



Qualitative Assessment of the 4P Digital Marketing Mix for Modified Resistance Bands in the Indonesian Martial Arts Industry

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HIGHLIGHTS

- ❖ This study provides practical recommendations for refining the 4P marketing mix using qualitative research in Indonesia's martial arts equipment market.
- ❖ Results provide insights into strong market validation of product acceptance, with martial arts practitioners in Indonesia expressing positive feedback on the unique product design.
- ❖ A notable misalignment was found in the pricing strategy, as this highlights a high degree of price sensitivity within the target market.
- ❖ In a digitally advanced and price-sensitive market, e-commerce platforms are vital for businesses.



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ABSTRACT

This study addresses a gap in sports marketing literature by qualitatively evaluating the appropriateness and market acceptance of a modified resistance band product designed for the swiftly growing martial arts industry in Indonesia. It investigates the efficacy of a proposed 4P-marketing mix strategy (Product, Price, Place, Promotion) in meeting the unique demands of Indonesian martial arts practitioners. Utilizing secondary data for an initial market assessment, the research proceeds with a qualitative market research approach. In-depth interviews were conducted with 20 purposively sampled respondents, martial arts instructors in Indonesia. The interview results were analyzed using thematic analysis methodologies to identify patterns and insights regarding the product's design, distribution preferences, price sensitivity, and promotion effectiveness. It reveals that the developed 4P-marketing mix generally aligns with market demands although there is a notable mismatch in the pricing strategy, as most respondents expect a more affordable price, ideally between Rp 100,000 – Rp 150,000 for a modified resistance band set. This research offers timely qualitative insights into the niche market of martial arts equipment in a developing economy like Indonesia by providing practical recommendations on how to refine marketing strategies for innovative fitness products.

INTRODUCTION

The Indonesian sports and fitness scene, especially in martial arts, has changed significantly in recent years, with popularity fueled by digital technology and entertainment (Holmes, 2022). Events like the Ultimate Fighting Championship (UFC), ONE Championship, and local showcases such as BYON Combat have increased accessibility. These events have also broadened the audience through online platforms and influencer involvement.

Rising participation in martial arts has brought greater awareness of the importance of strength training for athletic performance (Chernozub, 2023). In Indonesia, diverse styles exist, with pencak silat notably prominent, in part due to its presence in public school programs (Faisyal et al., 2023).

Traditional training works, but many now recognize the value of modern tools for performance and injury prevention. Research shows resistance bands designed for Pencak Silat pull techniques can boost specific skills (Muhammad et al., 2025). Resistance bands help improve explosive strength and warm-up efficiency, matching dumbbell results in Kumite Karate. Their low cost, portability, and adaptability make them attractive.

Conventional resistance bands lack an ergonomic design, which can lead to discomfort or increased injury risk during prolonged use. The "Spider Band" offers a modified resistance band for Indonesian martial arts, with a focus on full-body workouts and user comfort. Its 11 components include adjustable tubes and secure wrist/ankle cuffs, all ergonomically enhanced to reduce injury and improve comfort.

This study uses the 'Spider Band' as an early-stage case in qualitative market research. We gather secondary data for initial assessment and conduct in-depth interviews. The research addresses a gap in sports marketing literature by exploring the 4P marketing mix design for niche martial arts equipment—specifically, the modified 'Spider Band' resistance band—in an emerging economy like Indonesia. Prior research describes the dynamic and competitive nature of Indonesian MSME markets (Tarihoran et al., 2023) and challenges of digital transformation, especially in marketing readiness (Anatan & Nur, 2023). However, little research explores how to tailor the 4P mix for an innovative, non-essential product in a digital-first, price-sensitive market. This study asks: What is the optimal, market-accepted 4P marketing mix for a modified resistance band for Indonesian martial arts practitioners? Thus, this study offers qualitative insights for refining marketing strategies and shows the theoretical mechanism for applying the 4P mix in a niche, digitally driven, community-based non-Western market.

Resistance Bands: The Smart Choice for Performance and Economical Workouts

Resistance band training offers strong benefits for martial artists and athletes. Studies show it improves explosive strength, like dumbbell training (Shah et al., 2024). For kumite karate athletes, it enhances standing long jump, punch reaction time, and kick frequency (Ioannides et al., 2024). During COVID-19, resistance bands provided an affordable, safe training option for children when supervised (Konukman et al., 2022). These results show that resistance bands are effective for martial arts and athletic performance, offering a versatile and accessible strength-training option.

Resistance bands are inexpensive, portable, and fit many exercise needs (Campos & Miguel, 2020). Compared to costly equipment like dumbbells or machines, they are ideal for budget-conscious users. This accessibility has grown their market share, reaching USD 1.3 billion in 2024, with a forecasted 7.5% annual growth from 2025 to 2034 (Wani & Faizullahoy, 2025). Demand for home exercise equipment, heightened during COVID-19, has spotlighted portable options like resistance bands.

Resistance bands work well for anaerobic exercise, improving muscle strength and endurance (Liu et al., 2022). They target muscles key to martial arts: legs, core, back, and shoulders. Bands are especially good for dynamic moves and building muscular endurance (Behm et al., 2010). However, their design favors individual use over group workouts.

Ergonomic Design in Resistance Bands: A Growing Necessity

User-centered and ergonomic design are essential for intuitive, comfortable, and safe fitness equipment. UCD aligns design with user needs; ergonomics matches products to human limits. As Seo et al. (2024) note, products that focus on wearability and comfort achieve greater engagement and longer-term use.

