuring that marketing strategies are always aligned with current market conditions. AI-driven performance metrics help businesses measure the success of their marketing campaigns and make necessary adjustments to improve outcomes (Ibrahim, 2023).

Big Data and Performance: Big Data is the fuel that powers AI's capabilities. The vast amounts of data generated from various sources, including social media, and customer feedback, provide a rich foundation for AI algorithms to analyze and generate insights. By leveraging Big Data, companies can enhance their Performance by making informed decisions, predicting market trends, and personalizing customer experiences (Nanayakkara, 2020).

The Impact of the Fifth P (Performance) on the Traditional Marketing Mix: AI and Big Data will form the new components of the marketing strategy considering their transformational character on the traditional components of the marketing mix. The power of data analysis, personalization and an automated system built-in to their DNA will make marketing even more efficient and effective. With organizations moving forward in leveraging Big Data and experimenting with aspects of the metaverse, AI will become a more integral part of the marketing playbook for organizations looking to gain a competitive advantage in the future.(Ibrahim, 2023).

Table 02: The Direct Impact of the Fifth P (Performance) on each element of the Traditional Marketing Mix (4p's)

Element	Direct Impact
Product	Performance through personalization and innovation ensures products are tailored to customer needs and preferences. *Measuring product performance helps optimize features and drive continuous improvement.*
Price	Performance via optimization and dynamization enables real-time pricing adjustments based on market conditions and customer data. *Measurement of pricing effectiveness ensures competitive pricing strategies.*
Place	Performance through optimization and automation enhances distribution efficiency and effectiveness. *Measurement of logistical performance ensures products are available where and when customers need them.*
Promotion	Performance via personalization and innovation drives highly targeted and effective promotional campaigns. *Measurement of promotional effectiveness ensures campaigns are engaging and converting customers.*

Source: By authors.

Figure 02: The differences between the traditional marketing mix and the Digital marketing mix 4.0
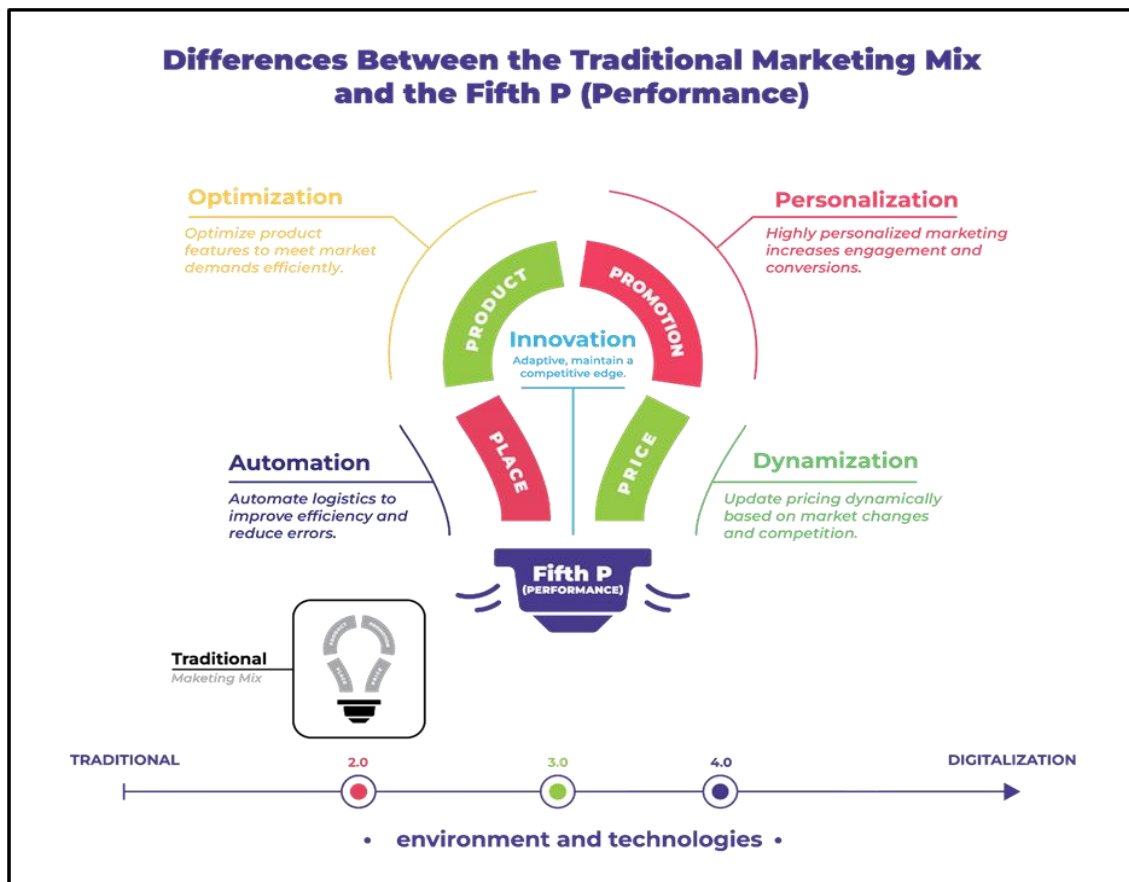
Source: By authors.

