

Location strategies for proximity supermarkets: A case study of Carrefour and Marjane in Morocco

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Abstract: Location is an essential factor in urban supermarkets that impacts their attraction and sales performance. In a fast-changing market, supermarket chains should adjust their location strategies to improve coverage and meet consumer expectations. In this context, the purpose of this study is to examine the location strategies of Carrefour (Label'Vie) and Marjane Holding in Morocco, highlighting the factors impacting their location decisions. To achieve this objective, a case study approach is adopted, based on secondary data (company reports, academic publications, and sector studies). The methodology relies on theoretical models of retail location, including Central Place Theory (Christaller), the Huff Model, and the Theory of Spatial Consumer Behavior, which help elucidate store distribution and competitive dynamics. The findings reveal that geographical, socio-economic, and competitive factors play a decisive role in supermarket location choices. Additionally, the results highlight the greater importance of digitalization and adaptation to new shopping behaviors. In conclusion, this study provides a conceptual framework for optimizing location strategies in a rapidly evolving retail landscape. From a practical perspective, the insights gained can help retail decision-makers refine their expansion strategies by integrating digital transformation and evolving consumer behaviors into their location planning.

Keywords: Carrefour, Commercial location, Geo-marketing, Marjane, Mass retail, spatial behavior.

1. Introduction

Geographic location is a crucial strategic factor for urban supermarkets. It directly influences sales performance by defining customer accessibility, brand visibility and proximity to target market areas. Optimal location maximizes consumer attractiveness while reducing operating costs. According to Chaudey and Fadaïro [1] location is clearly and long since considered a pivotal determinant of firm performance [2] and a decisive performance element for distribution networks [3]. Geo-marketing has a main role in localization, improving distribution networks and targeting advertising distribution. It segments space, for example, by determining influence zones, and provides data on consumers by highlighting the characteristics (socio-economic, urbanistic and demographic) of the area where they live, as a spatial translation of behaviors common to groups of customers.

In Morocco, the mass retail sector is led by a lot of major players, among which Carrefour and Marjane hold significant positions. Marjane, a pioneer of mass retailing in Morocco since 1990, has become a must-go destination for families, with over 40 hypermarkets throughout the country. For its part, Carrefour, operated by the Label'Vie group, has strengthened its existence by implementing urban expansion strategies, particularly through proximity formats.

The location strategies analysis of these two chains delivers an interesting comparative perspective on the approaches adopted to adjust to the specific characteristics of the Moroccan market. Their location choices reveal distinct responses to the challenges and opportunities presented by the

Moroccan urban environment, making this study a relevant case for grasping the influence of location in the geo-marketing of urban supermarkets. The aim of our study is to describe and analyze the location strategies of Carrefour and Marjane, and to highlight the geographical and commercial factors influencing their location decisions.

2. Theoretical Framework

2.1. Classic Business Location Models

2.1.1. Reilly's Law of Retail Gravitation: The First Space Marketing Tool

According to the retail gravitation law led by Reilly: Two towns attract retail trade from an intermediate town or city located near the breakpoint, in proportion to the population of the two towns and inversely proportional to the square of the distances between the two towns and the intermediate town [4].

In other words, this law is dedicated to towns and cities of different sizes, and to several categories of merchandise. When a city appeals to retail trade from a smaller town or village, this attraction is essentially due to the commercial services offered in connection with specialized and stylish products. However, the purchase of standardized products is often a result of the acquisition of stylish and specialized products. Numerous consumers living in a small town or village feel, rightly or wrongly, that they can buy standardized goods in larger towns at a better price [5].

2.1.2. Theory of Central Places

Central place theory developed in the 1930s by Christaller [6] and Lösch [7] deals with the distribution of services, their hierarchy, spacing and catchment areas through the system of cities that play the role of central places in relation to their environment. The hierarchy of services also underpins and derives from the hierarchy of cities. The theory of central places was developed independently by [8-10].

According to his analysis about Bavaria, Christaller highlighted three major hierarchical principles, which are Trade, Transport and administration. These three key factors identify the central places hierarchy, also their areas of influence.

The first element elucidates that commercial competition increases the number of centers, located at the vertices of hexagons and equilateral triangles. The transport principle suggests that cities cluster along transport axes to maximize connectivity. And the last principle, the administration, esteems that each administrative zone is manipulated by a single center, with no spatial division.