Many standard resistance bands are not user-friendly, especially for people with weak grip or joint issues. Prolonged or improper use causes discomfort or injury. The most frequent complaint is hand and wrist discomfort when bands lack handles or textured grips, and hands become sweaty (Baxter, 2022). Using gloves or pads only highlights the product's weak ergonomic design. Improper posture or awkward positioning can worsen strain, underscoring the need for better ergonomics (Joshi & Vyas, 2018).

The "Spider Band" meets the evolving needs of Indonesian martial artists. It reduces injury risk by attaching the load to the user's body and increases comfort with thumb locks and foot locks. The design supports full-body workouts with 10 ergonomic parts: five adjustable tubes, one adjustable belt, four secure cuffs, and a carrying bag.

Literature Review

Digital Marketplaces in Indonesia

Indonesia's e-commerce sector has experienced remarkable growth, expanding from 70.1 million users in 2017 to a projected 221 million by 2025. This surge is largely attributed to rapid digitalization and the behavioral shifts brought on by the COVID-19 pandemic, which accelerated the adoption of online shopping platforms. Shopee currently leads the market with a 38% share, followed by Tokopedia at 23%, maintaining its position as the top local brand in the country's digital marketplace landscape (Raiby, 2025). The expansion is further fueled by a tech-savvy millennial and Gen Z population that favors the convenience of e-commerce. According to Statista (2021), the number of e-commerce users in Indonesia is expected to reach 99.1 million by 2029. Given this scale, e-commerce platforms have become vital tools for micro, small, and medium enterprises (UMKM) to access broader markets and enhance their digital presence (Ayem et al., 2024).

Pricing Considerations for Resistance Bands in the Indonesian Market

The Indonesian martial arts equipment market is significantly influenced by the nation's unique economic landscape and consumer behavior, requiring a nuanced pricing strategy. On June 23, 2025, Indonesia's economy grew by 4.9% in Q1 2025, as per the June 2025 "Indonesia Economic Prospects" report. This growth was supported by strong macroeconomic policies; however, consumption growth among wealthier middle-class households slowed (World Bank Group, 2025). In early 2025, consumer spending slumped further, despite deflationary trends. Economists attributed this paradox to weakened purchasing power, exacerbated by layoffs in the manufacturing sector and persistent global economic uncertainty. According to Setyawan (2025), nearly 14,000 formal workers lost their jobs in early 2025, contributing to a decline in household income and consumption. These macroeconomic indicators play a crucial role in shaping consumer purchasing power and must be carefully considered when developing pricing strategies.

Evolving consumer behavior in Indonesia reflects a shift toward cautious, value-oriented spending. Prasetyo et al. (2024) observed that Indonesian martial artists prioritize affordability and proximity when selecting training services, with price range accounting for over 22% of decision-making weight. As Ouyang et al. (2018) emphasize, price sensitivity is inversely related to customer satisfaction in martial arts services, suggesting that value-driven pricing can foster loyalty and reduce churn.

Market analysis of e-commerce platforms provides crucial insights into consumer price expectations and competitive landscapes for fitness equipment. Observations from Shopee, a leading digital marketplace in Indonesia, indicate a varied pricing structure for resistance band sets. A 7-component set typically sells for Rp 60,000 to Rp 80,000, while more specialized 11-component sets range from Rp 258,524 to Rp 539,100. This significant price disparity reflects differences in product complexity, features, and target user needs.

Given current market prices and the high price sensitivity identified among Indonesian consumers, particularly the martial arts sector, an initial selling price of Rp 200,000 has been set for the "Spider Band" resistance band set. This pricing strategy aims to balance perceived value with market affordability, attracting a broad segment of martial arts practitioners seeking a cost-effective yet high-quality training solution. The intent is to position this product competitively while acknowledging the consumer preference for more affordable options.

Digital Influence and Community Engagement: The Role of Social Media in Marketing

The rapid advancement of digital technology has significantly shaped trends and collective identity, particularly through the widespread use of social media platforms. These platforms transformed how communities interact, share cultural practices, and form collective memories (Melianto & Syamsudin, 2024). In Indonesia, platforms like Instagram and TikTok have become spaces for expressing cultural identity and promoting cultural heritage, although concerns about language preservation and misinformation persist (Alauddin *et al.*, 2025). Digital marketing has become crucial for businesses to enhance brand awareness and expand their reach. Social media platforms like Instagram and WhatsApp are effective tools for engaging customers and showcasing products (Rahmawati *et al.*, 2024; Firmansyah *et al.*, 2022). These platforms offer features such as automatic replies and product catalogs, facilitating customer interaction and improving marketing strategies (Rahmawati *et al.*, 2024).

Recent studies highlight the significant influence of social media on consumer behavior in Indonesia, particularly among Generation Z. Social media influencers play a crucial role in shaping purchase intentions and attitudes, with 85% of young consumers acknowledging their impact (Erwin *et al.*, 2023). Platforms like Instagram and TikTok are key channels for product visibility and engagement (Erwin *et al.*, 2023; Trianasari *et al.*, 2023). Authenticity and transparency in influencer content are vital for building trust and driving purchasing decisions (Erwin *et al.*, 2023; Azkiah & Hartono, 2023).

Marketing Mix

The Marketing Mix, comprising the 4Ps (Product, Price, Place, Promotion), remains a fundamental framework for strategic marketing decisions (Donndelinger & Ferguson, 2020). This concept has evolved over 40 years, incorporating customer preferences and decision theory into engineering design (Donndelinger & Ferguson, 2020). Libraries are adapting the marketing mix to promote information products and services, enhancing community engagement in the digital age (Okoro & Olowookere, 2024). The 4Ps help identify customer needs and create responsive strategies across various brands (Xia, 2023).

