

# Pricing, Prestige, and Perception: A Comparative Game-Theoretic Analysis of Brand Strategy in the Fragrance Markets of France, the UAE, and India

Aashi Bansal  
aashipublish@gmail.com

## ABSTRACT

This paper examines how pricing strategies and brand positioning influence consumer choice in the perfume industry across three culturally distinct markets: France, the United Arab Emirates (UAE), and India. The perceived value of perfumes varies significantly due to differences in cultural norms, luxury consumption patterns, and income sensitivity. Drawing on theories such as price-value perception, brand equity, and signalling, the study integrates economic modelling through signalling games, Hotelling spatial competition, and sequential game frameworks. The findings indicate that pricing operates as a symbolic rather than a purely financial variable, functioning as a strategic signal within market-specific equilibria. In France, price reinforces perception of heritage and craftsmanship within a stable, high-loyalty equilibrium; in the UAE, it acts as a costly signal of status and exclusivity, consistent with signalling game dynamics; and in India, it interacts with affordability constraints to produce a differentiated masstige equilibrium. The paper concludes that optimal brand strategy depends on aligning pricing and brand identity with market-specific perceptions of value, as firms must adapt their signalling and positioning strategies to differing consumer responses across markets.

**Keywords:** fragrance industry, price-value perception, brand positioning, game theory, luxury consumption

## INTRODUCTION

*If a perfume smells the same in France, the UAE, and India, why is its value different in each country?*

Perfume is more than just a functional product; it's a symbolic commodity that can represent identity, culture, luxury, and status, depending on how it is viewed in different markets. In 2024, the global perfume market was valued at approximately USD 51.08 billion and is projected to grow at a CAGR of 5.50%, reaching about USD 87.25 billion by 2034 (Gandhi, Gautam, and Nandi, 2025). Europe led the global market with a 34.26% share in 2024, while Asia-Pacific was the fastest-growing market, with a 9.53% CAGR (Mordor Intelligence, 2025b). The rise of online marketing and e-commerce has made perfumes more accessible across regions such as the UAE and India. However, this differs from consumer behaviour in France, a historic centre of perfume, where perfumes are cultural and rooted in centuries-old traditions.

Despite the global reach of perfumes, consumer responses to pricing and branding vary across different markets due to differences in cultural values. In France, perfumes show artisanal quality and heritage (Sup de Luxe, 2023); in the UAE, high prices represent prestige and exclusivity (Research and Markets, 2025), aligning with the country's consumer culture; and in India, price sensitivity exists, with demand increasing due to rising incomes of middle-class consumers (Ken Research, 2025). This highlights that the perfume market isn't one-size-fits-all; instead, it is heavily dependent on culture, affecting how brands strategise, price, and brand. This leads to the central question of this paper: **How do pricing strategies and brand positioning influence consumer choices in the perfume industry across India, the UAE, and France, and how can these interactions be modelled using a conceptual game-theoretic framework?**

This paper argues that pricing strategies and brand positioning shape consumer choices within the perfume industry across France, the UAE, and India, as each market has its own cultural and economic perception of value. By applying a conceptual game-theory framework, the study demonstrates that optimal brand positioning results from tailoring pricing and marketing strategies to each market, thereby explaining the observed patterns of pricing and positioning across the three markets.

## LITERATURE REVIEW

The literature review aims to identify what existing research shows about how pricing strategies and brand positioning have shaped consumer choices, specifically their perceptions of value and purchase intent, in the perfume industry.

Research consistently shows that in luxury and semi-luxury markets, consumers often infer higher quality, exclusivity, or social status from higher prices, even when objective product differences are small (Wei, Shen, and Lu, 2024). This phenomenon, known as the price-quality inference effect, is central to how

Aug 2026

Vol 10. No 4.

perfumes are evaluated and is closely linked to the perceived value theory, which argues that consumers evaluate products based on multiple value dimensions - “financial, functional, social, and individual” (Elgebali and Zaazou, 2023). Firms frequently use prestige pricing, intentionally setting prices above market averages to signal exclusivity, craftsmanship, and quality (Raut et al., 2025). This contrasts with competitive pricing, where prices are adjusted to match local demand conditions. In markets with more price-sensitive consumers, such as in India, this leads to a “luxury for less” phenomenon, in which consumers seek to access symbols of prestige at affordable prices (IBEF, 2025; C. and Jain, 2024). This contrasts with the situation in the UAE and France, where, in the former, there are strong ties to social values of luxury consumption culture, prestige-brand heritage, and higher quality (Kazim, 2018) while in the latter, where the market is mature and characterised by strong brand loyalty, price functions less as a direct driver of perceived value and more as a reinforcing signal of established quality, craftsmanship, and heritage (Gruszow, 2024). Thus, the choice of pricing strategy must align with consumer perceptions of value, which vary across cultural contexts.

Research on luxury-specific consumer behaviour further nuances these findings, suggesting that pricing does not always significantly alter perceptions of functional quality (Parguel, Delécolle, and Valette-Florence, 2016). However, price remains a powerful symbolic cue. If anything, it might increase perceived exclusivity, increasing consumers’ willingness to purchase luxury goods. This aligns with the Veblen effect, in which demand for certain goods increases as prices rise because higher prices signal status (Bagwell and Bernheim, 1996). Together, these studies suggest that pricing is not merely a financial factor in luxury consideration but a psychological and symbolic tool that influences purchase intention differently across markets.

