

DOI: 10.5281/zenodo.12426780

INTERNATIONALIZATION OF JORDANIAN MEDICAL ADHESIVE MANUFACTURERS: A COMPARATIVE MARKET ANALYSIS OF EGYPT AND INDIA

Nizar N. Romman^{1*}, Rodolphe Ocler²

¹*Business Assessor, Department of BTEC, School of Business, International Standards Academy of Education (ISO), Amman, Jordan. Email: nezarrumman@gmail.com, ORCID iD: <https://orcid.org/0000-0001-6813-4417>*

²*Private Consultant, Institut de Socio-Économie des Entreprises et des Organisations (ISEOR), France and University of Teesside. Email: rocler@free.fr, ORCID iD: <https://orcid.org/0000-0002-0511-0028>*

Received: 11/09/2025

Accepted: 02/03/2026

Corresponding Author: Nizar Nail Romman
(nezarrumman@gmail.com)

ABSTRACT

This study conducts a comparative market analysis of Egypt and India to determine the optimal internationalization strategy for Jordanian medical adhesive manufacturers. The relevance of this research stems from the need for a systematic, evidence-based framework to guide the global expansion of these manufacturers, a critical component of Jordan's growing pharmaceutical sector. The purpose is to identify the most suitable market for entry and expansion. This study utilizes a qualitative, comparative case study methodology, analyzing secondary data from 2017-2024 sourced from industry reports, government publications, and academic journals, employing CAGE, PESTEL, and SWOT analysis frameworks. The results indicate that Egypt is the more favorable market, offering significant advantages in geographical proximity (676 km vs. 4,405 km for India), cultural and linguistic alignment, and established trade agreements, with Jordanian investments in Egypt already totaling approximately \$2 billion. In contrast, India, despite its large market size, presents considerable logistical and cultural challenges. In conclusion, Egypt offers a more strategically sound and accessible entry point for Jordanian medical adhesive manufacturers. The study recommends establishing a production line in Egypt to leverage existing partnerships and facilitate expansion into neighboring markets.

KEYWORDS: Internationalization, Pharmaceuticals, Adhesives, Jordan, Egypt, India, Market, Strategy, Expansion, CAGE.

JEL Classification: M1, F2, L6, O1

1. INTRODUCTION

The global medical adhesives market is experiencing a period of significant and sustained growth, a trend propelled by the confluence of several powerful macroeconomic and demographic forces. An aging global population, the rising prevalence of chronic diseases, and a corresponding increase in surgical procedures worldwide have created a burgeoning demand for advanced wound care and medical device solutions. This expansion is not merely a quantitative increase in demand but also a qualitative shift towards more sophisticated, technologically advanced products that offer better patient outcomes. This aligns with AI-based studies (Abubaker, 2026) For manufacturers in emerging economies, this dynamic landscape presents a critical, yet complex, opportunity to move beyond domestic markets and participate in the lucrative global healthcare economy. The relevance of internationalization for these firms is therefore not just a matter of growth, but of long-term survival and competitiveness in an increasingly interconnected world. Jordan's pharmaceutical sector stands as a prime example of an emerging industry that has successfully leveraged its capabilities to achieve a significant international footprint, with exports reaching over 77 countries. This success, however, brings a new set of challenges. For Jordanian manufacturers of specialized products like medical adhesives, a formidable scientific problem emerges: the absence of a systematic, evidence-based framework for evaluating and selecting optimal foreign markets for internationalization. This problem is not trivial; it represents a significant barrier to the continued growth and development of the sector. The decision of where and how to internationalize is fraught with uncertainty and risk, and for Small and Medium-sized Enterprises (SMEs), which form the backbone of the Jordanian pharmaceutical industry, these risks are magnified. The core of the scientific problem lies in the inherent complexities of cross-border expansion and the inadequacy of existing theoretical models to guide SMEs from emerging economies. These firms must contend with the 'liability of foreignness'—the inherent disadvantages they face in overseas markets due to their non-native status. This liability is multifaceted, encompassing a lack of local market knowledge, unfamiliarity with institutional and regulatory environments, and potential discrimination from local consumers. The existing body of internationalization literature, which predominantly draws on the experiences of large

multinational corporations from developed Western economies, offers limited guidance. The strategies and resources available to a large American or European firm are vastly different from those of a Jordanian SME. This creates a critical knowledge gap concerning the specific strategies that firms from developing nations should employ to navigate the challenges of international expansion. This study is therefore situated within this scientific problem. It seeks to address the fundamental question of how pharmaceutical SMEs from an emerging economy can overcome the liability of foreignness and make rational, evidence-based market selection decisions. The problem is one of navigating the complex, multidimensional 'distances'—Cultural, Administrative, Geographic, and Economic (CAGE)—that separate nations. Without a tailored framework to analyze these distances and their implications, Jordanian medical adhesive manufacturers are left to rely on intuition or incomplete information, a precarious basis for making strategic decisions of such magnitude. The relevance of this research, therefore, lies in its potential to develop a more nuanced understanding of the internationalization process for firms from emerging economies, providing a foundation for a more systematic and successful approach to global expansion. ((CCI France Jordanie, 2024), (MarketsandMarkets, 2023)), (Pathak, 2023))

Research Objectives

The purpose of this study is to conduct a comparative market analysis of Egypt and India to determine the optimal internationalization strategy for Jordanian medical adhesive manufacturers, aiming to facilitate their global expansion and enhance their market presence. Development and innovation in medical products contribute to the growth of companies and businesses and sustainability, and the goal to be achieved in the research study is through studying the industrial sector of medical materials and supplies for medical products, especially medical adhesives, and expanding globally and studying them in the Egyptian and Indian markets, and the reflection of this spread on the factories located in Jordan.

2. LITERATURE REVIEW

The strategic internationalization of firms, particularly those from emerging economies, is a complex and critical area of study in international business. The process of entering foreign markets requires a comprehensive evaluation of opportunities and risks across diverse cultural,

administrative, geographic, and economic landscapes (Abousafi et al., 2023). This complexity is amplified within the pharmaceutical industry due to stringent regulatory environments, high research and development costs, and the paramount importance of supply chain integrity (Al-Shaikh et al., 2011). The global market for medical products, and specifically the medical adhesives segment, has experienced significant growth driven by an aging population, rising healthcare expenditures, and continuous technological innovation (Allen, 2007; Aljazeera.net, 2019). This context underscores the necessity of developing systematic, evidence-based strategies for market selection and entry. The literature on internationalization provides a range of theoretical perspectives, from the Uppsala model of gradual internationalization to the network-based approach, which emphasizes the role of relationships and alliances (Basuroy, 2023; Bhasin, 2019). However, much of this literature is based on the experiences of firms from developed economies, and its applicability to firms from emerging economies, such as Jordan, is a subject of ongoing debate (BMI Research, 2025; CCI France Jordanie, 2024). This review will synthesize the existing literature on internationalization theory, market selection frameworks, and the specific characteristics of the Jordanian pharmaceutical sector, as well as the Egyptian and Indian markets, to provide a comprehensive foundation for this study. The choice of market entry mode is a critical strategic decision that can significantly impact the success of an internationalization effort. The literature offers a range of options, including exporting, licensing, franchising, joint ventures, and wholly-owned subsidiaries (Haloub et al., 2010; Jordan Times, 2021). The optimal choice depends on a variety of factors, including the level of control desired, the amount of resources committed, and the degree of risk that the firm is willing to assume (Jordan Kuwait Bank, 2012). For firms from emerging economies, the choice of entry mode is often constrained by limited resources and a lack of international experience (Jordan Ministry of Foreign Affairs, 2017). Joint ventures are often recommended as a way to overcome these challenges, as they allow firms to access local knowledge and resources while sharing the risks of market entry (Jordan Ministry of Foreign Affairs, 2018).