However, with the rise of e-commerce and digital marketing, some question the relevance of the classic 4Ps model. Despite criticisms, the marketing mix remains a valuable tool for developing unique selling points and brand images to attract customer loyalty (Guangshu *et al.*, 2021). Its application continues to evolve, with researchers exploring more complex problem formulations that encompass the entire Marketing Mix (Donndelinger & Ferguson, 2020), all of which are crucial for addressing customer needs and establishing a competitive advantage.

The marketing mix for the "Spider Band," a modified resistance band, is shown in **Table 1**. Designed to overcome the limitations of generic resistance bands, the Spider Band minimizes injury risk by attaching the load to the user's body and enhances comfort with thumb locks on wrist cuffs and foot locks on ankle

straps. Its design prioritizes versatility and comprehensive full-body workouts, featuring 10 ergonomically enhanced components: five adjustable tubes, an adjustable waist belt, and four secure wrist/ankle cuffs, all accompanied by a packaging bag.

Niche Market Dynamics and the Evolving 4P Framework in Indonesia

The study of the 4P marketing mix in Indonesia's niche markets has grown alongside the nation's rapid digital adoption. For Micro, Small, and Medium Enterprises (MSMEs), market success is increasingly linked to dynamic capabilities and entrepreneurial marketing, with innovation capability being critical for enhancing performance in competitive environments (Sari et al., 2023; Li et al., 2023). This emphasis on innovative product design and market-based strategies (Tarihoran et al., 2023) provides the theoretical groundwork for the Product component, where unique, ergonomic design features are necessary to drive market acceptance.

The challenge of Place in this market is particularly complex. While e-commerce platforms, such as Shopee and Tokopedia, dominate distribution (Raiby.com, 2025; Statista, 2021), Indonesian MSMEs face persistent constraints related to socio-technical adaptation and human capital that hinder their full realization of the digital economy (Aminullah et al., 2022; Anatan & Nur, 2023). This dynamic suggests that an effective 'Place' strategy must evolve beyond a simple online channel choice and incorporate mechanisms to build consumer trust, mitigating the documented risks of incorrect orders or material discrepancies cited by consumers.

Furthermore, Promotion strategies in this price-sensitive, digital context are primarily shaped by financial incentives and social proof. Price-based incentives are consistently shown to impact MSME performance (Mujiatun et al., 2023). Simultaneously, the significant influence of social media influencers on Generation Z consumer behavior in Indonesia (Erwin et al., 2023; Trianasari et al., 2023)—a trend affirmed in other emerging markets (Afzal et al., 2024)—highlights the crucial role of endorsements and community engagement. This role is further demonstrated in healthcare contexts, where the influence of trusted professionals, like doctors, acts as a strong social influence in recommending online purchases to mitigate patient apprehension (Karnadi et al., 2023). This sets up a theoretical link where high-trust promotional channels are instrumental in overcoming the barrier of price sensitivity, a critical factor for Indonesian martial artists who prioritize affordability (Prasetyo et al., 2024). This is further complicated by the finding that price sensitivity is inversely related to customer satisfaction in the commercial martial arts industry, suggesting that value-driven pricing is crucial for fostering loyalty and reducing churn (Ouyang et al., 2018). The existing literature thus frames the market not only by rapid digital adoption but also by the need to balance innovative products with a constrained price reality, a gap this study aims to address for the niche martial arts equipment sector.

Table 1. “Spider Band” Digital Marketing Mix

Marketing Mix	4P Description (Kotler & Armstrong, 2018)	“Spider Band” Marketing Mix
Product	anything that can be offered to a market for attention, acquisition, use, or consumption that might satisfy a want or need	This modified resistance band features thumb locks on wrist cuffs and foot locks on ankle straps for reduced injury risk and enhanced comfort. It offers versatile, full-body workouts with 10 ergonomically enhanced, adjustable components, all included in a packaging bag

Marketing Mix	4P Description (Kotler & Armstrong, 2018)	"Spider Band" Marketing Mix
Price	the amount of money charged for a product or service, or the sum of the values that customers exchange for the benefits of having or using the product or service	To balance value and affordability for price-sensitive Indonesian martial artists, it will be initially priced at Rp 200,000
Place	company activities that make the product available to target consumers, or a set of interdependent organizations that help make a product or service available for use or consumption by the consumer, or business use	Distribution will primarily leverage major e-commerce platforms like Shopee and Tokopedia
Promotion	activities that communicate the merits of the product and persuade target customers to buy it". This includes various tools such as advertising (any paid form of nonpersonal presentation and promotion of ideas, goods, or services by an identified sponsor), personal selling, and sales promotion, which collectively form the promotion mix or integrated marketing communication strategy	Promotion will utilize Instagram and Meta forums to disseminate techniques, encourage recommendations, and drive purchasing behavior through user-generated content and influencer endorsements

METHODOLOGY

This study employed a qualitative research approach, incorporating in-depth interviews and thematic analysis to assess the suitability and market acceptance of a modified resistance band product for the Indonesian martial arts industry. The interviews were conducted face-to-face in Bahasa Indonesia to ensure participants could express nuanced opinions naturally. All interviews were audio-recorded with the respondents' prior informed consent. The average interview duration was approximately 25–30 minutes. Verbatim transcription was performed on all audio recordings. Ethical clearance was ensured through the signing of an informed consent form detailing the study's purpose, guaranteeing confidentiality, and assuring the anonymization of all quoted data.