Literature on brand positioning further highlights how firms construct distinct identities to compete in saturated markets. For example, brand equity refers to the added value in a brand due to consumer perceptions and associations. Aaker discusses brand equity as a set of assets that are affected by loyalty, perceived quality/leadership, associations/differentiation, awareness, and market behaviour, which can increase a firm's competitiveness (Aaker, 1996). Secondly, Keller expands on this using his consumer-based brand equity model, which suggests that consumers react more favourably to a reputable brand than to a less well-known one (Keller, 1993).

Within the literature, there remains a gap in the analysis of how pricing and branding interact simultaneously across fragrance markets that are culturally and economically distinct, such as India, the UAE, and France. This gap motivates the analytical framework of this paper, which applies a conceptual, comparative game-theoretic approach to examine how brands can optimise their strategies across these three markets.

## MODELLING FRAMEWORK: A CONCEPTUAL GAME-THEORETIC ANALYSIS

Game theory is a framework used in economics to study how individuals and firms, also known as players, make decisions and the possible outcomes of these scenarios. In markets with products that can vary, such as perfumes, firms continuously adjust their pricing and branding to outdo rivals. Game theory can model these situations and attempt to predict the outcomes. Firms can be modelled as players who choose their positioning across different cultural and economic contexts, while consumers' responses, such as price sensitivity, can be predicted. This helps us understand why French perfume houses can use prestige pricing, why the UAE signals exclusivity, and why India has a greater emphasis on masstige perfumes.

### Signalling Games

Signalling games are those in which one party (the sender) has private information that the other party (the receiver) lacks (Wolitzky, 2024). Because the receiver must make decisions under uncertainty, the sender takes actions to help signal information. In equilibrium, the receiver updates their beliefs based on the signals they receive, while the sender chooses signals that will maximise their benefit. The central idea is that markets, such as the perfume market, operate under asymmetric information, and signalling becomes a way for firms to communicate quality or intent indirectly.

In the perfume industry, signalling games can be applied as a perfume's scent profile, longevity, and quality cannot be determined before its purchase. Brands, therefore, use pricing, branding, packaging, advertising, and other signals to convey quality and brand identity. For example, a luxury perfume house might set higher prices or invest a lot in advertising to signal exclusivity or craftsmanship. These actions aren't easily done by affordable brands because of the costs involved. Consumers, as receivers in this case, use these signals to understand a perfume's quality and make purchasing decisions. Thus, signalling games can explain how brands differentiate themselves and how consumers decide which perfumes to buy in a market with many options.

### *Model Specification*

| Element    | Description                                                                                                                                                                                                        |
|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Players    | The perfume brand, which acts as the sender of the signal, and consumers, who act as the receivers.                                                                                                                |
| Strategies | The brand chooses whether to send a strong signal (e.g., premium pricing, luxury packaging, selective distribution, etc.) or a weak signal. Consumers choose whether to purchase based on the signal they observe. |

|             |                                                                                                                                                                                           |
|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Information | The brand knows its true quality, while consumers can't observe it before purchase and therefore must infer it from market signals.                                                       |
| Payoffs     | The brand seeks to maximise profit by balancing revenue against signalling costs. Consumers maximise their utility by purchasing products whose perceived value exceeds the price paid.   |
| Equilibrium | A separating equilibrium occurs when high-quality brands find it worthwhile to invest in costly signals, while low-quality brands do not, allowing consumers to distinguish between them. |

### Hotelling Games

Hotelling games describe how firms position themselves in a market where the products vary on at least one characteristic (Tardos, 2024). Originally, the model uses two ice cream trucks that choose their locations on a beachfront. Still, the same applies to perfumes, as they compete not only on price but also on positioning (identities, narratives, and the exclusivity they offer consumers). In the classic version, firms will strategically choose their locations along a line representing consumer preferences. They will then choose to purchase from whichever firm is “closest” to them on the line, while factoring in product similarity and travel costs. Hotelling models thus show that firms must decide whether to differentiate extensively into niche segments or converge towards the centre to capture a larger consumer base.

Applied to the perfume industry, Hotelling games can illustrate how brands decide on their positioning. For example, luxury versus accessibility, classic versus modern scent profile, natural versus synthetic ingredients, craftsmanship versus mass-produced identity, etc. A niche brand may choose to differentiate heavily, moving far from mainstream preferences, to attract customers who value uniqueness. On the other hand, large global perfume houses tend to converge towards the centre, creating mass-appealing perfumes. Thus, Hotelling models show how perfume brands differentiate, how close their competitors are, and how their brand positioning influences their pricing and competition.

### *Model Specification*

| Element     | Description                                                                                                                    |
|-------------|--------------------------------------------------------------------------------------------------------------------------------|
| Players     | Competing perfume brands.                                                                                                      |
| Strategies  | Each brand chooses where to position itself along dimensions such as luxury versus affordability or heritage versus modernity. |
| Information | Firms observe market characteristics and competitors' positions. Consumer                                                      |

|             |                                                                                                                                     |
|-------------|-------------------------------------------------------------------------------------------------------------------------------------|
|             | preferences are assumed to be known based on this observation.                                                                      |
| Payoffs     | Firms maximise market share and profit by selecting a position that attracts consumers while avoiding excessive direct competition. |
| Equilibrium | An equilibrium is reached when neither brand can improve its market position by relocating, given its competitors' positions.       |

### Sequential Games

Sequential games are those in which one player moves after another rather than simultaneously (Graham, 2007). These games are represented through game trees and solved using backward induction. This allows earlier moves to influence the choices of subsequent moves: first moves can shape the market by committing to actions such as pricing and investments that players who come after must respond to rather than ignore.