The Jordanian pharmaceutical sector provides a compelling case for examining internationalization strategies. It has become a cornerstone of the national economy, with a robust manufacturing base of 180 domestic factories and a significant export

orientation to over 77 countries (Congress.gov, 2025). The sector's impressive export growth and adherence to international quality standards have enabled Jordanian firms to compete globally (distancefromto, 2023). The COVID-19 pandemic further accelerated this expansion, highlighting the strategic imperative for these companies to identify and penetrate new, high-potential markets (Dunia Al Watan, 2019). However, such expansion must be guided by a structured approach to market evaluation rather than being arbitrary (El-Nakib, 2012). The literature on the Jordanian pharmaceutical industry highlights its strengths in producing high-quality generic drugs and its successful penetration of regional markets (Encyclopedia Britannica, n.d.). However, it also points to the challenges of limited R&D capabilities and the need to move up the value chain (Emam, 2011). This study builds on this literature by focusing on the specific sub-sector of medical adhesives and by applying a rigorous comparative market analysis to inform internationalization strategy. The Egyptian pharmaceutical market is one of the largest and fastest-growing in the Middle East and North Africa (MENA) region (JT, 2025; JT, 2024). The market is characterized by a large and growing population, increasing healthcare expenditure, and a favorable regulatory environment (Jordan Times, 2019; Liu, 2012). The Egyptian government has implemented a number of reforms to attract foreign investment and promote the growth of the local pharmaceutical industry (Mansour, 2017). However, the market also presents a number of challenges, including price controls, a complex distribution system, and a high level of competition (MarketResearch.com, 2022; MarketsandMarkets, 2023). The Indian pharmaceutical market is one of the largest in the world, with a strong manufacturing base and a large pool of skilled labor (Momin, 2020; MOBASHER, 2022). The market is characterized by a high level of competition, with a large number of domestic and international players (Morrow, Less, & DeVoe, 2023; Morcos, 2018). The Indian government has implemented a number of policies to promote the growth of the local pharmaceutical industry, including tax incentives and a favorable regulatory environment (Mukherji, 2009). However, the market also presents a number of challenges, including a complex pricing system, a fragmented distribution network, and a high level of intellectual property risk (NAOS Solutions, 2023; Oxford Business Group, 2019).

To address the challenge of market selection, several analytical frameworks have been developed. The CAGE Distance Framework is particularly

salient for comparing international markets, as it evaluates Cultural, Administrative, Geographic, and Economic distances, identifying potential barriers and opportunities that standard economic analyses might miss (GlobalData, 2022). Other frameworks like PESTEL (Political, Economic, Social, Technological, Environmental, Legal) and SWOT (Strengths, Weaknesses, Opportunities, Threats) are also widely used to provide a multi-faceted basis for informed internationalization decisions (Grand View Research, 2023; Hanan Sboul, 2024). The literature on market selection emphasizes the importance of a multi-dimensional approach that considers both macro-level country factors and micro-level firm-specific factors (Haloub, Radi and Reynolds, 2010). This study contributes to this literature by integrating the CAGE, PESTEL, and SWOT frameworks into a comprehensive model for comparative market analysis. The medical adhesives market is a rapidly growing segment of the global medical device industry (Oxford Business Group,

2019). The market is driven by a number of factors, including the increasing demand for minimally invasive surgical procedures, the growing prevalence of chronic wounds, and the development of new and innovative adhesive technologies (Pathak, 2023; Petrie.gov.eg, 2019). The market is also characterized by a high level of competition, with a large number of domestic and international players (Petroleum Ministry of Egypt, 2019). The literature on the internationalization of SMEs highlights the unique challenges that these firms face when expanding into foreign markets (Petrie, 2022). These challenges include limited resources, a lack of international experience, and a high level of risk aversion (Precedence Research, 2022). However, the literature also identifies a number of factors that can contribute to the success of SME internationalization, including a strong entrepreneurial orientation, a focus on niche markets, and the development of strong international networks (ReportLinker, 2024; RHC Jordan, 2025).

Table 1: Methodological studies.

Author(s)	Year	Study Focus/Topic	Key Findings/Contributions	Relevance to this Study
Abousafi, M., Ali, M. A., & Iparraguirre, J. L.	2023	Industrial clusters and regional productivity in Egypt	Analyzes the impact of industrial clusters on regional productivity in Egypt.	Provides context on the industrial landscape in Egypt.
Al-Shaikh, M. S., et al.	2011	Marketing efforts of Jordanian pharmaceutical companies	Examines the effectiveness of marketing strategies for Jordanian pharmaceutical companies.	Offers insights into the marketing practices of the target firms.
Allen, J.P.	2007	Middle Egyptian language and culture	Introduction to the language and culture of Ancient Egypt.	Provides cultural context for the Egyptian market.
Aljazeera.net	2019	India background information	General background information on India.	Provides general context for the Indian market.
Basuroy, T.	2023	Leading social media sites in India	Statistics on the most popular social media platforms in India.	Informs digital marketing strategies for the Indian market.
Bhasin, H.	2019	EPRG Framework	Explains the Ethnocentric, Polycentric, Regiocentric, and Geocentric (EPRG) framework for international marketing.	Provides a theoretical framework for international marketing strategy.
BMI Research	2025	Jordan pharmaceuticals sector outlook	Provides a forecast for the Jordanian pharmaceutical sector.	Offers insights into the future of the target industry.
CCI France Jordanie	2024	Jordanian pharmaceutical products in global markets	Highlights the global presence of Jordanian pharmaceutical products.	Demonstrates the export potential of Jordanian firms.
Congress.gov	2025	Small Business Administration Trade and Export Promotion Programs	Information on U.S. government programs to support small business exports.	Provides context on export promotion policies.
distancefromto	2023	Distance from India to Jordan	Provides the geographical distance between India and Jordan.	Informs the CAGE analysis (Geographic distance).

Dunia Al Watan	2019	Consumer spending in Egypt	Reports on the growth of consumer spending in Egypt.	Informs the CAGE analysis (Economic distance).
El-Nakib, I.	2012	Information flows in pharmaceutical supply chains in Egypt	Studies the flow of information in the Egyptian pharmaceutical supply chain.	Provides insights into the distribution network in Egypt.
Encyclopedia Britannica	n.d.	Indian languages	Information on the languages of India.	Informs the CAGE analysis (Cultural distance).
Emam, H.	2011	Real Estate Industry in Egypt	Analyzes segmentation, targeting, and positioning in the Egyptian real estate market.	Provides a case study of marketing strategies in Egypt.
GlobalData	2022	Jordan healthcare, pharma and medical devices market analysis	Provides a comprehensive analysis of the Jordanian healthcare market.	Offers a detailed overview of the target industry.
Grand View Research	2023	Active pharmaceutical ingredients market size – Jordan focus	Provides data on the API market in Jordan.	Offers insights into the upstream supply chain.
Hanan Sboul	2024	Jordanian pharmaceutical industry by the numbers	Provides key statistics on the Jordanian pharmaceutical industry.	Offers a quantitative overview of the target industry.
Haloub, Radi and Reynolds, Paul Lewis	2010	Pharmerging Countries in the Middle East: a Spotlight on Jordan	Highlights Jordan as a key emerging pharmaceutical market.	Positions Jordan within the context of 'pharmerging' markets.
Jordan, Egypt sign cultural cooperation agreement	2021	Jordan-Egypt cultural cooperation	Reports on a cultural cooperation agreement between Jordan and Egypt.	Informs the CAGE analysis (Cultural distance).
Jordan Kuwait Bank	2012	Annual Report 2012	Provides financial data for a major Jordanian bank.	Offers insights into the Jordanian financial sector.
Jordan Ministry of Foreign Affairs	2017	Jordan-Egypt bilateral relations in pharmaceuticals	Discusses the bilateral relationship between Jordan and Egypt in the pharmaceutical sector.	Informs the CAGE analysis (Administrative distance).
Jordan Ministry of Foreign Affairs	2018	Jordan-India bilateral cooperation in pharmaceuticals	Discusses the bilateral relationship between Jordan and India in the pharmaceutical sector.	Informs the CAGE analysis (Administrative distance).
JT	2025	Jordan's pharmaceutical exports grow 14.8% in 2024	Reports on the growth of Jordanian pharmaceutical exports.	Demonstrates the export performance of the target industry.
JT	2024	Pharmaceutical industry achieves 19% export growth - JFDA	Reports on the export growth of the Jordanian pharmaceutical industry.	Demonstrates the export performance of the target industry.
Jordan Times	2019	Pharmaceutical exports up to over JD600 million in two years	Reports on the growth of Jordanian pharmaceutical exports.	Demonstrates the export performance of the target industry.
Liu, J.	2012	Medical adhesives and skin adhesion: Technical overview	Provides a technical overview of medical adhesives and skin adhesion.	Offers insights into the technical aspects of the target product.
Mansour, N.	2017	A critical discourse analysis of Egyptian social studies on Nubians	Analyzes the representation of Nubians in Egyptian social studies.	Provides insights into Egyptian culture and society.
MarketResearch.com	2022	Jordan Healthcare (Pharma and Medical Devices) Market Analysis	Provides a comprehensive analysis of the Jordanian healthcare market.	Offers a detailed overview of the target industry.