The study primarily relied on qualitative data collected through in-depth, face-to-face interviews conducted in May 2025. This approach was chosen to gain unique, direct understanding of respondents' subjective perspectives, life experiences, and reactions to the modified resistance band product. The in-depth nature of the interviews allowed for the exploration of nuanced opinions and perceptions, providing rich qualitative data essential for developing a comprehensive marketing mix plan. While the interviews were unstructured to allow for natural conversation, key themes related to the 4P marketing mix (Product, Price, Place, Promotion) were consistently covered. Additionally, demographic questions concerning age, martial arts experience, profession, and monthly income were included to profile the respondents.

A purposive sampling technique was employed, focusing on a limited number of participants who met specific criteria relevant to the research objectives. This method was particularly appropriate given the niche focus on a modified resistance band product for martial arts. A sample of 20 respondents was selected to yield precise, in-depth data (Sharma, 2017; Muhamad Noor et al., 2024). Recruitment was conducted using personal networks and through direct contact with trainers and instructors at various martial arts dojos in the Greater Jakarta region. The initial approach involved explaining the study's purpose and obtaining verbal consent before formal participation. This approach leveraged the community-driven

nature of the martial arts sector to identify highly experienced and relevant participants. The selection criteria for participants were as follows:

- Actively practicing martial arts for more than three years.
- Experience as a martial arts trainer for at least one year.
- Experience competing in martial arts competitions.
- Aged over 17 years old.
- Understanding and using supporting tools/equipment during martial arts training sessions.
- Experience with e-commerce platforms for shopping.

These criteria ensured that respondents possessed relevant experience in martial arts, familiarity with training equipment, and exposure to online purchasing, which enabled them to provide informed perspectives on the modified resistance band product from a marketing mix perspective. The final sample consisted of 20 active martial arts instructors (N=20), aged 19 to 45 years. This age range ensures the inclusion of perspectives from both younger, digitally native consumers and older, more established instructors. The sample was predominantly focused on Pencak Silat instructors (20/20), who all train actively. Several respondents also reported cross-disciplinary experience, including Taekwondo (3), Karate (2), Boxing (1), MMA (1), and Kickboxing (1). Detailed demographic information and e-commerce usage specifics are provided in **Table 2**.

The in-depth interview sessions focused specifically on respondents' perspectives and opinions regarding the modified resistance band product, structured around the 4Ps of the marketing mix. Although the interviews were conducted without a rigid, systematic list of questions, each core aspect of the 4P-marketing mix had a guiding theme that all respondents were expected to address. These thematic questions included:

1. Product: "How modified resistance bands can improve practitioner strength performance?"
2. Place: "What platforms or channels do martial arts practitioners prefer to shop on?"
3. Price: "What is the estimated price for a full set of modified resistance bands?"
4. Promotion: "What kind of promotion do martial arts practitioners want to get them to buy a product?"

This semi-structured approach allowed flexibility to probe responses as the conversation progressed, while ensuring comprehensive coverage of the marketing mix elements.

Data Analysis

Data from open-ended, in-depth interviews were subjected to thematic analysis. The process followed the six phases outlined by Braun & Clarke (2006) to systematically review and interpret recurring patterns. included: (1) familiarization, (2) initial coding, (3) searching for themes, (4) reviewing themes, (5) defining and naming themes, and (6) writing the report. The initial coding process used a mixed approach, combining deductive organization of data around the 4P framework with inductive reasoning to allow for the emergence of unexpected insights. Credibility was ensured through peer discussion among the researchers regarding the themes and by revisiting the original transcripts to ensure that the codes accurately reflected the participants' meanings. This technique involves coding interview data based on recurring patterns and groups, enabling a more systematic and methodical review (Muhamad Noor et al., 2024). Thematic analysis is particularly advantageous for identifying differing opinions among respondents, even with varied responses, and for uncovering unexpected insights. Interview themes are designed to elicit both measurable answers and those aligned with the project's overall objectives.

GPT-4o (GPT-4 Omni) was used to aid in transcribing the audio files (after which the text was human-proofread) and to suggest expanded labels for initial thematic codes. The primary analytical tasks of defining themes, reviewing themes, and interpreting the findings remained fully manual and were conducted by the researchers. AI was specifically excluded from summarizing or interpreting complex qualitative quotes to prevent misattribution or loss of nuance. The integrity of the original data was maintained by cross-checking all AI-suggested code labels against the verbatim transcripts and researcher consensus. The AI was limited to mechanical coding tasks to improve processing efficiency. However, this methodological choice presents limitations, including the potential for subtle linguistic bias in AI-generated labels, which necessitates strict human evaluation to maintain the reliability of the qualitative data. This application of AI adheres to ethical standards by ensuring that the transcription and coding processes do not involve summarization, thereby maintaining the integrity and consistency of the original source data (Nguyen-Trung, 2025). The coded respondent answers were subsequently organized into a table, categorized by the 4P marketing mix, for comparative analysis with relevant literature.