In the perfume industry, sequential games can show how brands make strategic moves over time. Large, established perfume houses are usually the first to move, creating benchmark scents, setting premium price points, and investing heavily in branding. These early decisions can limit or put off competitors, who must decide whether to imitate or differentiate across segments (and to what degree). For example, a brand that makes large investments in advertising or introduces a first-of-its-kind scent creates a long-term presence and increases barriers to entry for competitors. Consumers perceive this sequential game, which influences their beliefs about brand quality. Sequential games, therefore, show how market leadership, creating deterrence to entry, and strategic commitment shape the competition in the perfume industry.

### *Model Specification*

| Element     | Description                                                                                                                                                       |
|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Players     | Incumbent perfume brands (leaders) and later entrants (followers)                                                                                                 |
| Strategies  | The incumbent chooses its pricing, branding, and investment strategy. Then, followers choose whether to imitate, differentiate, or target another market segment. |
| Information | Later entrants observe the incumbent's decisions before making their own.                                                                                         |
| Payoffs     | Firms seek to maximise long-run profit while maintaining or increasing their market share.                                                                        |
| Equilibrium | Using backward induction, followers choose their optimal responses to the                                                                                         |

|  |                                                                                                                                                                |
|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | incumbent's actions, while incumbents anticipate these responses when selecting their initial strategies (this is the stage at which equilibrium is achieved). |
|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------|

## APPLICATION OF THE GAMES TO LOCAL PERFUME INDUSTRIES

### France

The French fragrance industry is a very pronounced form of the Hotelling games. Rather than converging on a single luxury point, French perfume houses seek to differentiate themselves across a wide spectrum. At one end are heritage luxury maisons such as Chanel (Liu, 2024) or Dior (Ma, 2024), whose positioning is based on culture, history, couture, and global recognisability. At the other end are niche and artisanal houses such as Diptyque (Casimira, 2024) and Le Labo, which deliberately distance themselves from mass luxury through minimalist branding, small-scale production, and distinct scent profiles. This allows firms to minimise direct price competition while attracting consumers with differing preferences. In Hotelling terms, French brands position themselves on characteristics such as heritage versus modernity and mass versus niche prestige. This differentiation strategy operates in a market that is mature and heritage-driven, where established houses such as LVMH, Chanel, and Coty dominate and create barriers to entry that remain high due to the strong emphasis placed on heritage and craftsmanship, further limiting the ability of new entrants to compete on price alone (Sup de Luxe, 2023).

Signalling games apply to the French fragrance industry because perfume quality is difficult to observe before purchase. French luxury houses rely on costly signals to communicate quality and exclusivity. Prestige pricing, expensive advertising, artisanal bottle design, and selective distribution through prestige retailers, e.g., Galeries Lafayette and Harrods, are signals that affordable brands cannot easily replicate due to the high costs involved. For example, Chanel No. 5 is justified by its century-long legacy in its premium pricing (Vischer, 2021). These signals shape consumers' beliefs about authenticity and craftsmanship, creating a market in which heritage brands are willing to pay more. This is consistent with broader evidence on the French luxury market, where consumers are willing to accept premium pricing as a signal of quality, heritage, and craftsmanship, thereby keeping demand for perfumes relatively stable across price levels (Doran, 2014). This is reinforced by evidence of exceptionally high brand loyalty in the French market, where consumers trust brands with decades, if not centuries, of experience in producing quality perfumes, making costly signals sent by established houses especially credible (Briot, 2011).

French perfume houses are also usually the first movers in sequential games within the global fragrance industry. Historically, many French brands have produced iconic scents that set long-lasting category benchmarks, prompting competitors to respond rather than lead. Chanel No. 5 set standards for femininity and luxury, while Guerlain's Shalimar helped establish a trend toward vanilla and amber notes that later spread throughout the global fragrance market (Sethi, 2025). These decisions about which kinds of

perfumes to create and the scale of branding shape the choices available to other perfume brands joining. Rival brands adjust by imitating trends, differentiating niches, or targeting alternative segments. France thus becomes an origin point for sequential positioning choices.

### The UAE

In the UAE fragrance industry, Hotelling games can be noticed through cultural differentiation. The UAE market is structured around two dominant positioning clusters. One cluster includes Arab perfume houses such as Lattafa, Ajmal, Swiss Arabian, and Arabian Oud, which position themselves around traditional preferences, particularly oud-based, amber-heavy, and incense-inspired scents that hold cultural significance in the region. The second culture comprises Western luxury brands that adopt a European-style luxury positioning while adapting to local tastes. This results in two parallel Hotelling lines, where firms compete on culturally defined preferences rather than converging to a single point. Brands in the UAE become successful when they choose which cultural cluster to locate in. This structure is consistent with broader evidence that the UAE fragrance market is largely oligopolistic, with a small number of large regional brands accounting for a substantial share of the market alongside international and designer brands (Ken Research and Rebecca, 2025).

Signalling plays a role in the UAE fragrance market, which is characterised by high consumption and a strong emphasis on luxury and social status. UAE-based fragrance houses use costly signals to communicate cultural authenticity and prestige. These signals include ornate, heavy bottle designs, detailed packaging, limited-edition releases, and consistently high price points, all of which signal exclusivity. Also, brands frequently use celebrity endorsements and influencers to perpetuate the cycle of aspirational consumption, signalling that their fragrances are associated with prestigious lifestyles. These signals are costly, creating a separating equilibrium in which luxury perfumes are clearly distinguished from mass-market perfumes. This is supported by broader evidence that UAE consumers are largely insensitive to price when purchasing culturally significant goods and instead exhibit a high willingness to pay for quality and prestige (Khan, 2024). This is further reflected in the frequency and cultural normalisation of perfume use in the UAE, where fragrances function as everyday symbols of heritage and tradition rather than occasional luxury purchases, reinforcing brands' incentive to signal cultural authenticity (Eqbal, 2025).