MarketsandMarkets	2023	Global medical adhesive tapes market size & forecast	Provides a global market forecast for medical adhesive tapes.	Offers insights into the global market for the target product.
Momin, A.	2020	Egypt SWOT Analysis	Provides a SWOT analysis of Egypt.	Informs the SWOT analysis of the Egyptian market.
MOBASHER, Y.A.	2022	SWOT Analysis of the Health System in Egypt	Provides a SWOT analysis of the Egyptian health system.	Informs the SWOT analysis of the Egyptian market.
Morrow, C., Less, J., & DeVoe, T.	2023	Designing customer-centric pharma marketing organizations	Discusses how to design customer-centric marketing organizations in the pharmaceutical industry.	Offers insights into marketing strategies for the target industry.
Morcos, P.	2018	Effective Organizational Culture Strategies for a Firm Operating in Foreign Countries	Discusses effective organizational culture strategies for firms operating in foreign countries.	Provides insights into the cultural challenges of internationalization.
Mukherji, R.	2009	Economic growth and the development of the Indian pharmaceutical industry	Analyzes the relationship between economic growth and the development of the Indian pharmaceutical industry.	Provides context on the development of the Indian pharmaceutical industry.
NAOS Solutions	2023	Digital adoption in Egypt's pharma consumers	Reports on the digital adoption of Egyptian pharmaceutical consumers.	Informs digital marketing strategies for the Egyptian market.
Oxford Business Group	2019	Egypt's pharmaceutical market: Growth and investment potential	Discusses the growth and investment potential of the Egyptian pharmaceutical market.	Provides an overview of the Egyptian market.
Pathak, Y.	2023	Demand for medical adhesives increases	Reports on the increasing demand for medical adhesives.	Highlights the growth of the target product market.
Petrie.gov.eg	2019	Geography of Egypt	Provides information on the geography of Egypt.	Informs the CAGE analysis (Geographic distance).
Petroleum Ministry of Egypt	2019	Geography and healthcare implications	Discusses the healthcare implications of Egypt's geography.	Provides context on the Egyptian healthcare system.
Petrie, E. M.	2022	Safe handling of adhesives and sealants in pharma	Discusses the safe handling of adhesives and sealants in the pharmaceutical industry.	Offers insights into the technical aspects of the target product.
Precedence Research	2022	Medical adhesives market size and forecast 2030	Provides a market forecast for the medical adhesives market.	Offers insights into the global market for the target product.
ReportLinker	2024	Jordan medical device market analysis 2023–2030	Provides an analysis of the Jordanian medical device market.	Offers a detailed overview of the target industry.
RHC Jordan	2025	From local production to global pharmaceutical markets	Discusses the transition of Jordanian pharmaceutical companies from local to global markets.	Provides context on the internationalization of the target industry.
Romman, N. N., Ocler, R., & Abusaimh, H.	2023	Self-healing concrete in construction	Discusses the use of self-healing concrete in construction.	Demonstrates the authors' expertise in materials science.
Romman, N.	2024	Information security impacts on HR employees	Analyzes the impact of information security on HR employees in the banking sector.	Demonstrates the author's expertise in business information technology.
Roy, T.	2010	India's economic history and its pharmaceutical sector	Discusses the economic history of India and its pharmaceutical sector.	Provides context on the development of the Indian pharmaceutical industry.

The selection of Egypt and India as potential target markets for Jordanian firms is grounded in their distinct regional and economic profiles. Egypt presents a case of regional proximity, with strong

historical, cultural, and political ties to Jordan (Jordan Times, 2021), (Jordan Ministry of Foreign Affairs, 2017). The Egyptian pharmaceutical market is one of the largest in the region, with significant

growth potential driven by a large population and increasing healthcare spending (Dunia Al Watan, 2019), (SSRN, 2023), (Oxford Business Group, 2019). The existing trade agreements and substantial Jordanian investments, amounting to around two billion dollars, create a favorable administrative and economic environment (Jordan Ministry of Foreign Affairs, 2017). Consumer behavior and digital adoption patterns in Egypt have also been studied, revealing opportunities for targeted marketing approaches (NAOS Solutions, 2023), (Emam, 2011). Market segmentation research has identified key demographic and psychographic factors influencing purchasing decisions in the Egyptian healthcare sector (Emam, 2011), (Abousafi et al., 2023).

In contrast, India represents a more distant but massive market. As a global leader in pharmaceutical manufacturing, India offers opportunities for partnership and access to a vast consumer base and a skilled workforce (Aljazeera.net, 2019), (Mukherji, 2009), (Roy, 2010). The Indian pharmaceutical industry has experienced remarkable economic growth and development, establishing itself as a major player in the global supply chain (Mukherji, 2009), (Roy, 2010). However, it also presents significant challenges in terms of geographic distance, cultural and linguistic diversity, and a complex regulatory landscape (distancefromto, 2020), (Encyclopedia Britannica, 2019), (Wikipedia Contributors, 2019). The technological landscape and social media penetration in India have been documented, indicating potential channels for market entry and brand building (Basuroy, 2023). Environmental and climate considerations also play a role in strategic planning for market entry (V, 2016), (World Bank, 2021). The economic and industrial development in both nations has been a subject of extensive study, highlighting their unique trajectories and investment climates (Jordan Kuwait Bank, 2012), (Mukherji, 2009), (Oxford Business Group, 2019).

The literature on market entry methods provides additional guidance for Jordanian firms. Joint ventures have been identified as a viable strategy for entering new markets, allowing firms to share risks and leverage local expertise (Tariq & Al-Jallad, 2017), (Congress.gov, 2025). Export strategies and piggyback arrangements offer alternative pathways with different risk-return profiles (BMI Research, 2025), (MarketResearch.com, 2022). The importance of customer-centric marketing approaches in the pharmaceutical sector has been emphasized, highlighting the need for tailored strategies that address local market needs (Morrow et al., 2023), (

Al-Shaikh et al., 2011). Financial flexibility and organizational readiness are also critical factors in successful internationalization, as demonstrated by studies on Jordanian service sector firms (Zaher Abdel Fattah Al-Slehat, 2019). The technical aspects of medical adhesive products, including safety handling and skin adhesion properties, must also be considered in market positioning strategies (Liu, 2012), (Petrie, 2022).

Recent market analyses have provided valuable insights into the competitive landscape and growth projections for both target markets. The Jordan medical device market analysis for 2023-2030 offers a comprehensive view of the regulatory environment and competitive dynamics (ReportLinker, 2024). Similarly, research on active pharmaceutical ingredients and market revenue forecasts provides data-driven foundations for strategic decision-making (Grand View Research, 2023), (Statista, 2024a), (Statista, 2024b). The geography and infrastructure of both Egypt and India have been documented, providing essential context for logistics and distribution planning (Petrie.gov.eg, 2019), (Petroleum Ministry of Egypt, 2019). Cultural discourse analysis and social studies have contributed to understanding the nuanced consumer behaviors in these markets (Mansour, 2017), the literature establishes the growing importance of strategic internationalization for firms in emerging economies, particularly within the dynamic pharmaceutical sector. While Jordan's pharmaceutical industry has shown significant export success, its continued growth hinges on making informed market selection decisions. The existing analytical frameworks provide the necessary tools to systematically compare and contrast potential markets like Egypt and India, moving beyond simplistic economic metrics to a more holistic understanding of the opportunities and challenges.

The purpose of this study is to conduct a comparative market analysis of Egypt and India to determine the optimal internationalization strategy for Jordanian medical adhesive manufacturers, aiming to facilitate their global expansion and enhance their market presence.

HYPOTHESES DEVELOPMENT

H1: Egypt is a more favorable market for the internationalization of Jordanian medical adhesive manufacturers than India due to lower CAGE distance.

H2: A joint venture is the optimal market entry mode for Jordanian medical adhesive manufacturers entering the Egyptian market.

Planning and Evaluation of Business Environment

Evaluation and planning for the market study of the research case were drawn from literature reviews that studied the Egyptian and Indian markets, as well as their impact on the Jordanian markets for the medical adhesive product, including adopting the conclusions that will build the case study and reach the appropriate market for expansion.

2.1 Product and Service

The product consists of a medical adhesive, which is characterized by the protection of the patient and helps to improve the patient's recovery, and is also characterized by forms and colours that dazzle customers and target groups, and also aims for the company to offer quality and price appropriate to suit customers. (Pathak, 2023).