2.1.3. Huff Model

In what concerns this theory, it is proposed in 1962 and relies on the concept that consumer behavior is probabilistic when choosing an outlet. The attractiveness of a store is measured by the expected number of potential consumers, calculated as a function of individual probability and the total population of the areas studied. This model has just adjusted a few axes, among which we find that it considers market hierarchies, where all competitors in the same market area are included. Product classification is essential, involving differentiation according to categories of goods. Overlapping catchment areas are also considered, enabling us to estimate the probability of consumers visiting each area.

2.2. Modern Approaches

Classical models are of course essential in laying theoretical foundations for commercial localization, but they presuppose a homogeneity of behavior that no longer exists with the evolution of consumer profiles and the influence of real-time data. The integration of advanced technologies, such as artificial intelligence and geographic information systems, not only overcomes these limitations, but also provides a more dynamic and personalized view of consumer behavior and location decisions. These

modern approaches do not replace classic models but enrich them and make them applicable to today's realities.

A GIS concept can thus be expanded to constitute "a system of hardware, software and procedures, designed to achieve the capture, storage, manipulation, analysis, modeling and presentation of spatially referenced data for the solution of complex planning and management problems" [11]. GIS is widely used in geo-marketing, particularly for geographic market research. They have emerged as useful tools in geographic modelling processes, making it possible to answer questions about the variability of landscape structure over time [12, 13] to forecast areas of urban expansion, [14, 15] analyze propagation phenomena [16, 17] model animal movement and behavior [18, 19] determine periods and areas at high risk of flooding [20, 21] among other phenomena.

By using geographic databases to store data such as addresses, zip codes and GPS coordinates, geo-marketing can better target locations and develop location-based market research.

Although AI and GIS have historically developed separately, their paths are increasingly crossing to capitalize on each other's key strengths [22]. The evolution of traditional geo-marketing tools, such as GIS, geographic databases, geocoding techniques and data visualization tools, now finds a natural extension in the integration of geospatial artificial intelligence (GeoAI). Today, companies are moving beyond traditional statistical approaches and opting for contextual, real-time and dynamic analyses. GeoAI offers marketers new opportunities to solve problems and make strategic decisions related to segmentation and targeting, sales forecasting, resource allocation, price optimization, sales territory planning and distribution networks [23].

3. Methodology

This study adopts a qualitative and descriptive approach, based exclusively on the analysis of secondary data from company reports, sector studies and academic publications. The aim is to examine the location strategies of Carrefour (Label'Vie) and Marjane Holding in Morocco, and to identify the factors influencing their location decisions.

The data was collected from the two companies' reports, as well as from specialized articles and academic studies on retailing and geo-marketing. This information was analyzed using a three-pronged thematic approach: geographical, socio-economic and competitive factors.

This article is dedicated to comparing the two companies' strategies, explained through the lens of theoretical models such as Central Place Theory (Christaller), the Huff Model and the Theory of Spatial Consumer Behavior.

Carrefour and Marjane are chosen for this study, because they represent a powerful position in the Moroccan market and their key role in the improvement of retail formats. However, it was limited by the non-existence of primary data, although the diversity of sources used guarantees a robust and relevant analysis.

4. Case Study: Analysis of Carrefour and Marjane Strategies

4.1. Introducing the Two Brands

4.1.1. Carrefour

In 2009, the Label'Vie group signed a franchise agreement with the Carrefour Partenariat International (CPI) group, giving it exclusive rights to operate Carrefour brands in Morocco [24]. This partnership resulted in the transformation of existing Label'Vie supermarkets into Carrefour Market stores, and the development of numerous new outlets throughout Morocco. Today, the Carrefour Market [25] chain includes over 70 medium-sized stores located in urban areas. There is also the Carrefour Express, designed to facilitate shopping in urban areas [26]. This ultra-neighborly store offers a wide choice of products and extensive opening hours. This concept meets the needs of an increasingly active urban clientele with less and less time available.

4.1.2. *Marjane*

Marjane Holding is a Moroccan mass retailer and subsidiary of the ONA Group (short for Omnium Nord-Africain). Founded in 1990, "Marjane" was the first to establish itself on the Moroccan market [27]. This distributor is the market pioneer, ahead of its main competitors "Aswak Assalam" and "Label'vie". Now, it has 130 stores throughout Morocco. In 2002, the network of Marjane group grew through implementing the first 6 Acima stores in the city of Casablanca, which changed in 2019 to Marjane Market [28]. Since its launch, the chain has established itself as a leader in the supermarket sector, inaugurating the "convenience supermarket" concept in the neighborhoods of major Moroccan cities, before developing its network nationwide with over 83 stores currently in operation.