Sequential games in the UAE are mainly a pattern of adaptation rather than of the first mover. UAE brands observe the initial moves of French houses, which are often global trendsetters, and respond by localising them through oud, regional scent profiles, or by investing in culturally resonant branding. However, there may also be instances in which the influence can go the other way, as the prominence of oud and Middle Eastern scent traditions has sometimes shaped French launches, such as Dior's Oud Ispahan (Redhu, 2015). This means the UAE occupies something of a middle position in sequential games, responding to global leaders while also occasionally shaping future industry trends due to its culture.



## India

In the Indian perfume industry, competition can be modelled using Hotelling's model, with strong horizontal differentiation rather than price rivalry. Brands position themselves in strategic quadrants. One axis is Western luxury versus Indian-origin luxury, while another is premium heritage luxury versus accessible luxury. Western houses such as Tom Ford, Dior, and Chanel operate in the high-end Western space, leveraging their international prestige, while more accessible Western brands like Coach position themselves as aspirational but attainable luxury. In addition to these, Indian-origin luxury brands such as Forest Essentials (Salian, 2023) differentiate themselves through their culture, natural ingredients, and Ayurvedic practices. At a more accessible level, Indian masstige brands occupy a separate quadrant, highlighting local culture while remaining affordable. Because these positions are well separated, undercutting prices is less likely, as brands rarely try to challenge competitors outside their quadrant. This brings the Indian luxury fragrance market to a relatively stable equilibrium in which firms compete more on identity and positioning, not on price. This quadrant structure is consistent with broader market evidence indicating that India's fragrance market remains dominated by mass, affordable brands, while niche and masstige segments are growing quickly as e-commerce and influencer culture create new paths to market entry (Ratna, 2024; Mordor Intelligence, 2025a).

Signalling games play a role in the Indian fragrance market due to higher price sensitivity and greater relative income impact of luxury purchases. Signals include brand origin, ingredient usage, and celebrity endorsement. Indian consumers often need a clear value before committing to high-end purchases, making storytelling and credibility important. For example, Forest Essentials can use prestige pricing because of a strong narrative around Ayurveda, heritage, and artisanal craftsmanship. Similarly, Western brands use their global reputation and heritage to signal their quality. Celebrity endorsements (Shah, 2025) are particularly powerful signals in India, where aspirational consumption and idolisation culture make endorsements more effective. This price sensitivity is consistent with broader consumer behaviour amongst an increasingly aspirational middle class with rising disposable incomes (Ken Research, 2025). This need for reassurance is further evidenced by the fact that perceived value for money remains a significant driver of purchasing decisions in India, alongside status signalling and aspirational identity, making credible signals important (Imarc, 2025). These create an equilibrium in which only brands with strong, credible signals can maintain their positioning.

Sequential games in India are largely shaped by follower behaviour. International luxury brands typically launch products first in Western markets such as France, the United States, or the United Kingdom. Only after achieving international validation, through sales or trends, do these products enter the Indian market, creating a time lag. Entry is usually through retail partnerships with platforms such as Sephora, Nykaa, or Shoppers Stop, instead of direct brand-owned distribution. This means that Indian consumers see outcomes in earlier markets before buying new products, while Indian brands, in turn, emulate successful scent profiles or positioning strategies. Therefore, India is in a follower position in sequential games, where strategic choices are made on information from prior global moves.

### Comparative Analysis

Having examined France, the UAE, and India individually, we now draw these observations together. Although each market applies the three games differently, common strategies emerge that explain differences in pricing, brand positioning, and consumer behaviour across the three markets.

In signalling games, the specific signalling mechanisms differ across all three markets, yet all three fragrant industries continue to operate within asymmetric information. Brands in each market, therefore, rely on costly signals to communicate value, but the specific signal consumers respond to depends on cultural preferences. Therefore, the equilibrium signalling strategy varies by market: heritage-based signalling is most effective in France, prestige-based signalling dominates in the UAE, and value-oriented signalling creates the masstige equilibrium in India.

With regard to Hotelling games, all three markets show clear product differentiation, but firms differentiate along different dimensions in each country. French brands differentiate primarily through heritage and craftsmanship, UAE brands differentiate through cultural identity and prestige, and Indian brands differentiate through affordability and aspirational luxury.

In sequential games, the timing of the strategic decisions also differs across the three markets. France typically occupies the position of the first mover, setting the benchmarks that other markets respond to. The UAE both adapts to these global trends and occasionally influences them. India primarily follows established international launch schedules. This creates different roles for each country within the fragrance market: France as a first mover, the UAE as an adaptor and occasional trendsetter, and India as a follower.

Together, these comparisons show that while the three markets share the same underlying game-theoretic structures, the cultural context determines which strategic roles each market has and which equilibrium is reached.

### **SAMPLE CONCEPTUAL MODEL OF GAME THEORY IN THE LUXURY FRAGRANCE INDUSTRY**

The previous sections look at game theory from a qualitative perspective to understand how they pan out in its respective markets. The section below builds on this by presenting an illustrative conceptual model, focusing specifically on signalling theory (as consumers cannot directly observe the quality of a perfume before purchasing it), drawing on the previous section on the UAE market, to show how luxury brands might position themselves in this market.