RESULTS

This results section is organized by marketing mix component, presenting findings from each in-depth interview. All interview excerpts included in this chapter were translated from Bahasa Indonesia to English. Regarding their martial arts background, all 20 respondents identified as Pencak Silat instructors. Among the respondents, 3 were female and 17 were male. Additionally, some participants reported experience in other disciplines, including Taekwondo (3 respondents), Karate (2 respondents), Boxing (1 respondent), MMA (1 respondent), and Kickboxing (1 respondent), indicating a varied background within the broader martial arts community. In terms of equipment used in their training, the most frequently mentioned items were: Mattress (10 mentions), Point pad (9 mentions), Ladder (8 mentions), Cone (7 mentions), Sandbag (6 mentions), Body protector (5 mentions), Resistance band (4 mentions), Tire (3 mentions), Dumbbell (3 mentions). For purchasing martial arts equipment, respondents primarily utilized e-commerce platforms. The most preferred platforms were: Shopee (19 respondents), TikTok Shop (12 respondents), Tokopedia (8 respondents), Lazada (2 respondents), and Alibaba (1 respondent). For confidentiality, the names of respondents remain undisclosed. Further details on the respondents are provided in **Table 2**.

Table 2. Demographics Profile of Respondents

Respondent	Gender	Age	Martial Art Background	Equipment Used	E-commerce Used
1	Male	45	Pencak Silat	Mattress, target pad, machete, stick	Shopee
2	Male	30 - 35	Pencak Silat	Cone, ladder, tire, resistance band	Shopee, TikTok Shop
3	Male	35 - 40	Pencak Silat, Taekwondo, Karate	Mattress, ladder, body protector	Shopee
4	Female	32	Pencak Silat, Boxing	Cone, ladder, dumbbell, resistance band	Shopee, TikTok Shop
5	Male	27	Pencak Silat, MMA	Point pad, cone, mattress, resistance band	TikTok Shop, Shopee, Tokopedia
6	Male	24	Pencak Silat, Karate	Ladder, cone, point pad, mattress	TikTok Shop, Shopee

Respondent	Gender	Age	Martial Art Background	Equipment Used	E-commerce Used
7	Male	20	Pencak Silat	Point pad, sandbag, car tire	Shopee, TikTok Shop, Lazada
8	Male	20	Pencak Silat	Point pad, sandbag, car tire	Shopee, Tokopedia, TikTok Shop
9	Female	19 - 20	Pencak Silat	Mattress, point pad, machete, stick	TikTok Shop, Shopee
10	Male	22	Pencak Silat, Taekwondo	Body protector, point pad, shin guard	Tokopedia, TikTok Shop
11	Male	36	Pencak Silat	Cone, ladder, dumbbell	Shopee, TikTok Shop
12	Male	42	Pencak Silat	Body protector, mattress, sandbag	Shopee, Tokopedia
13	Male	24	Pencak Silat	Sandbag, weaponry, dumbbell	Shopee
14	Male	39	Pencak Silat	Ladder, cone, sandbag	Shopee, Tokopedia, Alibaba
15	Female	40	Pencak Silat	Pad, weaponry, mattress	Shopee, Tokopedia, TikTok Shop
16	Male	25	Taekwondo, Pencak Silat	Obstacles, ladder, point pad	Shopee, Tokopedia, TikTok Shop
17	Male	29	Pencak Silat	Cone, body protectors, point pad, mattress,	TikTok Shop, Shopee, Lazada
18	Male	41	Pencak Silat	Mattress, point pad, resistance band	Shopee
19	Male	38	Pencak Silat, Kickboxing	Pad, body protector, mattress	Shopee, Tokopedia
20	Male	27	Pencak Silat	Sandbag, target pad, ladder	Shopee

Product Findings

The "Spider Band" product garnered overwhelmingly positive feedback, indicating strong market acceptance for its design and concept. Respondents consistently expressed high interest and favorable impressions, describing the product as "unique" (Respondents 1,11,13,14), "interesting and cool" (Respondent 5), and "very multifunctional" (Respondent 4). For instance, Respondent 1 emphasized the novelty, stating, " This tool is very unique, in my opinion. This is the first time I've seen it." Similarly, Respondent 5 noted, " The shape is interesting and cool, it looks strong too."

Many respondents specifically highlighted its ability to facilitate "whole body" training and its overall practicality. As Respondent 3 remarked, "This tool can also assist with pull-up exercises by adding weight or resistance—very multifunctional, and good in my opinion." Respondent 6 added, "It is simple, easy, and then it can affect the whole body." Respondent 13 highlighted its versatility, stating, "This is unique; not only can you train power, but also speed." Similarly, Respondent 15 noted, "You can train your legs and arms at the same time—I think it's very useful." The product's practicality was further emphasized by Respondent 17, who found that "If the shape of the belt is like this, it will be more practical because it doesn't need a pole to support it," and Respondent 18, who appreciated its portability, stating, "it is more portable because it can be used for training at home."

Durability and material quality were critical concerns, with respondents emphasizing the need for robust construction. Desired improvements included a stronger "metal ring" (Respondent 3) and reinforced "stitching" (Respondents 8 and 11). However, initial impressions of the product's build quality were largely positive. Respondent 6 commented, "The material and stitching are quite strong, the appearance is also attractive", and Respondent 15 stated, "Good material, sturdy, strong, thick rubber, does not slip".

The ergonomic design features were particularly well-received. Respondents appreciated the design for its perceived ability to improve strength performance while simultaneously reducing injury risk. For instance, Respondent 8 also highlighted that "The additional innovation is really cool, especially the locking part on the cuffs". Respondent 16 also noted, "The addition of a thumb lock on the bracelet to prevent it from slipping is also very useful in my opinion. Furthermore, Respondent 14 affirmed, "Then the locks on the anklets, and wristbands, I think they really have an effect on the comfort of the wearer."