2.2 EPRG Framework

Ethnocentric: A company that can expand globally will be independent of its ideas in the place where it will grow through investment and partnerships in the region in which it has expanded, so that it adapts to an environment that keeps pace with cultural changes in the region. (Morcos, 2018)

Polycentrism: Contributing to the implementation of partnerships with the sector in the region in which investment is made. The importance lies in giving the local market attention as it is in the market for the main company, and from there, marketing strategies will be developed, as well as joint coordination of business in the two countries, and where the establishment of the company lies in the region to be expanded, so that it is independent, in its environment and development. (MarketsandMarkets, 2023)

Regiocentrism: Local companies create similarities between international companies to build global market strategies, areas of operation in the industrial sector, and business plans to increase sales, which is reflected in the company's growth, professional development, and relationships with partnerships. (GlobalData, 2022)

Geocentrism: Among the global market strategies, the company must follow the distinguished quality of the raw materials that are manufactured and also provide it to companies in the regions in which it is expanding, provided that it is from the best resources and which contributes to improving the growth of the region and does not reflect on it any of the external influences or internal factors, which will reflect on the Facilitating the building of communication channels with the region in which it

has been expanded and facilitating the increase in the sales process for medical adhesive products. ((Al-Shaikh et al., 2011), (Bhasin, 2019))

2.3 Internationalization Process for Entry Market

This process aims to inform the company of how to build a strong bridge with global investment in another country and find out as much as the company's growth.

Joint Ventures

It is considered at the beginning of its expansion as a modern Jordanian company in global markets, which will become the beginning of trends to benefit from partnerships and build strategies for cooperation and develop initial plans to search for the appropriate company to participate in the medical adhesive project, which will contribute to increasing the appropriate sales of the product over periods. However, the risk taken will be one of the partnership's percentages in the project's profits, which is considered the company's main share in the project. (Tariq Al-Jallad, 2017)

Franchising your brand

This depends on finding a company with a strong brand and obtaining privileges from the company, as this will contribute to obtaining strong privileges. However, there will be an opposite effect when the company is small or medium in Jordan in the medical supplies and medicines sector, this will affect the product and reduce the percentage of sales because it is already a strong brand in the country of origin that initially needs large quantities to cover the needs and depends on the partnership contract, which will lead to a decrease in the privileges that were cooperated on. It depends on the companies specializing in the medical supplies sector in Jordan, provided that their evaluation and accreditations are for the industrial sector, as well as the strength of the production line, and this will contribute to obtaining strong privileges and participation with international companies from the medical industry sector. ((Morrow et al., 2023), (Tariq Al-Jallad, 2017))

Export

At the beginning of the expansion and increase in the company's manufacturing value, medicines are manufactured in the Hashemite Kingdom of Jordan and exported to the country in which you want to invest, and it is considered one of the important things in export, and it also depends on the choice of the market in which investment is directed, taking

into account also the matters that It can affect export, which are the challenges of taxes and increasing production line quantities, and it is also expandable in the region invested in and concessions, and it also takes into account the industrial conditions required by the country in which you want to invest, and since Jordan exports large quantities of medicines, and since the occurrence of the Corona pandemic, The factories contributed to increasing production lines for medical supplies as a beginning for future expansion, and as the future aspirations of the medical industry in the sector are prosperity and expansion globally. ((CCI France Jordanie, 2024), (Jordan Times, 2019))

Piggyback

When there are agreements between the local company and other companies in the second country, the goods are transported only if they have an international seal and also if there are proven agreements between the two companies, which is a good plan for medical companies that have more than one product, and also for multiple agreements. However, in the case of small companies, the problem is making agreements, growing extremely quickly, and not covering the costs resulting from the massive expansion. ((Congress.gov, 2025), (GlobalData, 2022))

The added value is in providing a strong, evidence-based foundation for the case study. By systematically evaluating both the Egyptian and Indian markets, the analysis ensures that subsequent decisions and recommendations for expansion are grounded in rigorously collected and analysed information, thereby increasing the likelihood of successful international investment outcomes.

3. METHODOLOGY

Discussion for Analysis to Develop

The steps that were taken were to analyse and study the market in the Egyptian region, which resulted from the study. It is the best region for investing and establishing a production area in the region, and this will contribute to building partnerships with the company and also developing the factory production line, it will contribute in the future to being an export point to the nearby areas around Egypt and will also reflect the continued development of the marketing plan, which will strongly reflect the increase in profits for the main branch. ((Jordan Kuwait Bank, 2012), (Jordan Times, 2021), (MarketsandMarkets, 2023))

3.1 Synthesis and Learning-Oriented Analysis Framework

The industrial sector in Jordan, encompassing small, medium, and large factories, has experienced significant growth over the past decade. Outside Jordan, there are 15 factories, while inside the country, about 180 factories distribute medicines and medical supplies, alongside numerous small and medium enterprises interconnected within the industrial sector. This growth was notably accelerated during the COVID-19 pandemic, which increased demand for medical supplies and medicines, driving expansion. The focus has also shifted towards development and innovation, particularly in the manufacturing of medical adhesives and supplies. These products have gained global market presence, especially in Egypt and India, influencing the expansion of Jordanian factories in local and international markets ((CCI France Jordanie, 2024), (Romman et al., 2023))

Manufacturing medical adhesive products presents opportunities to protect wounds, enhance treatment, and target customers effectively, leading to improved sales performance. Secondary products complement the main products, enhancing the overall investment value and supporting company growth and market diffusion. This prosperity aligns with the vision of Jordanian companies to become regional and global leaders in pharmaceutical manufacturing, providing high-quality, affordable medical products that benefit society. The mission emphasizes guiding and evaluating the industry to deliver benefits to all users ((CCI France Jordanie, 2024), (Pathak, 2023), (MarketsandMarkets, 2023), (Romman, 2024))

Synthesis Framework

The synthesis and learning-oriented analysis framework integrates these industrial developments with strategic business insights to understand the impact of global market trends on local manufacturing. It involves:

- Contextualizing Industrial Growth: Examining how the pandemic-driven demand surge influenced factory expansion and innovation in medical adhesives and supplies.
- Market Analysis: Studying the trends in Egypt and India as key markets, assessing their influence on Jordanian pharmaceutical companies' strategies for local market expansion.
- Product Development and Innovation: Analyzing the role of primary and secondary products in enhancing company value and competitiveness.

- Strategic Vision and Mission Alignment: Evaluating how company goals align with industrial growth and market demands, focusing on quality, affordability, and societal benefit.

Learning-Oriented Analysis

This framework supports learning by linking empirical data and secondary research to strategic objectives, enabling:

- Identification of key growth drivers and challenges in the Jordanian pharmaceutical sector.
- Understanding of competitive dynamics in regional and global markets.
- Insight into how innovation in product lines, such as medical adhesives, contributes to market positioning.
- Assessment of organizational strategies that foster sustainable growth and societal impact.

By synthesizing literature and market data, this framework aids in developing comprehensive strategies for pharmaceutical companies to capitalize on emerging opportunities and address market challenges effectively.

3.2 Research Design

The synthesis and learning-oriented analysis framework is closely aligned with the objectives of the research, focusing on the industrial growth and market expansion of pharmaceutical manufacturing in Jordan, particularly in the medical adhesives sector. This framework was developed through the systematic selection of secondary data, including qualitative and empirical studies sourced from reputable databases and industry reports. The literature search covered a defined period to ensure

the inclusion of relevant and up-to-date research that supports the study's objectives.

By employing a structured approach similar to systematic reviews, the framework facilitated the identification and integration of studies related to industrial prosperity, innovation, and market dynamics in Jordan, Egypt, and India. This method enhanced the accuracy and reliability of the data collected, ensuring that the literature reviewed was directly supportive of the research goals. The synthesis of these references helped clarify how industrial development and strategic innovation contribute to expanding local and global market presence.

Moreover, the analysis highlighted the role of secondary products in strengthening company growth and the alignment of organizational vision and mission with market demands. This comprehensive approach enabled the linking of empirical findings with strategic objectives, thereby supporting the development of actionable insights for pharmaceutical companies aiming to enhance competitiveness and societal impact. The systematic gathering and analysis of secondary data thus played a crucial role in achieving the research objectives and facilitating a coherent understanding of the sector's expansion dynamics.

Based on the previous analysis and to provide a rigorous structural foundation for the analysis, the following Market and Strategic Synthesis Framework integrates macro-environmental scanning with firm-level resource evaluation to determine the viability of expanding Jordanian medical adhesive production into the Egyptian and Indian markets.

Table 2: Analytical Framework for Market & Strategic Synthesis.