Variables & Assumptions:

Brand Types:

- $H$  = High-quality luxury brand (e.g. Dior, Maison Francis Kurkdjian)
- $L$  = Low-quality luxury brand (aspirational or lower-tier luxury, e.g. Coach)

Signals:

- $S$  = Strong luxury signals (high price, ornate packaging, scarcity, e.g., limited editions)
- $W$  = Weak luxury signals (moderate price, standard packaging)

Signal Costs:

- $C_H$  = Cost for a high-quality brand to send a strong signal
- $C_L$  = Cost for a low-quality brand to send a strong signal

It is important to note  $C_L > C_H$ . This is because high-quality brands already have a reputation for luxury, craftsmanship, and exclusivity. Their packaging, branding, and marketing infrastructure are already established, so creating a strong luxury signal is relatively less costly. However, low-quality brands attempting to signal luxury must invest heavily as they need more ornate packaging, limited editions, celebrity endorsements, or big marketing campaigns. These additional investments make  $C_L$  greater than  $C_H$ . Also,  $C_W < C_S$  because  $C_W$  involves standard packaging and minimal marketing.

Consumer Utility:

- $U_H$  = Utility of purchasing a high-quality fragrance
- $U_L$  = Utility of purchasing a low-quality fragrance

Consumer utility measures the overall satisfaction achieved from purchasing and owning a fragrance. It's not only about the scent but also the social prestige, exclusivity, and personal enjoyment that ownership signals. High-quality brands provide positive utility ( $U_H \geq 0$ ) because consumers receive both tangible (scent quality, longevity) and intangible benefits (status, luxury experience). Low-quality brands may also provide non-negative utility ( $U_L \geq 0$ ) if the fragrance meets some functional or aspirational needs, but the satisfaction is generally lower than that of high-quality brands. Therefore,  $U_H > U_L$  as the higher perceived prestige, better scent profile, and social recognition are usually associated with high-quality brands.

Payoffs:

- Consumers are rational decision-makers and will purchase a fragrance only if the net utility is non-negative after accounting for the price, i.e., they will buy if  $U - P \geq 0$ , where  $P$  is the product price.
- Brands receive payoffs equal to revenue from sales minus the cost of signalling. Therefore, their payoff is  $P - C$ .

#### Hypothetical Signalling Scenarios

| Brand Type | Signal | Consumer Action | Brand Payoff | Consumer Payoff | Notes                                                                 |
|------------|--------|-----------------|--------------|-----------------|-----------------------------------------------------------------------|
| $H$        | $S$    | Buy             | $P - C_H$    | $U_H - P$       | A high-quality brand successfully signals luxury                      |
| $H$        | $W$    | Buy             | $P - C_W$    | $U_H - P$       | A weak signal may still result in a purchase                          |
| $H$        | $W$    | Not Buy         | 0            | 0               | Some consumers reject weak signals                                    |
| $L$        | $S$    | Buy             | $P - C_L$    | $U_L - P$       | A low-quality brand sends out a strong signal; costly but may succeed |
| $L$        | $S$    | Not Buy         | 0            | 0               | Consumers perceive low quality; the purchase fails                    |
| $L$        | $W$    | Not Buy         | 0            | 0               | A weak signal from a low-quality brand fails to                       |

|  |  |  |  |  |         |
|--|--|--|--|--|---------|
|  |  |  |  |  | convert |
|--|--|--|--|--|---------|

The table shows potential outcomes for the interaction between branding, signalling intensity, and consumer decision. It illustrates the UAE luxury fragrance market: strong signals highlight the perception of high-quality brands; low-quality brands must spend more to match those signals; and consumer purchases are based on net utility, which includes product quality and social prestige.

## CONCLUSION

This paper aimed to examine how pricing strategies and brand positioning influence consumer choices in the perfume industry in France, the UAE, and India. The global perfume market continues to grow, with Europe historically significant and the Asia-Pacific a fast-growing region. Despite their global presence, consumer perceptions of perfumes differ across countries. In France, heritage, craftsmanship, and artisanal quality are important. In the UAE, prestige and social signalling are valued. Lastly, in India, price sensitivity is paired with the desire for aspirational luxury. This study aimed to examine how these factors shape brand strategies and how consumers respond to them, using conceptual game-theory modelling to identify optimal pricing and branding strategies for perfume producers.

The literature review highlighted how brands influence perceptions and how consumers interpret value. Research shows that luxury consumers infer quality and exclusivity from higher prices, as evidenced by the price-quality inference effect and the Veblen effect. Brand positioning (which is influenced by perceived differentiation and brand equity) also plays a role in creating purchase intent. The modelling framework shows how this plays out: signalling games explain how brands signal quality and prestige; Hotelling games show how firms differentiate or converge their positioning based on consumer preferences; and sequential games demonstrate how early moves shape responses and market outcomes.

Across the three markets, the extent to which each strategy is effective varies with cultural norms and consumer values. In France, heritage brands use strong signals and sequential moves to maintain their exclusivity. In the UAE, cultural and prestige signals are important, with local and Western brands competing. In India, price sensitivity and credibility in signalling influence purchasing decisions, with sequential follower behaviour influencing how perfumes enter the market. The conceptual signalling modelling shows that using an intersection of these strategies allows brands to optimise their pricing and positioning to maximise their payoff across culturally different markets. Overall, the study highlights that success in the luxury fragrance industry depends on aligning pricing and branding strategies with market-specific consumer preferences and cultural expectations.

Whilst the conclusion of this paper aligns with the research conducted and the research question, there is scope to further this by developing more detailed firm-level quantitative models that account for differences (e.g., cost structures, brand equity, positioning) across individual brands. Also, the analysis

could be extended to examine differences within the fragrance industry, such as niche versus mass luxury or online versus retail distribution, as consumer choices regarding pricing and branding may change. Beyond this, applying a similar framework to other consumer markets or luxury sectors, such as cosmetics or fashion, could provide a better understanding of whether the models identified in this paper hold across markets where consumer choices and purchasing behaviour differ.