Additionally, Respondent 19 commented on the design's adaptability, noting, "The size can be adjusted with velcro, ... so it can be used by various people." Furthermore, Respondent 17 emphasized the thoughtful design, stating, "The length adjustment on the rubber is very creative, so it can be adjusted to the user's needs." These sentiments were echoed by Respondent 20, who observed, "There is adhesive on the belt so it can be adjusted, the rubber strap can also be adjusted in length. Wow, this is the first time I've seen this."

Place Findings

The research unequivocally demonstrated a strong preference for online purchasing channels among all 20 respondents. A significant majority of respondents indicated they "usually buy equipment online" (Respondents 2, 3, 7, 8, 9, 10, 12, 13, 15, 16, 17, 18, 19, 20). The primary drivers for this preference include time efficiency and practicality, as users can "order directly from home, so it is more efficient" (Respondent 4) and it's "more practical and simple" (Respondent 7).

Online channels are also favored for their competitive pricing, with Shopee frequently highlighted as a preferred platform (Respondents 11, 12, 17, 20). As Respondent 10 stated, "Usually buy online, because it's easier and cheaper... We prefer shopping online, like at Shopee". Respondent 12 further elaborated, "Online saves time. If you buy it yourself, Shopee is usually the cheapest." In addition to competitive pricing, online platforms also offer "more choices" (Respondent 9) and "many vouchers such as discounts and free shipping" (Respondent 7).

Despite this strong inclination towards online purchasing, some informants expressed dissatisfaction with past online experiences. Cited issues included "incorrect sizing," "material discrepancies compared to product photos," or "receiving the wrong quantity of items." These responses underscore the importance of robust online product representation and reliable fulfillment for building customer trust in the e-commerce channel. Respondent 12 shared a negative experience: "A disadvantage of purchasing online, ordered 3, sent 1, immediately gave 1 star." Similarly, Respondent 9 noted, "Ever ordered online, the size doesn't fit, or the material is different from the photo."

Despite the strong online preference, offline channels remain relevant for specific needs, such as immediate purchase or direct product inspection. Respondents mentioned buying "offline if you need it quickly" (Respondent 3) or "to check the goods directly, feel the quality, and compare brands" (Respondent 16). Offline purchases also occur "at events" (Respondents 8, 11) or directly from manufacturers for potential cost savings (Respondent 14). However, the general sentiment indicates that in-person shopping is less frequent, with respondents typically resorting to it only when they "need it suddenly" (Respondent 13) or when the online experience has led to dissatisfaction, such as receiving "the size doesn't fit, or the material is different from the photo" (Respondent 9). Ensuring trustworthiness in online stores is paramount to mitigate such concerns.

Price Findings

The initial proposed price of Rp 200,000 for a "Spider Band" set revealed a significant mismatch with market expectations. Informant interviews indicated a strong preference for a much more affordable price range. Specifically, 55% (11 out of 20) of the informants preferred prices below Rp. 150,000, with the ideal range being Rp. 100,000-150,000 for a complete set. Only 45% (9 out of 20) of the informants (Respondents 1, 4, 5, 7, 10, 12, 14, 16, 20) were willing to consider prices up to Rp 200,000, and even then, "they expressed a hope for a lower price. This sentiment was directly echoed by Respondent 4, who stated, "Around Rp. 150,000 – Rp. 200,000; but I hope it can be cheaper." Furthermore, Respondent 12 indicated, "Rp. 150,000 is still acceptable if the quality is good."

Promotion Findings

The proposed promotional strategies resonate strongly with consumer preferences, primarily driven by "price-based incentives" and "community engagement". A substantial number of informants (65%; 13 out of 20) explicitly linked their purchasing decisions to financial benefits. As claimed by Respondent 7, "Discounts really have an influence on us wanting to buy things." Respondent 1 stated that "if you buy a lot, you might get a discount, so we want to buy more later."

Similarly, "free shipping" was a strong consideration for many (Respondents 8, 9, 12, 15, 17, 20). Respondent 8 stated, "For me, the important thing is that the shipping is free," and Respondent 9 reiterated, "The important thing is free shipping." Other respondents, like Respondent 12, emphasized that "there are lots of discounts and free shipping" on online platforms. Respondent 15 also expressed that "maybe we would just like free shipping," and Respondent 17 asserted that "free shipping, if possible, should be a must." Respondents frequently associated these promotions with online platforms, with Respondent 2 noting that "online shopping is cheaper... there are discounts, vouchers". Respondent 6 also elaborated that "More affordable online ... sometimes they are cheaper than offline ones."

Furthermore, significant interest emerged in special promotions for large or bulk purchases, particularly from martial arts trainers. These individuals, who "have a lot of students," expressed a strong likelihood to "purchase in high amounts" (Respondent 9). Respondent 1 articulated this by stating, "If you buy a lot, you might get a discount, so that we want to buy more later," a sentiment echoed by Respondent 5, who noted, "If you can get a discount, for example, if you buy a lot, that's also quite good." This indicates that offers like "if you buy a lot, you get 1 free, that's really cool" (Respondents 11, 14) would be highly appealing. This highlights the potential for a targeted business-to-business (B2B) sales channel via trainers, with suggestions to "offer them to trainers first" (Respondent 5) or promote "by word of mouth between trainers" (Respondent 13) and through community WhatsApp groups (Respondent 16).