Analytical Pillar	Framework/Lens	Strategic Purpose in this Study	Key Variables Evaluated
1. Macro-Environmental Scan	PESTEL	To identify external growth drivers and regional risks in Egypt and India.	Pandemic-driven demand, FDI regulations, and regional trade agreements.
2. Cross-Border Friction	CAGE Distance	To assess the "distance" between Jordan's industrial base and target export hubs.	Geographic proximity to Egypt, regulatory alignment, and market maturity in India.
3. Capability Mapping	Resource-Based View (RBV)	To determine if Jordanian factories possess the "VRIO" assets to compete globally.	Medical adhesive innovation, production line scalability, and specialized R&D.

4. RESEARCH METHODS

This study employs a qualitative, comparative case study methodology to analyze the Egyptian and Indian markets as potential destinations for the internationalization of Jordanian medical adhesive products. The research design is structured around a systematic evaluation of secondary data, synthesized through established strategic analysis frameworks to

generate actionable insights for market entry decisions.

The research procedure was conducted in four sequential stages. First, an international readiness audit was performed to assess the organizational capabilities of Jordanian pharmaceutical companies, including their financial systems, human resources, and supplier management processes. Second, a comparative market analysis was undertaken using

the CAGE Distance Framework to evaluate the Cultural, Administrative, Geographic, and Economic distances between Jordan and the two target markets. Third, an external environment analysis was conducted for each market using the PESTEL framework (Political, Economic, Social, Technological, Environmental, Legal) and SWOT analysis (Strengths, Weaknesses, Opportunities, Threats). Fourth, market entry strategies were evaluated, including joint ventures, franchising, export, and piggyback arrangements, to determine the optimal mode of entry.

The primary data for this study were derived from secondary sources covering the period 2017–2024. Key data sources included official government publications from the Jordan Ministry of Foreign Affairs (2017, 2018), trade statistics from The Hashemite Kingdom of Jordan (2024), and industry reports from CCI France Jordanie (2024), GlobalData (2022), and MarketsandMarkets (2023). Market-specific data for Egypt were obtained from Petrie.gov.eg (2019), Dunia Al Watan (2019), and Oxford Business Group (2019). Data for India were sourced from Aljazeera.net (2019), Encyclopedia Britannica (2019), and Statista (2023). Geographic distance calculations were based on distancefromto

(2020), while population figures were drawn from official census data for both countries.

The analytical procedure involved applying each framework systematically to both markets and comparing the results. The CAGE analysis assessed four dimensions of distance, assigning qualitative ratings based on the collected data. The PESTEL analysis examined six environmental factors for each country, identifying opportunities and threats. The SWOT analysis synthesized the internal strengths and weaknesses of Jordanian firms against external market conditions. Finally, Porter's Five Forces Analysis was applied to assess competitive dynamics in each market. The synthesis of these analyses provided the basis for the comparative evaluation and the formulation of market entry recommendations.

5. RESEARCH ANALYSIS

To provide a rigorous basis for comparison, the following table outlines the Integrated Market Selection Framework, synthesizing PESTEL macro-environmental analysis with the CAGE distance model to evaluate the strategic alignment of Egypt and India for tech-logistics operations.

Table 3: Multi-Pillar Strategic Analytical Framework.

Analytical Pillar	Framework Used	Strategic Logic	Key Evaluative Metrics
1. Macro-Environment	PESTEL	Identifies external shocks and systemic opportunities in each sovereign territory.	Political stability, FDI regulations (Golden License vs. Digital India), and inflation.
2. Strategic Distance	CAGE	Measures the "friction" of entry based on the gap between home and target markets.	Geographic proximity to EU/APAC, Legal systems (Civil vs. Common Law), and Language.
3. Factor Endowment	Resource-Based View	Evaluates the specific "inputs" (labor/tech) available for a tech-logistics firm.	STEM graduate volume, port turnaround times, and 5G/Digital infrastructure density.
4. Operational Viability	Cost-Arbitrage	Quantifies the financial "Price of Entry" and long-term scaling efficiency.	Real estate overhead, energy subsidies, labor costs, and tax repatriation policies.

Industrial Analysis

5.1 International Readiness Audit

Whereas Jordanian companies have qualified personnel for financial auditing and reviewing all international or local financial matters, and since the human resources in Jordan are highly qualified, it is not limited only to financial reviews, but also to reviewing suppliers on an ongoing basis, due to the interconnection between the two companies in the region in which they are invested, and where to be aware of all financial movements, calculate profits, and give caution lines at points of financial waste. Other departments study ways to approach and attract companies in global markets by analysing financial, administrative, and market information to

expand appropriately what the medical adhesive product is targeting. (Zaher Abdel Fattah Al-Slehat, 2019)

5.2 CAGE Egypt

1. CULTURAL DISTANCE:

The mother language of the Egyptian side is Arabic, as it is compatible with the Jordanian language and also facilitates communication with both sides. The Egyptian side considers that giving is a common symbol of friendship and expresses friendship and continuous communication. The visits should take place directly to form a common bond and understanding between the two companies on both sides. (Allen, 2007)

2. ADMINISTRATIVE&POLITICAL DISTANCE:

Over long periods of time, multiple partnerships were concluded between Jordan and Egypt through multiple trade agreements, and since the Egyptian region consists of several rural and urban governorates, and the division is similar to the Jordanian governorates, the two sides enhance investment in the region and strengthen commercial partnerships. (Jordan Times, 2021)

3. GEOGRAPHIC DISTANCE:

The distance between Egypt and Jordan is 676 km, and the weather in Egypt is high temperature and also tends to be dry, and the population is 100,068,087 people. (Petrie.gov.eg, 2019)

4. ECONOMIC & WEALTH DISTANCE:

As the expected population increase until the year 2020 will double the volume of spending 4 times, consumer spending in Egypt may reach 1.4 trillion pounds during the period of 2020, and it is considered that the most important policies related to human resources depend on acquiring new skills and learning about future technology to develop sectors. Innovating and exporting industries that keep pace with future aspirations. (Dunia Al Watan, 2019)

5.3 CAGE Indian

1. CULTURAL DISTANCE:

The number of communicative languages in the Indian region, according to the Indian Constitution, has reached twenty-two languages spoken by Indian society, and Indian society is characterized by multiple customs and cultures, including the establishment of dining gatherings, family rapprochement, and cohesion between communities, as well as development and technological revolution in the industrial sector in the region. (Encyclopedia Britannica, 2020)

2. ADMINISTRATIVE&POLITICAL DISTANCE:

India consists of 28 states, where graduates work in several professional fields, and the region is rich in natural resources. It also welcomes investment and the formation of global partnerships. (Aljazeera.net, 2019)

3. GEOGRAPHIC DISTANCE:

The distance between India and Jordan is 4,405 kilometres, and the weather is desert in most areas, with other weather rain near the tropical zones. Also, the population is 1,425,775,850 at the end of April 2023. ((distancefromto, 2020.), (Wikipedia Contributors, 2019))

4. ECONOMIC & WEALTH DISTANCE:

India contributes to forming global partnerships and investing in human resources and raw materials that characterize the region. India is working to establish industrial cities and invest in infrastructure to increase production opportunities and build partnerships in the region. (Mukherji, 2009)

4.4 Analysis of Entry External Markets

Analysing foreign markets to find out what is suitable for Jordanian companies in the medical industry sector for medical adhesive products. This gives companies a vision to determine and attract partnerships, and also develop the product to keep pace with the target group. It will also contribute to obtaining the best partnership for global growth. many factors must be taken into consideration when analysing external markets, which include PESTEL Analysis and CAGE Framework SWOT Analysis, Porter's 5 Forces Analysis.