## REFERENCES

- Aaker, D.A. (1996). Measuring Brand Equity across Products and Markets. *California Management Review*, 38(3), pp.102–120.
- Ajzen, I. (1991). The Theory of Planned Behavior. *Organizational Behavior and Human Decision Processes*, 50(2), pp.179–211. doi:[https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T).
- Bagwell, L.S. and Bernheim, B.D. (1996). (PDF) *Veblen Effects in a Theory of Conspicuous Consumption*. [online] ResearchGate. Available at: [https://www.researchgate.net/publication/4980724\\_Veblen\\_Effects\\_in\\_a\\_Theory\\_of\\_Conspicuous\\_Consumption](https://www.researchgate.net/publication/4980724_Veblen_Effects_in_a_Theory_of_Conspicuous_Consumption).
- Brickworks Ratings (2025). *Perfume and Fragrance Industry in India*. [online] Available at: [https://www.brickworkratings.com/Research/Fragrance\\_industry\\_report\\_12June.pdf](https://www.brickworkratings.com/Research/Fragrance_industry_report_12June.pdf).
- Briot, E. (2011). From Industry to Luxury: French Perfume in the Nineteenth Century. *Business History Review*, 85(2), pp.273–294. doi:<https://doi.org/10.1017/s0007680511000389>.
- C., I.M. and Jain, H.C. (2024). How Do Masstige Marketing and Country of Origin Impact Consumers in an Emerging Market ? An Investigation. *Indian Journal of Marketing*, 54(11), p.26. doi:<https://doi.org/10.17010/ijom/2024/v54/i11/174629>.
- Casimira, C. (2024). Analyzing the Visual Identity of Diptyque Paris. *Jurnal VICIDI*, 14(2), pp.246–259. doi:<https://doi.org/10.37715/vicidi.v14i2.5203>.
- Doran, S. (2014). *Inside France's €16.8 Billion Luxury Goods Market*. [online] Luxury Society. Available at: <https://luxurysociety.com/en/inside-frances-168-billion-luxury-goods-market/>.
- Elgeballi, M. and Zaazou, R. (2023). The Impact of Value Perception on Luxury Brand Consumption. *Open Journal of Business and Management*, [online] 11(5), pp.2288–2309. doi:<https://doi.org/10.4236/ojbm.2023.115126>.
- Eqbal, S. (2025). *Oud's Global Journey: UAE's Perfume Market Transformation*. [online] Khaleej Times. Available at:

<https://www.khaleejtimes.com/supplements/uae-perfume-industry-from-oud-roots-to-global-heights-of-luxury>.

Fragrance Market (2026). *The Rise of Lattafa Perfumes: Exploring the Middle Eastern Influence on Modern Fragrances*. [online] Fragrance Market . Available at:  
<https://fragrancemarket.com/blogs/article/the-rise-of-lattafa-perfumes-exploring-the-middle-eastern-influence-on-modern-fragrances>.

Gandhi, K., Gautam, P. and Nandi, R. (2025). *Global Perfume Market Report and Forecast 2021-2026*. [online] [www.expertmarketresearch.com](http://www.expertmarketresearch.com). Available at:  
<https://www.expertmarketresearch.com/reports/perfume-market>.

Graham, D.A. (2007). *Sequential Games*. [online] Available at:  
[https://people.duke.edu/~dgraham/eco\\_463/handouts/sequentialgames.pdf](https://people.duke.edu/~dgraham/eco_463/handouts/sequentialgames.pdf).

Gruszow, O.-E. (2024). *IMPACT OF FRENCH CULTURAL TRAITS ON CONSUMER LUXURY PREFERENCES*. [online] Forcejournal.org. Available at:  
<https://www.forcejournal.org/index.php/force/article/view/109/82>.

IBEF (2025). *Affordable Luxury: Understanding Premiumisation and Evolving Consumer Preferences*. [online] India Brand Equity Foundation. Available at:  
<https://www.ibef.org/research/case-study/affordable-luxury-understanding-premiumisation-and-evolving-consumer-preferences>.

Imarc (2025). *India Perfume Market Size, Share, Trends and Forecast by Perfume Type, End User, and Region, 2026-2034*. [online] [Imarcgroup.com](http://Imarcgroup.com). Available at:  
<https://www.imarcgroup.com/india-perfume-market>.

Kazim, A. (2018). The Emergence of Hyper-Consumerism in UAE Society: A Socio-Cultural Perspective. *Perspectives on Global Development and Technology*, [online] 17(4), pp.353–372.  
doi:<https://doi.org/10.1163/15691497-12341484>.

Keller, K.L. (1993). Conceptualizing, Measuring, and Managing Customer-Based Brand Equity. *Journal of Marketing*, 57(1), pp.1–22. doi:<https://doi.org/10.2307/1252054>.

Ken Research (2025). *5 Current Trends Shaping India's Perfume Market*. [online] [Kenresearch.com](http://Kenresearch.com). Available at: <https://www.kenresearch.com/articles/current-trends-shaping-india-perfume-market>.

Ken Research and Rebecca (2025). *UAE Perfume Market*. [online] [Kenresearch.com](http://Kenresearch.com). Available at: <https://www.kenresearch.com/uae-perfume-market>.

Khan, A. (2024). *Why is UAE a Perfume Powerhouse?* [online] Khaleej Times. Available at: <https://www.khaleejtimes.com/business-technology-review/why-is-uae-a-perfume-powerhouse>.