Beyond price, respondents also valued experiential engagement and trust-building. The desire for free trials and direct product offers was noted, with one respondent stating, "I prefer it if it's offered directly, so I can try it out" (Respondent 4). Additionally, event-based promotions were deemed effective, with suggestions to promote "when there is a competition event" (Respondent 10) or capitalize on "events that give promotions like 12.12" (Respondent 7). The influence of social proof and urgency was also evident, with respondents being drawn to promotions on platforms like Facebook (Respondent 18) and TikTok (Respondent 19), especially when presented as "price cuts but the time is limited" (Respondent 18).

DISCUSSION

The qualitative assessment highlights a general alignment of the "Spider Band" marketing mix with market demands, with particular strengths in Product, Place, and Promotion, but a critical need for adjustment in Price.

The Product component, the "Spider Band," demonstrates strong market validation. Informants' overwhelmingly positive feedback and the product's perceived ability to enhance strength performance while reducing injury risk confirm its suitability for the Indonesian martial arts sector. Minor suggestions for quality refinements indicate opportunities for iterative design to further enhance adoption and loyalty. This aligns with theories emphasizing user-centered design and ergonomic principles to improve performance and reduce injury risk. The strong positive feedback for the 'Spider Band' stems from a desire for versatility and injury mitigation. Respondents, especially the older/trainer demographic (e.g., Respondent 1, age 45, and Respondent 3, age 35-40), specifically valued the ergonomic locks on the cuffs as a professional necessity, not a luxury. This product's success aligns closely with the literature emphasizing the crucial roles of innovation capability and entrepreneurial marketing in boosting the performance of small and medium enterprises (SMEs) in contexts such as Indonesia (Sari et al., 2023) and other emerging markets (Li et al., 2023). The product's unique design solves a tangible problem associated with generic resistance bands (discomfort/injury). This perceived utility overrides the initial price concern in their assessment of Product P.

For Place, the fact that everyone prefers online shopping, especially on Shopee, backs up an online-first distribution approach. This finding aligns with Indonesia's digital adoption trends, where e-commerce users are projected to reach 221 million by 2025. The heavy reliance on e-commerce comes with risks, as informants mentioned frequent problems such as incorrect sizing and material differences, which shows an important trend: people only trust e-commerce when it comes from well-known official stores or platforms, not random third-party vendors. This trust deficit is reinforced by broader research on the Indonesian digital MSME ecosystem, which identifies critical constraints in socio-technical adaptation and human capital (Aminullah et al., 2022). This means the "Place" approach needs to be backed by a "Promotion" strategy that builds trust before the sale, such as using community channels like dojos and WhatsApp groups to demonstrate that people are interested in the product before they buy.

The most critical modification is to the pricing strategy, given the substantial gap between the initial proposed price of Rp. 200,000 and the market's preferred range of Rp. 100,000-150,000, indicating high price sensitivity. This high price sensitivity finding is consistent with previous quantitative research indicating that affordability is a major priority for Indonesian martial artists, accounting for over 22% of decision-making weight when selecting training services (Prasetyo et al., 2024). Furthermore, the sentiment that price sensitivity is inversely related to customer satisfaction in the commercial martial arts industry supports the need for value-driven pricing to foster loyalty (Ouyang et al., 2018). To ensure market acceptance, the price must be reduced, ideally by implementing cost-cutting measures such as increasing the Minimum Order Quantity (MOQ). This price disparity suggests that while customers recognize the product's distinctiveness, the perceived value does not justify the higher cost, possibly due to affordability constraints or a lack of understanding regarding the innovations. A central conflict arises because, despite desiring a low price, participants also expressed concern that an excessively low price might imply poor quality, a critical risk for a training instrument where safety and durability are paramount. Consequently, any price reduction must be managed cautiously to remain within the accepted range while effectively signaling quality. Furthermore, future promotional campaigns must explicitly quantify and demonstrate the product's benefits, such as reduced injury and enhanced comfort, to fully justify the adjusted price point and cultivate stronger perceived value among consumers.

Promotion strategies are well aligned, with discounts and free shipping highly influential, reinforcing the market's price sensitivity. This focus on price-based incentives is supported by broader research on the impact of marketing communication on MSME performance in Indonesia (Mujiatun et al., 2023). Furthermore, the interest in wholesale discounts for trainers, coupled with the founder's existing community connections, highlights a powerful and cost-effective word-of-mouth channel. This suggests that a targeted, relationship-based promotional strategy leveraging trainers as brand advocates and distributors could yield significant, high-trust market penetration. This also aligns with existing studies demonstrating

the significant influence of social media influencers on consumer purchase intentions and attitudes among Indonesia's Generation Z (Erwin et al., 2023), with cross-cultural support from other emerging markets affirming their impact on shopping behavior (Afzal et al., 2024). The finding that transparency is vital for building trust and driving purchasing decisions is also supported by prior research. When the price is high, consumers become hesitant. The endorsement from a trusted trainer acts as a crucial non-price signal of quality assurance, mitigating the risk and justifying the purchase price to the consumer (Karnadi et al., 2023). The final, data-driven 4P configuration, incorporating the necessary price adjustment and channel insights, is summarized in **Table 3**.