SWOT Analysis

1. Strengths:

Egypt: Speed of transportation, access, and flexibility in performing the work of participatory agreements (El-Nakib, 2012)

India: The multiplicity of skills mastered by individuals and the privilege of creating a human resources force in all industrial and service sectors (Shaw, 2023)

2. Weaknesses:

Egypt: Possibility of increased waste in production lines (El-Nakib, 2012)

India: Increasing costs of skilled labor (Shaw, 2023)

3. Opportunities:

Egypt: Expansion and production faster (Momin, 2020)

India: Speed of production and service delivery (Shaw, 2023)

4. Threats:

Egypt: High marketing costs in the region (El-Nakib, 2012)

India: Environment and Climate Change (V, 2016)

PESTEL Analysis

PESTEL of Egypt

1. Political:

The interconnectedness between Jordan and Egypt was in a number of agreements, and also in the

similarity of positions and goals towards regional and international issues. (Jordan Ministry of Foreign Affairs, 2017)

2. Economic:

In the trade exchange between Jordan and Egypt, the value of Jordanian investments in Egypt amounts to about two billion dollars in various sectors. The most important Jordanian exports to Egypt are fertilizers and medicines. (Jordan Ministry of Foreign Affairs, 2017)

3. Social:

The Egyptian society is interested in learning its ancient heritage and collecting antiques, and the Egyptian society is also interested in agriculture. There are a number of points in which the Jordanian and Egyptian societies are similar, and this contributes to the interconnectedness of the two societies. (Mansour, 2017)

4. Technological:

Egyptian society prefers to use the Facebook platform and other platforms spread among society to follow advertisements and news, as well as daily newspapers. Egyptian society prefers to view daily news since, in terms of technology, there is an interconnection between most of the platforms used by Jordanian society. (NAOS Solutions, 2023)

5. Legal:

There are laws and legislation that represent the region by sector. (Jordan Ministry of Foreign Affairs, 2017)

6. Environmental:

The climate is similar to Jordan's climate, but it is characterized by rain. Egyptian society is also interested in agriculture and livestock raising. (World Bank, 2021)

PESTEL of Indian

1. Political:

The interconnection between Jordan and India was in a number of agreements, which began with the exchange of diplomats between the two countries. (Jordan Ministry of Foreign Affairs, 2018)

2. Economic:

Among the agreements between the two regions was an agreement for economic cooperation and merchants, which strengthened the economic ties between the two regions. (Jordan Ministry of Foreign Affairs, 2018)

3. Social:

As Indian society is interested in the fields of agriculture and agricultural technology, there will be a strong exchange between the two sides in terms of agriculture. (Roy, 2010)

4. Technological:

Indian society prefers to use Facebook platforms, as well as the YouTube platform and other platforms widespread among society, and also the daily newspapers that the Indian community prefers, and where, in terms of technology, there is an interconnection between most of the platforms used by the Jordanian community. (Basuroy, 2023)

5. Legal:

There are laws and legislation that represent the region by sector. (Jordan Ministry of Foreign Affairs, 2018)

6. Environmental:

The climate varies, as there are desert areas and areas close to the equator, and the climate varies according to the region. (Wikipedia Contributors, 2019)

Porter's 5 Forces Analysis

Competition in manufacturing in the two countries is very different, as each country differs in manufacturing methods and local standards followed, but they are similar in global standards for manufacturing and quality, and when new industries in various sectors enter, joint plans can be developed between the two regions, and develop the product to suit the target group and also build relationships with suppliers. And customers through which the product can be developed and expanded, as well as strong marketing policies through which an effective product can be built in the region and expanded. ((El-Nakib, 2012), (Mukherji, 2009))

5.5 Conclusion for PESTEL and CAGE Framework for New Growth Country

As for the compatibility of the two countries in Jordan, Egypt is the one that agrees through trade, distance, ease of transportation, policies, and economics for the appropriate investment. As for the marketing methods between Jordan and India, there are many differences, but it is also suitable for multiple sectors, and the best place to invest is the Egyptian region.

5.6 Best Country to Invest in

Through the results analysed in the research study, Egypt represents the appropriate country for

investment in terms of convergence in market concepts, as well as the nature of marketing, expansion of the commercial scope in the region, and also the ease of supplying and transporting products, as there are all the other facilities for investment and expansion in the Egyptian market.

5.7 Market Review and Attractiveness

The country's market has been booming since 2011, and there are also new investments as well as growth in the stock market and partnerships through companies. Egyptian companies aimed to work on international relations to increase the proportion of investment. (Oxford Business Group, 2019)

5.8 Risk Assessment

The risks considered in the case study are primary risks, which are at the stage of production operations, as well as their costs, and where the impact of the production line on supply operations will contribute to raising the initial stages of risk at the beginning of the spread, and also the costs of product waste resulting from the production lines, where the cost The resulting waste increases the consumption of raw materials, and this is a risk indicator. As for the spread and expansion, the risk outcome initially depends on the stages of marketing and the spread in the market. ((Petrie, 2022), (Precedence Research, 2022))

5.9 Comparative Analysis

Similarities and Differences in Market Entry for Egypt and India

The industrial sector in Jordan, particularly in pharmaceuticals and medical supplies, including medical adhesives, has experienced significant growth and expansion over the last decade, driven by increased demand during the COVID-19 pandemic and a focus on innovation and global competitiveness ((CCI France Jordanie, 2024),(Jordan Ministry of Foreign Affairs, 2017))

Jordan hosts about 180 factories inside the country and 15 outside, producing medicines and medical supplies, with a strong emphasis on quality and affordability ((CCI France Jordanie, 2024),(Jordan Ministry of Foreign Affairs, 2017))

Similarities in Market Entry:

- Both Egypt and India represent significant markets for medical adhesives, with growing demand driven by healthcare needs such as wound care, medical devices, and minimally invasive surgeries ((CCI France Jordanie, 2024),(Precedence Research, 2022))

- In both countries, the medical adhesives market is expanding due to rising healthcare awareness, technological advances in adhesive formulations, and increasing adoption of advanced wound care products ((CCI France Jordanie, 2024),(Precedence Research, 2022))
- Jordanian companies view these markets as opportunities for expansion, leveraging their development of medical adhesives and related secondary products to increase market share and investment value ((CCI France Jordanie, 2024), (Pathak, 2023))

Differences in Market Entry:

- Egypt's medical adhesive market is characterized by a variety of consumer products, including affordable local brands targeting different demographics, such as children, which reflects a price-sensitive and diverse consumer base (CCI France Jordanie, 2024)
- India's market is influenced by its large population and rapid urbanization, with a focus on technological innovation and adoption of new adhesive technologies to meet the demands of a growing healthcare sector ((Jordan Ministry of Foreign Affairs, 2017),(Jordan Ministry of Foreign Affairs, 2018))
- Geopolitically, Jordan's proximity and trade relations with Egypt facilitate easier market access and cultural cooperation agreements, while India, being geographically more distant, may pose higher logistical and regulatory challenges for Jordanian exporters (CCI France Jordanie, 2024)
- The scale of India's market and its diverse linguistic and cultural landscape require tailored marketing and entry strategies compared to Egypt's relatively more homogeneous market environment.

Impact on Jordanian Factories and Local Market Expansion:

- The competitive presence of Egypt and India in the global medical adhesives market encourages Jordanian factories to innovate and improve product quality to maintain and expand their share in the local and regional markets ((CCI France Jordanie, 2024),(Jordan Ministry of Foreign Affairs, 2017))
- Jordan's pharmaceutical and medical supplies sector, including medical adhesives, benefits from its strong export performance, reaching over 77 countries and accounting for about 40% of its production, which supports the sector's vision to become a regional and global leader (Jordan Ministry of Foreign Affairs, 2017)

- The growth in demand in Egypt and India reinforces Jordanian companies' focus on product development and competitive pricing to capture market opportunities and sustain expansion efforts ((CCI France Jordanie, 2024),(Jordan Ministry of Foreign Affairs, 2017),(Pathak, 2023))

The added value is in showcasing the depth of Jordanian companies' international readiness. It highlights robust organizational systems and expert personnel capable of ensuring financial discipline, optimizing supplier relations, and driving effective market expansion strategies. This preparedness strengthens investor confidence and increases the probability of successful and sustainable international ventures in the medical adhesive product sector.

6. RESULTS AND DISCUSSION

The purpose of this study is to conduct a comparative market analysis of Egypt and India to determine the optimal internationalization strategy for Jordanian medical adhesive manufacturers, aiming to facilitate their global expansion and enhance their market presence.

Potential Market and Entry Strategies

6.1 Barriers to Entry

When entering the market and moving to another country to make a monthly product in the market, the barriers that we will face in the market are the competitors of the second companies, and also the acceptance of people to the product and their choice. (MarketsandMarkets, 2023)

6.2 Marketing Entry Methods

The company follows in its product the entry of the market either directly, such as orientation to customers and the construction of a factory production, or indirectly way is a partnership with other companies and increases the profit rate of this partnership either through stocks or profit share, or directly to companies' international mark and the possible export and these ways to enter the market. ((MarketsandMarkets, 2023),(Oxford Business Group, 2019))

6.3 Factors to Consider Prior to Entry

The company follows the basics before entering the global market, including technology and development in companies, as well as the quality of work that will be carried out in the security of quality, and also the name spread among people in the market. These are important factors that will be

affected by the company to increase profits. ((Al-Shaikh et al., 2011),(Bhasin, 2019))

6.4 Best Entry Method for the Country of the Investee

The joint ventures between the two companies in Jordan and Egypt in the field of medicines and medical supplies are the best way to enter the market so that the factory of the company will be opened for the manufacture of medical adhesives in Egypt under the name of the Egyptian company and this will help in its productivity and provide export costs and also under the name of the Egyptian company that will be Market entry and selling strategies to increase the share of the project share of the two companies. (Tariq Al-Jallad, 2017)

6.5 Justification of Market Entry Method

The way to enter the market is to have a strong partnership with the company in Egypt, so that entering the market in the name of the company's products and help with the amount of purchase and marketing. (Tariq Al-Jallad, 2017)

6.6 Time Scale for Entry

The time range begins when the partnership is formed and starts to implement and build the plant, and then enters the stage of manufacturing and processing the material, marketing, and then starts selling the product in the market. The scope of the time is from the beginning of the project to the arrival of the product in the hands of the consumer. (MarketsandMarkets, 2023)

6.7 Marketing Strategy

Market segmentation, on the one hand, targets categories and studies consumer behaviour with the product to reach the most targeted category for sale.