4.2. *Analysis of the Factors Influencing Their Location Decisions*

The location decisions of supermarkets are mainly influenced by geographical, socio-economic and competitive factors. In Morocco, for the Carrefour banners, operated by the Label'vie group, and Marjane Holding, these factors have a direct impact on their ability to satisfy consumer expectations and improve their market share in a highly competitive sector.

4.2.1. *Geographical Factors*

The location strategy of urban supermarkets is mainly determined by geographical factors. Retailers opt for strategic locations that maximize their accessibility and attractiveness.

4.2.1.1. *Accessibility*

Carrefour and its multiple formats (Carrefour, Carrefour Market, and Atacadao) are in strategic zones with a high level of accessibility, which means that many highways and neighborhoods are well served by transport infrastructure. The network contains 109 outlets in 26 Moroccan towns, with a total surface area of 214,164 m². These locations guarantee optimum accessibility for consumers and facilitate logistics operations. For example, in 2020, the LabelVie group strengthened its presence in Casablanca by opening three Carrefour Market supermarkets in key districts: Gauthier, La Villette and Beauséjour. These locations reflect a strategy aimed at capturing an urban clientele in search of proximity and convenience.

For Marjane, it has 130 stores in 30 towns and has been expanding steadily since opening its first hypermarket in Rabat-Salé in 1990. The chain has also developed a 56,000 m² logistics center to optimize its supply chain [29].

4.2.1.2. *Proximity to Dense Residential Areas*

Both chains, Carrefour Market and Marjane Market, have been developed to appeal to an active urban clientele, with a range adapted to quick shopping and flexible opening hours. On the other hand, Hypermarkets Carrefour and Marjane are located on the outskirts of town, taking advantage of large sales areas for volume purchases.

4.1.3. *Socio-Economic Factors*

Brand strategies take into consideration people's purchasing power and consumption patterns.

4.1.3.1. *Targeting Customer Segments*

The consumers' purchasing power is a key factor in Carrefour (LabelVie) segmentation. Accordingly, it adapts its offer, with accessible formats like Atacadao, and premium concepts like Carrefour Market and Carrefour Gourmet, which feature organic and local products [30].

In parallel, Marjane Holding is characterized by a policy focused on the purchasing power of Moroccan households, with guaranteed low prices and a diversified offering that includes local products and economical ranges.

4.1.3.2. Customer Experience and Differentiated Services

Carrefour Market Gourmet is dedicated to offering an upscale shopping experience, with carefully designed decor, a wide range of quality products and partnerships with well-known brands. For Marjane, it strengthens customer loyalty through a loyalty program, a mobile application, home delivery and a wide range of healthy products (sugar-free, gluten-free, etc.).

4.1.4. Competitive Factors

The growing competition between national and international brands has a direct influence on location strategies.

4.1.4.1. Strategic positioning and differentiation

Carrefour (Label'vie) focuses on a multi-format model combining hypermarkets, supermarkets and discount chains. As for Marjane Holding, its investment focuses more on food e-commerce, becoming the leading operator in Morocco in 2020, and has launched a marketplace in 2023 with 200 brands and over 100,000 products.

4.1.4.2. Reacting To Local and International Competitors

In Morocco today, other chains are emerging in fierce competition with Marjane Holding and Carrefour (Label'vie). Hard discounters BIM [31] and KAZYON [32] are putting pressure on these two chains, forcing them to rethink their business models.

5. Discussion and Recommendations

The choice of Marjane and Carrefour's location is not at all done arbitrarily, it is rooted in logical reasoning and explained by several theoretical models of retail location and consumer spatial behavior. Primarily, Christaller [6] guides us to grasp the structuring of store networks according to catchment areas and urban centers. Through this model, strategic locations, characterized by their accessibility and attractiveness, are the main key factors that magnetize retailers. Carrefour adopts this logic, combining hypermarkets on the outskirts to extend over large areas and local supermarkets in urban centers to meet consumers' everyday needs. Likewise, Marjane opts for the same approach with its Marjane Markets, which strengthens its existence in city centers, while maintaining its hypermarkets on the outskirts.