In this schema, it makes visual sense in clear and simple terms as to how the Fifth P - (Performance) changes the traditional marketing mix. AI and Big Data based marketing delivers a high level of personalization, optimization, dynamization, automation, and innovation to the marketers. The entire scope of this methodology makes an important difference and can be used to make marketing much more effective, efficient, and agile in a rapidly evolving digital landscape, resulting in greater value for businesses and consumers alike.

Table 03: Impact of Digital Marketing Mix 4.0 Dimensions on Each Element of the Traditional Marketing Mix (4Ps)

Aspect	Personalization	Optimization	Dynamization	Automation	Innovation
Product	AI and big data enable the creation of highly personalized products that cater to individual customer preferences.	AI-driven analytics optimize product features and development processes.	Products can be dynamically adjusted based on real-time feedback and market trends.	Automation streamlines product development and customization processes.	AI and big data drive innovation in product development, leading to unique and advanced products.
Price	Dynamic pricing strategies can be tailored to individual customer behavior and market conditions.	Real-time data analytics optimize pricing strategies.	Pricing models can be dynamically updated in response to market changes and competitor actions.	Automated pricing algorithms adjust prices in real-time.	Innovative pricing strategies, such as dynamic and personalized pricing, are enabled through AI.
Place	Distribution channels can be personalized to ensure products are available where and when customers want them.	Supply chain and logistics are optimized using AI, reducing costs and improving delivery times.	Distribution strategies can be dynamically adapted to changing market conditions.	Automated logistics and inventory management improve efficiency and reduce human error.	Innovative distribution methods, including the use of AI for demand forecasting and route optimization, enhance place strategies.
Promotion	Marketing messages and campaigns can be highly personalized, increasing engagement and conversion rates.	Marketing campaigns are continuously optimized through data-driven insights.	Promotional activities can be dynamically modified in response to real-time data and customer interactions.	Promotional activities can be dynamically modified in response to real-time data and customer interactions.	AI-powered tools enable innovative promotional techniques, such as predictive analytics and augmented reality marketing.

Source: By authors.

It is important to add Performance as a key ingredient in the marketing mix today given the ever-changing digital environment. This extension emphasizes how AI and Big Data represent a paradigm shift in marketing, introducing critical dimensions of personalization, optimization, dynamization, automation, and innovation.

These technologies can not only make a business agile in their marketing but also help them with efficient execution of their campaigns. It will ensure the marketing mix is robust and fresh, and it will also drive incremental value for both businesses and consumers. Fifth-P Performance turns your organization into proactive, agile, and inventive lead-meeting opportunities in the digital age in order to win the race.

Conclusion:

The integration of Artificial Intelligence (AI) and Big Data into the marketing mix marks a significant advancement in modern marketing. This study proposes "Performance" as a vital fifth element in Marketing Mix 4.0, enhancing traditional elements—Product, Price, Place, and Promotion—through data-driven insights, personalization, and automation. By embracing Performance, businesses can create a flexible, responsive framework that meets evolving customer expectations and maintains competitiveness in a digital landscape. This shift not only modernizes established marketing practices but also supports continuous innovation, ensuring that marketing remains dynamic and valuable in today's digital age.

Adapting to the Future:

- *Facebook has rebranded to Meta.com.*
- *Top domain names with the "Meta" and "VR" keywords are in high demand and have been reserved.*
- *New products and major collaborations in VR and the metaverse are emerging.*
- *Blockchain technology and decentralized applications (dApps) are gaining significant traction.*

Given these shifts, do you think it's time to introduce a new perspective on the Fifth P—performance measurement in digital marketing Mix, moving beyond the current emphasis on AI and Big Data?

How can we effectively assess marketing success in this rapidly evolving digital landscape, where new technologies and platforms are continuously emerging?

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