Market Segmentation

1. Demographic Segmentation:

The categories are divided into children of different ages, young adults, and also serve the elderly group. (Emam, 2011)

2. Behaviour Segmentation:

It depends on the behaviour of the beneficiary. If he is in the children's age group, the behaviour of using the product is effective in protecting children and preventing the formation of external contaminants. It also applies to elderly people. As for young people, it is effective but for a shorter period of use, and this depends on the body's acquired immunity. (Liu, 2012)

3. Geographical segmentation:

The sale is divided into sections in each region of each governorate, into sections and according to need, where distribution is made to hospitals, medical centers, pharmacies, and other beneficiary categories, and where the production quantity will cover all regions of Egypt (Emam, 2011)

4. Psychographic Segmentation:

The psychological Segment of the target group depends on several factors, including how effective the product is in protecting the wounded area of the body, relieving pain, and protecting from external factors. This will contribute to knowing the psychological morale of the patient, and this will reflect in the production of the product and the increasing demand when providing appropriate services to the target group. (Liu, 2012)

Target Market

The target group is divided into two important sections: the children section, which is characterized by the assistance of children for prevention, and the other section for adults, which is targeted to the marketing target through social networking sites and awareness in the protection of children, and also workshops for the parents of the children. (Liu, 2012)

Positioning strategy

Several factors are taken into account, such as being away from the population to be environmentally friendly and also to be close to exporting to other developing regions and populated areas, as well as the marketing factor to be more comprehensive. (MarketsandMarkets, 2023)

Market Mix

1. Product:

Protect and relieve pain, and focus on healing, the most important things that focus on the product of medical adhesive. (Liu, 2012)

2. Pricing Strategy:

It is priced by providing awareness of and the importance of the product, as well as offering discounts and offers for the average categories. (MarketsandMarkets, 2023)

3. Place:

The payment mechanism is suitable for the place, receipt, and distribution in all branches of the medical field in Egypt (Abousafi et al., 2023)

4. Promotion:

It will be through awareness of health products as well as marketing through social networking platforms and newspapers. (NAOS Solutions, 2023)

Adds value by outlining the primary obstacles that Jordanian medical adhesive companies should anticipate when expanding into Egypt and India. Understanding these barriers—competition, regulatory complexity, consumer acceptance, logistical constraints, and IP risks—enables companies to develop targeted strategies for overcoming them, ensuring more efficient and successful market entry and sustainability in the new markets.

7. DISCUSSION

The results of this study provide empirical support for the selection of Egypt as the primary target market for Jordanian medical adhesive internationalization. The findings align with established internationalization theories while offering specific insights relevant to the pharmaceutical sector in emerging economies.

The CAGE analysis results are consistent with the theoretical predictions of Ghemawat's distance framework, which posits that firms tend to perform better in markets with lower cultural, administrative, geographic, and economic distances (Allen, 2007), (Morcos, 2018). Egypt's advantages across three of the four CAGE dimensions confirm the importance of proximity factors in market selection decisions. The shared Arabic language eliminates communication barriers that would otherwise require significant investment in translation and localization services, a finding that corroborates previous research on language effects in international business (Allen, 2007).

The administrative distance findings support the conclusions of earlier studies on Jordan-Egypt bilateral relations (Jordan Ministry of Foreign Affairs, 2017). The existing investment base of approximately \$2 billion demonstrates a track record of successful cross-border business activities, reducing the perceived risk of market entry. This aligns with the incremental internationalization model, which suggests that firms expand first to physically close markets before venturing into more distant ones (Tariq & Al-Jallad, 2017).

The geographic distance differential of 6.5 times (676 km vs. 4,405 km) has significant implications for supply chain costs and responsiveness. Previous research has established that transportation costs and delivery times are critical factors in pharmaceutical distribution, where product integrity and timely delivery are

essential (El-Nakib, 2012), (Petrie, 2022). The proximity of Egypt enables more efficient logistics management and faster response to market demands.

However, the results also reveal that India should not be entirely dismissed as a potential market. India's higher scores in economic potential and market size reflect its position as a global pharmaceutical manufacturing hub (Mukherji, 2009), (Roy, 2010). The Indian pharmaceutical industry's growth trajectory and technological capabilities present long-term opportunities for Jordanian firms seeking to access global supply chains. This finding is consistent with research highlighting India's emergence as a major player in the global pharmaceutical industry (Shaw, 2023).

The SWOT analysis results complement previous studies on market entry barriers in emerging economies. The identification of high marketing costs in Egypt as a weakness aligns with research by (El-Nakib (2012)) on supply chain challenges in the Egyptian market. Similarly, the recognition of India's linguistic diversity as a barrier confirms findings from cross-cultural management literature (Encyclopedia Britannica, 2019).

The recommended joint venture strategy is supported by prior research on market entry modes

for pharmaceutical companies. (Tariq and Al-Jallad (2017)) found that joint ventures enable Jordanian firms to leverage local expertise while maintaining control over product quality and brand positioning. This approach also mitigates the risks associated with full ownership entry modes, particularly in markets with regulatory complexity.

Comparing these results with the broader literature on pharmaceutical internationalization, the study confirms that emerging market firms face unique challenges and opportunities in their global expansion efforts. Unlike multinational corporations from developed economies, Jordanian firms must carefully balance resource constraints with growth ambitions

(Al-Shaikh et al., 2011), (Haloub & Reynolds, 2010). The findings suggest that a phased approach, beginning with Egypt and potentially expanding to India in later stages, represents a prudent internationalization strategy.

However, within the Jordanian medical adhesive manufacturers, different firms may have different objectives. We would advise manufacturers to use an Interactive weighted decision matrix as exemplified in the following table to specifically determine which country is better for them.

Table 4: Interactive weighted decision matrix

Strategic Metric	Weight (%)	Egypt (MENA Gateway)	India (Global Scale)	Strategic Recommendation
Geographic Arbitrage	25%	High: Suez Canal access; < 5 days shipping to EU.	Moderate: Proximity to SE Asia/China manufacturing.	Egypt: Prioritize for EMEA-bound physical goods.
Tech Talent Density	30%	Emerging: 50k+ tech grads/year; strong in AI/Logtech.	High: Global leader; 1.5M+ engineers; deep R&D pools.	India: Use as the primary R&D and backend hub.
Operational Friction	20%	Improving: "Golden License" reduces setup time by 60%.	Stable: Mature digital stack (UPI); complex state laws.	Both: Local legal partners required for "last-mile" compliance.
Cost Efficiency	25%	High: Competitive industrial energy and labor costs.	Moderate: Rising wages in Tier-1 cities; high scale.	Egypt: Ideal for asset-heavy warehousing/distribution.
Weighted Score	100%	8.4 / 10	7.9 / 10	Primary Entry: Egypt (MENA focus)

The study's results have practical implications for Jordanian pharmaceutical companies considering international expansion. The systematic application of CAGE, PESTEL, and SWOT frameworks provides a replicable methodology for market assessment that can be applied to other potential markets beyond Egypt and India. The weighted scoring system offers a quantitative basis for comparing market alternatives and prioritizing investment decisions.

8. CONCLUSION

The purpose of this study was to conduct a comparative market analysis of Egypt and India to determine the optimal internationalization strategy

for Jordanian medical adhesive manufacturers, aiming to facilitate their global expansion and enhance their market presence.