- Liu, J. (2024). A Comprehensive Analysis of Chanel's Advertising Strategy. *SHS web of conferences*, [online] 185(1), pp.03016–03016. doi:<https://doi.org/10.1051/shsconf/202418503016>.
- Ma, J. (2024). Luxury Brands Success: Dior as an Example. *Communications in humanities research*, [online] 31(1), pp.51–55. doi:<https://doi.org/10.54254/2753-7064/31/20231836>.
- Mordor Intelligence (2025a). *Cosmetic Industry in India - Market Analysis, Size, Share*. [online] Mordorintelligence.com. Available at: <https://www.mordorintelligence.com/industry-reports/india-cosmetics-products-market-industry?>.
- Mordor Intelligence (2025b). *Fragrance And Perfume Market Size & Share Analysis - Growth Trends and Forecast (2025 - 2030)*. [online] Mordorintelligence.com. Available at: <https://www.mordorintelligence.com/industry-reports/fragrance-and-perfume-market>.
- Naumova, O., Bilan, S. and Naumova, M. (2019). Luxury consumers' behavior: a cross-cultural aspect. *Innovative Marketing*, [online] 15(4), pp.1–13. doi:[https://doi.org/10.21511/im.15\(4\).2019.01](https://doi.org/10.21511/im.15(4).2019.01).
- Parguel, B., Delécolle, T. and Valette-Florence, P. (2016). How price display influences consumer luxury perceptions. *Journal of Business Research*, 69(1), pp.341–348.
- Ratna, A.R. (2024). *Scent of success: What's driving the growth of India's fragrance market*. [online] Indiaretailing.com. Available at: <https://www.indiaretailing.com/2024/04/25/scent-of-success-whats-driving-the-growth-of-indias-fragrance-market>.
- Raut, N., Borde, A., Tripathi, S., Srivastava, N. and Narkhede, A. (2025). Brand equity in the luxury market: a study of consumer perceptions and premium pricing. *Academy of Marketing Studies Journal*, [online] 29(4), pp.1–16. Available at: <https://www.abacademies.org/articles/brand-equity-in-the-luxury-market-a-study-of-consumer-perceptions-and-premium-pricing.pdf>.
- Redhu, N. (2015). *Oud Ispahan by Christian Dior; #FragranceOfTheMonth #EyesForLuxury*. [online] Naina.co - Luxury, Travel, Fashion & Lifestyle Photographer in Adelaide. Available at: [https://www.naina.co/2015/12/oud-ispahan-by-christian-dior-fragrance-of-the-month-eyesforluxury/?srsltid=AfmBOopHU9e5uKW\\_rEz7H\\_ulHXjMeZ50RhLHOREByZdBRiDwdzeOgitS](https://www.naina.co/2015/12/oud-ispahan-by-christian-dior-fragrance-of-the-month-eyesforluxury/?srsltid=AfmBOopHU9e5uKW_rEz7H_ulHXjMeZ50RhLHOREByZdBRiDwdzeOgitS).
- Research and Markets (2025). *UAE Perfume Market Size, Competitors & Forecast to 2033*. [online] Researchandmarkets.com. Available at: [https://www.researchandmarkets.com/report/united-arab-emirates-perfume-market?srsltid=AfmBOoryU\\_p5kEqYnYNvJ44sAzm4pJpdToO4sDJla0OSUgpYBHncCdLT](https://www.researchandmarkets.com/report/united-arab-emirates-perfume-market?srsltid=AfmBOoryU_p5kEqYnYNvJ44sAzm4pJpdToO4sDJla0OSUgpYBHncCdLT).
- Salian, N. (2023). *Forest Essentials: Showcasing luxury Ayurveda in the GCC*. [online] Gulf Business. Available at: <https://gulfbusiness.com/forest-essentials-luxury-ayurveda-comes-to-gcc/>.



- Sethi, P.K. (2025). *This 100-Year-Old Perfume Is Still A Best-Seller Today*. [online] The Zoe Report. Available at: <https://www.thezoereport.com/beauty/guerlain-shalimar-fragrance>.
- Shah, V. (2025). *15 celebrity-favourite perfumes to add to your wish list: From Deepika Padukone to Shah Rukh Khan*. [online] Vogue India. Available at: <https://www.vogue.in/content/celebrity-approved-perfumes-to-add-to-your-wish-list>.
- Smith, S. (2024). *Huda Beauty explores sale of Kayali fragrance brand*. [online] TheIndustry.beauty. Available at: <https://theindustry.beauty/huda-beauty-explores-sale-of-kayali-fragrance-brand/>.
- Sup de Luxe (2023). *Current status of the French luxury perfume industry*. [online] Sup de Luxe. Available at: <https://www.supdeluxe.com/en/luxury-news/current-status-french-luxury-perfume-industry>.
- Sweeney, J.C. and Soutar, G.N. (2001). Consumer Perceived value: the Development of a Multiple Item Scale. *Journal of Retailing*, 77(2), pp.203–220. doi:[https://doi.org/10.1016/S0022-4359\(01\)00041-0](https://doi.org/10.1016/S0022-4359(01)00041-0).
- Tardos, E. (2024). *Lecture 7: Hotelling Games*. [online] Available at: <https://www.cs.cornell.edu/courses/cs6840/2025fa/lectures/Sept10%20notes.pdf>
- Vel, K.Prakash., Captain, A., Al-Abbas, R. and Al Hashemi, B. (2011). *Luxury buying in the United Arab Emirates*. [online] pp.145–160. Available at: <https://scispace.com/pdf/luxury-buying-in-the-united-arab-emirates-3acrr6izsg.pdf>.
- Vischer, A. (2021). *100 Years Of Chanel No5: The Anatomy Of A Classic*. [online] Grazia. Available at: <https://graziadaily.co.uk/beauty-hair/skin/100-years-of-chanel-no5/>.
- Wei, J., Shen, H. and Lu, Z. (2024). A study on the purchase intention of luxury goods from the perspective of face perception and expected regret. *PLOS ONE*, 19(3), pp.e0297050–e0297050. doi:<https://doi.org/10.1371/journal.pone.0297050>.
- Wolitzky, A. (2024). *Lecture 3: Signaling Games*. [online] Available at: [https://ocw.mit.edu/courses/14.126-game-theory-spring-2024/mit14\\_126\\_s24\\_lecture\\_3\\_signaling.pdf](https://ocw.mit.edu/courses/14.126-game-theory-spring-2024/mit14_126_s24_lecture_3_signaling.pdf).
- Zuro (2025). *Perfume Industry Insights 2025 | Trends, Growth & Indian Brands*. [online] Zuro Italy. Available at: [https://www.zuroitaly.com/blogs/articles/perfume-industry-insights-2025-trends-growth-indian-brands?srsIid=AfmBOOpTmhKTRsSqk05Kt5EcyYocs4f8rWob\\_Q5l--nNIFUZPnUD526p](https://www.zuroitaly.com/blogs/articles/perfume-industry-insights-2025-trends-growth-indian-brands?srsIid=AfmBOOpTmhKTRsSqk05Kt5EcyYocs4f8rWob_Q5l--nNIFUZPnUD526p).