As a second point, consumers select a store location according to its accessibility and attractiveness. This is mainly what is stated by Huff [33]. In another way, this approach shapes the probability of a consumer visiting a store as a function of store size and distance from the store. Carrefour follows this strategy by boosting the attractiveness of its hypermarkets via a lot of diversified offers and multiple services. Simultaneously, the company is improving more accessible formats such as Carrefour Market and Carrefour Express, that are situated close to urban customers. In its turn, Marjane has been aware of the major impact of proximity and has relied on digitalization to tackle distance constraints. Its extension into online commerce and the initiation of its marketplace makes its products accessible even outside its physical stores.

Finally, the expansion of retailer strategies in line with purchasing habits and new consumer trends are effectively drawn by the theory of Spatial Consumer Behavior. Today, consumers are seeking greater flexibility, speed and immersive in-store experiences. Carrefour has taken this trend into consideration by implementing Carrefour Market Gourmet, a concept that presents an upscale shopping experience with organic and local products, as well as a meticulous design that enhances customer experience. Marjane, on its side, is adapting to new consumer expectations by developing digital services, such as express delivery, as well as an offer focused on healthy, local products. These progresses elucidate how the brands are following new customer expectations and market evolutions.

Carrefour and Marjane have different approaches, but in a complementary way. The first one focuses on differentiation through formats and customer experience, while Marjane relies on digital expansion and enhanced accessibility.

- Carrefour's strengths: Well-structured network, strong urban presence, premium positioning.
- Marjane's strengths: Extensive national coverage, e-commerce leadership, attractive pricing strategy.
- Common challenges: The rise of hard discounters (BIM, Kazyon) and the shift in purchasing behavior towards digital.

To strengthen their strategies and face up to the fierce competition, Carrefour could reinforce its proximity strategy by stepping up the deployment of its urban formats. It could also invest more in e-commerce to keep pace with Marjane. As for Marjane, this chain would benefit from better segmentation of its hypermarkets to adapt them to more diversified regions. It must also continue to innovate to maintain its digital leadership. The table below summarizes the strategies of the two chains.

Table 1.
Summary of the location strategies of the two Supermarket Chains.

	Carrefour (Label'Vie)	Marjane Holding
Theories used	Huff's model and central places	Spatial behavior of Consumers
Positioning	Premium, multi-format experience	Price accessibility and digitalization
Formats	Hypermarkets, Carrefour Market, Carrefour Express, Atacadao	Marjane, Marjane Market
Innovation	Concept Market Gourmet	Marketplace and e-commerce delivery
Customer experience	Immersive shopping, exclusive services	Digitization and online services
Future expansion	Acceleration in e-commerce	Figuring more segments in more regions

6. Conclusion

An analysis of the location strategies of Carrefour (LabelVie) and Marjane Holding reveals differentiated but complementary approaches, each responding to the challenges and opportunities of the Moroccan supermarket market. On the one hand, Carrefour relies on a multi-format strategy, combining hypermarkets, supermarkets and discount chains to capture different customer segments. Its premium positioning, illustrated by concepts such as Carrefour Market Gourmet, enables it to differentiate itself through customer experience and product quality. On the other hand, Marjane has a more accessible and digital approach, strengthening its network of Marjane Market urban supermarkets and investing heavily in e-commerce and the digital marketplace.

The location choices made by both brands are in line with classic theoretical models of retail location and consumer spatial behavior. Central Place Theory explains their strategic geographical distribution, while the Huff Model justifies their segmentation between proximity and department store attractiveness. Finally, the Theory of Spatial Consumer Behavior highlights recent developments, notably the rise of customer experience and digital services.

However, several challenges still lie ahead for these brands. The rise of the hard discount sector, with players such as BIM and Kazyon, is forcing Carrefour and Marjane to rethink their differentiation and strengthen their competitiveness in terms of price. In addition, the shift in consumer habits towards digital and local retailing means that retailers must continually innovate to anticipate the expectations of Moroccan consumers.

Taking this into consideration, the progress could have several manners. In simpler terms, Marjane can go furthermore with enlarging the logistic side and differentiating its digital offer to improve its e-commerce, at the same time as Carrefour should build on a strong online platform to keep up with the market competitiveness and refine its local stores. On top of that, for both companies, the integration of

artificial intelligence and GIS tools in the analysis of strategic locations could enable more accurate and efficient decision-making.

In conclusion, if Carrefour and Marjane have been able to adapt to the transformations of the Moroccan market, their ability to innovate, exploit new technologies and anticipate changes in consumer behavior will be decisive for their sustainability and future expansion.

Transparency:

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

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