Table 3. Final Data-Driven “Spider Band” Digital Marketing Mix

4P	Initial Digital Marketing Mix	Final Data-Driven Digital Marketing Mix Configuration	Key Insight/Justification
Product	High-quality, durable resistance band with unique ergonomic cuffs/locks. Focus on versatility and safety.	Maintain Core Product Features: Focus on versatility (multi-use for different martial arts) and durability/safety (ergonomic cuffs to prevent injury). Consider tiered quality (standard vs. professional) if needed to meet the strict price ceiling.	High acceptance of the product's function; features are a necessity (especially for trainers), not just a premium add-on.
Price	Premium-priced, reflecting the unique modification, estimated at Rp 200,000 – Rp 250,000 (or higher).	Significant Adjustment Required: The market-acceptable range is Rp 100,000 – Rp 150,000 (maximum). Pricing must be set at the high end of this range (e.g., Rp 149,000) to signal quality while remaining accessible.	Primary constraint, exceeding Rp 150,000 creates a massive barrier, even if value is understood. Affordability must be balanced with quality perception.
Place	Primary distribution via E-commerce platforms (Shopee, Tokopedia).	Digital-Community Nexus: E-commerce Platforms (Shopee, Tokopedia, Lazada) remain central, but must operate through an Official Store to build trust. Secondary, High-Trust Channels: Direct sales through martial arts dojos/clubs and trainer/instructor networks for hands-on demonstration and immediate purchase.	E-commerce is distrusted when quality is uncertain. The community channels provide social proof and overcome the barrier of online purchasing for physical goods.
Promotion	Digital advertising, fitness content marketing, and general discounts.	Incentive-Driven and Endorsement-Based: 1. Financial Incentives: Must utilize aggressive incentives (e.g., free shipping, limited-time discounts on launch) to drive initial purchase and justify the price point. 2. Community Endorsement: Instructor Endorsement Programs are crucial (e.g., affiliate/bulk discount programs). Focus communication on injury prevention and professional performance.	Price sensitivity demands aggressive incentives. Trust is driven by social proof from authority figures (trainers/instructors) within the community, not mass media.

Theoretical Implications

This research offers a theoretical contribution by demonstrating the value of applying the 4P marketing mix and qualitative research in a non-Western context characterized by unique digital adoption patterns and high price sensitivity in emerging economies such as Indonesia. In a digital-first context for MSMEs, 'Place' is theoretically redefined not merely as an online vs. offline dichotomy, but as a composite of the e-commerce platform (distribution) and trusted community channels (validation). The findings highlight that the inherent trust deficit and socio-technical challenges of Indonesian digital ecosystems (Aminullah *et al.*, 2022) mandate that the high-volume distribution channel (e-commerce) must be actively enabled and validated by high-trust community channels (e.g., martial arts dojos and dedicated WhatsApp groups) to facilitate the actual transaction.

The study demonstrates the price sensitivity for non-essential niche equipment creates a narrow, non-negotiable 'acceptable price band' (Rp 100,000–150,000) that acts as a fundamental constraint on the entire marketing mix. The idea that the price must be constrained between an upper limit (due to affordability) and a lower limit (due to quality risk) is a core element of price sensitivity and Value-Based Pricing. Specifically, the lower boundary where consumers begin to distrust quality is often referred to as a price-quality signal or price floor. The finding that the price is a gatekeeping factor rather than a flexible variable highlights the market's highly elastic demand, meaning small changes in price lead to large changes in demand (Ouyang *et al.*, 2018; Prasetyo *et al.*, 2024).

The research shows that Promotion in this community-driven environment is predominantly effective when it is relationship- and endorsement-driven, not reliant on mass-media advertising. When product quality is uncertain (as is often the case with innovative, new equipment purchased online), consumers look for signals to reduce perceived risk. When the price is high, consumers become hesitant. The endorsement from a trusted trainer acts as a crucial non-price signal of quality assurance, mitigating the risk and justifying the purchase price to the consumer (Karnadi *et al.*, 2022).

Managerial Implications

The study offers practical recommendations for refining marketing strategies for new products, and provides actionable insights into key areas of the marketing mix. The research validates an online-first distribution strategy, highlighting the universal preference for e-commerce. It also underscores the need for robust online product representation to build customer trust and mitigate dissatisfaction caused by issues such as incorrect sizing or material discrepancies. Finally, the study recommends leveraging price-based promotions and fostering community engagement with martial arts trainers to create a powerful and cost-effective word-of-mouth channel for market penetration.

CONCLUSION

This research offers timely qualitative insights into the niche market of martial arts equipment within a developing economy like Indonesia. It provides practical recommendations for refining marketing strategies for innovative fitness products, specifically the modified resistance band. The study contributes to theory by examining the dynamic application of the 4P marketing mix in a context characterized by unique digital adoption patterns and pronounced price sensitivities. The research underscores the critical role of qualitative market research in validating and refining marketing strategies for novel products, particularly in culturally nuanced and digitally evolving markets.

These findings also underscore the critical role of e-commerce platforms (Shopee, Tokopedia) and social media (Instagram, TikTok) as primary distribution and promotion channels for niche sports equipment in Indonesia. This contributes to the evolving theory of digital marketing and consumer behavior in a non-Western context, demonstrating how digital ecosystems can circumvent traditional distribution challenges and directly influence purchase decisions through specific promotional mechanics, such as

discounts and free shipping. The "Use of Artificial Intelligence (AI) in Journal Coding" and its integration into thematic analysis for efficiency and accuracy offer a methodological contribution.

Future research should focus on three key domains to validate and extend these findings. First, a more extensive quantitative survey is needed to assess price sensitivity within the specified range (Rp 100,000–150,000), utilizing experimental price-testing models to establish an optimal price point. Second, the scope of analysis should be expanded to include a cross-sport study across several martial arts disciplines and equipment categories to assess the broader applicability and external validity of the 4P findings beyond the initial Pencak Silat focus. Lastly, a post-launch longitudinal study should be conducted to compare initial stated purchase preferences with actual buying behavior, providing critical insights into the mechanisms of digital trust and endorsement within a digital-first commerce environment.

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