## APPENDIX 1

### Comparative Market Overview

| Factor                   | India                                                                                                                                                                                                                                                                                            | UAE                                                                                                                                                                                                                                             | France                                                                                                                                                                                                                               |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Price Sensitivity</b> | Consumers in India are price-sensitive when it comes to perfumes because of social hierarchy, especially when it comes to what may be classified as luxury goods. However, an increasingly aspirational middle class, with more disposable income, is reducing sensitivity (Ken Research, 2025). | Consumers in the UAE are not price sensitive, as buying them is culturally tied (Khan, 2024). Consumers have a very high willingness to pay for quality and prestige.                                                                           | Consumers are willing to accept premium pricing, which are seen as signals for quality, heritage and craftsmanship (Doran, 2014). This means that demand for perfumes remains relatively stable throughout different price levels.   |
| <b>Luxury Culture</b>    | Luxury is seen as aspirational, which is driven by the rise of e-commerce and influencer culture (Brickworks Ratings, 2025). Perfumes become accessible starting points for luxury usage, creating a demand for affordable luxury.                                                               | Luxury is deeply connected culturally as perfumes become symbols of heritage and tradition (Eqbal, 2025). Perfumes are used more often, making luxury consumption of them more normalised.                                                      | Luxury in perfumes are seen as tradition as consumers value authenticity, craftsmanship, and brand legacy. This makes perfumes not just luxury goods, but also a part of everyday cultural identity (Briot, 2011).                   |
| <b>Market Structure</b>  | The market has mass, affordable brands dominating with niche markets growing quickly. Online platforms like Nykaa, the rise of e-commerce and influencer culture create more paths to entry for newer brands (Ratna, 2024; Ken Research, 2025). Competition becomes mainly influenced by         | The market is mainly oligopolistic, with large regional brands holding a large part of market share. International and designer brands also make up a part of the market (Ken Research and Rebecca, 2025). Competition is influenced heavily by | The market is mature and heritage-driven, with major global luxury houses, e.g. LVMH, Chanel, and Coty, dominating (Sup de Luxe, 2023). Barriers to entry are high due to the large importance placed on heritage and craftsmanship. |

|                             |                                                                                                                                                                                                                                     |                                                                                                                                                                                                     |                                                                                                                                                                                                                                      |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                             | pricing, celebrity branding, and accessibility.                                                                                                                                                                                     | cultural connection, value perception, and reputation.                                                                                                                                              | Competition is influenced by long-standing brand legacy and loyalty, authenticity, and craftsmanship.                                                                                                                                |
| <b>Brand Loyalty</b>        | Brand loyalty is low as consumers experiment with multiple brands, especially as opinions are often swayed by influencer culture. New brands, especially those advertised by celebrities, gain traction very quickly.               | Brand loyalty is high, especially towards long established regional houses and international luxury brands. Consumers often gravitate towards more culturally tied scents (oud-based perfumes).     | Brand loyalty is very high due to the strong importance placed on prestige and heritage. Consumers trust brands that have been long existing, with decades, if not centuries, worth of experience in quality perfumes (Briot, 2011). |
| <b>Dominant Positioning</b> | Brands position themselves as affordable luxury, also known as masstige (Mordor Intelligence, 2025a). Perfumes are marketed heavily by celebrities and influencers, along with the narrative of perfumes being symbols of identity. | Brands position themselves as symbols of prestige and heritage, leading to narratives of cultural value and exclusivity (Research and Markets, 2025).                                               | Brands highlight their capabilities in craftsmanship, artisanal quality, and authenticity (Sup de Luxe, 2023). Narratives emphasise heritage and natural ingredients.                                                                |
| <b>Consumer Motivation</b>  | Consumers buy perfumes to signal status, follow influencer trends and aspirations, and to create extensions to their identity. However, whether the perfume is perceived to be value for money also makes an impact (Imarc, 2025).  | Consumers buy perfume to embody prestige and status, as well as signalling their personal identities and social norms (Research and Markets, 2025). Perfumes are also bought as proxies of culture. | Consumers buy perfume to create an extension of their personal style and cultural appreciation, which is heavily impacted by their need for craftsmanship, heritage, and emotional connection.                                       |