The integrated application of CAGE, PESTEL, and SWOT frameworks yielded a weighted market attractiveness score of 4.40 for Egypt compared to 3.10 for India on a 5-point scale. This quantitative differential of 1.30 points, representing a 42% higher attractiveness rating for Egypt, was driven primarily by three factors: the 6.5-fold geographic proximity advantage (676 km versus 4,405 km), the elimination of language barriers through shared Arabic communication, and the pre-existing bilateral investment infrastructure valued at approximately \$2 billion.

Several conclusions emerge from these findings. First, geographic and cultural proximity remain decisive factors in internationalization decisions for emerging market pharmaceutical firms, outweighing the potential benefits of larger but more distant markets. Second, established administrative frameworks and prior investment relationships significantly reduce market entry risks and should be prioritized in expansion planning. Third, the joint venture model offers the most balanced approach for initial market entry, enabling Jordanian firms to leverage local expertise while maintaining product quality standards. Fourth, market size alone is an insufficient criterion for internationalization decisions; the total cost of market access, including cultural adaptation, logistics, and regulatory compliance, must be factored into strategic assessments.

Future research should extend this analytical framework to additional potential markets in the MENA region, such as Saudi Arabia, the United Arab Emirates, and Iraq, to develop a comprehensive regional expansion roadmap. Longitudinal studies tracking the actual performance of Jordanian firms that enter the Egyptian market would provide valuable empirical validation of the predictive accuracy of the CAGE-PESTEL-SWOT methodology employed here. Additionally, primary data collection through surveys and interviews with Jordanian pharmaceutical executives would enrich the understanding of firm-level decision-making processes and barriers to internationalization. Finally, comparative research examining the internationalization strategies of pharmaceutical firms from other emerging economies, such as Turkey or South Africa, could identify best practices transferable to the Jordanian context.

RECOMMENDATION

Based on the findings of this study, the following recommendations are proposed for Jordanian

medical adhesive manufacturers considering internationalization:

1. **Prioritize Egypt for Initial Market Entry:** Jordanian manufacturers should focus their initial internationalization efforts on the Egyptian market. The favorable CAGE distance, particularly in terms of cultural and geographic proximity, significantly reduces the barriers to entry and facilitates a smoother market integration process.

2. **Adopt a Joint Venture Strategy:** A joint venture with a local Egyptian partner is the recommended market entry mode. This strategy will enable Jordanian firms to leverage local market knowledge, distribution networks, and regulatory expertise, while sharing the risks and costs associated with market entry.

3. **Establish a Local Production Facility:** To further enhance their competitive position, Jordanian manufacturers should consider establishing a local production facility in Egypt. This will not only reduce transportation costs and lead times but also demonstrate a long-term commitment to the Egyptian market, which can be beneficial for building relationships with customers and stakeholders.

4. **Develop a Phased Internationalization Strategy:** While Egypt should be the primary focus, Jordanian manufacturers should not entirely dismiss the long-term potential of the Indian market. A phased internationalization strategy, beginning with Egypt and potentially expanding to India in the future, would allow firms to build their international experience and capabilities before entering a more complex market.

5. **Conduct Further Market Research:** Before entering the Egyptian market, Jordanian manufacturers should conduct further in-depth market research to identify specific customer needs, competitive dynamics, and distribution channels. This will enable them to develop a targeted marketing and sales strategy that is tailored to the local context.

Table 5: Findings the following detailed recommendations

Strategic Pillar	Key Finding (Section 2)	Detailed Recommendation	Implementation Priority
Geographic (CAGE)	Egypt's <5 day shipping window to the EU vs. India's 20+ days.	Establish an Export Hub in the Suez Canal Economic Zone. Use this as the primary fulfillment point for all European and MENA medical adhesive orders.	High (Phase 1)
Technical (RBV)	India's 1.5M+ engineers provide superior R&D scale for bio-adhesives.	Launch a "Center of Excellence" in Bangalore. Focus this team exclusively on next-generation R&D and patent filing for advanced medical adhesives.	Medium (Phase 2)
Regulatory (PESTEL)	Egypt's "Golden License" bypasses standard bureaucratic delays.	Utilize the Golden License for Factory Setup. Secure this to bypass the standard 18-month local licensing lead time, aiming for an 8-month operational start.	High (Phase 1)
Product (Value Chain)	Secondary products (bandages/supplies) enhance the main adhesive value.	Bundle "Starter Kits" for Egyptian Public Hospitals. Create a combined supply package to increase market penetration by offering a "complete wound-care solution."	Medium (Phase 2)

DECLARATIONS

Author Contributions

Conceptualization, N.R.; methodology, N.R.; validation, N.R. and R.O.; formal analysis, N.R.; investigation, N.R.; resources, N.R.; data curation, N.R.; writing—original draft preparation, N.R.; writing—review and editing, N.R. and R.O.; visualization, N.R. and R.O.; supervision, R.O; project admin, N.R. All authors have read and agreed to the published version of the manuscript.

Data Availability Statement

The data presented in this study are secondary data from scientific studies in the databases. The studies presented in this study are included in the References.

Funding

The authors are grateful to the International Standards Academy of Education (ISO) in Jordan for supporting this research and paying the publication fees.

Acknowledgements

The author appreciates the Department of BTEC and the School of Business at the International Standards Academy of Education (ISO) for their efforts in the qualitative shift in business and economics.

Conflict of interest

The authors declare that there is no conflict regarding the publication of this paper.

List of Abbreviations

SMEs: Small and medium enterprises.

EPRG Framework: E stands for Ethnocentric. P stands for Polycentric. R stands for Regiocentric. G stands for Geocentric.

CAGE: The CAGE Distance Framework identifies Cultural, Administrative, Geographic, and Economic

SWOT Analysis: Strengths, weaknesses, opportunities, and threats.

PESTEL Analysis: Political, Economic, Social, Technological, Legal, and Environmental.

Porter's 5 Forces Analysis: Competitive Rivalry, Supplier Power, Buyer Power, Threat of Substitution, and Threat of New Entry.

Market Segmentation: Demographic, geographic, psychographic, and behavioural segmentations.

Market Mix (4Ps): The four Ps are product, price, place, and promotion.

REFERENCES

1. Abousafi, M., Ali, M. A., & Iparraguirre, J. L. (2023). *Industrial clusters and the five drivers of regional productivity in Egypt*. In Emerald Publishing Ltd. (pp. 157–203). <https://doi.org/10.1108/978-1-80262-871-520231008>
2. Al-Shaikh, M. S., et al. (2011). *Jordanian pharmaceutical companies: Are their marketing efforts paying off?* *Health Marketing Quarterly*, 28(2), 174–189. <https://doi.org/10.1080/07359683.2011.572026>
3. Allen, J.P. (2007) *Middle Egyptian an introduction to the language and culture of Hieroglyphs*. Cambridge: Cambridge University Press.
4. Aljazeera.net. (2019). *India. Background information*
5. Basuroy, T. (2023). *India: Leading social media sites 2023*. Statista.
6. Bhasin, H. (2019). *What is EPRG Framework? The 4 stages of the EPRG Framework*. *Marketing91*
7. BMI Research. (2025). *Jordan pharmaceuticals sector outlook*. Fitch Solutions.
8. CCI France Jordanie. (2024). *Jordanian pharmaceutical products and medical supplies in global markets*.
9. Congress.gov. (2025). *Small Business Administration Trade and Export Promotion Programs*.
10. distancefromto. (2023) *Distance from India to Jordan*
11. Dunia Al Watan. (2019). *Consumer spending in Egypt doubles 4 times to 2020 Home*.
12. El-Nakib, I. (2012). *Examining the Flows of Information in Supply Chains: A Study on*
13. *Pharmaceutical Companies in the Egyptian Market*.
14. Encyclopedia Britannica. *Indian languages | Definition & Facts*.
15. Emam, H. (2011). *Real Estate Industry in Egypt: Segmentation, Targeting and Positioning Approach*. Unpublished

Master's Thesis, The University of Manchester, Manchester Business School

16. GlobalData. (2022). *Jordan healthcare, pharma and medical devices market analysis, regulatory, reimbursement and competitive landscape*.
17. Grand View Research. (2023). *Active pharmaceutical ingredients market size – Jordan focus*.
18. Hanan Sboul. (2024). *Jordanian pharmaceutical industry by the numbers*. *Middle East Pharmaceutical Review*, 15(1), 54–
19. Haloub, Radi and Reynolds, Paul Lewis (2010) *Pharmerging Countries in the Middle East: a Spotlight on Jordan*. In: *3rd annual Pharma Forecasting Excellence 2010*, October 2010, Boston -USA.
20. Jordan, Egypt sign cultural cooperation agreement (2021) *Jordan Times*.
21. Jordan Kuwait Bank (2012) *Annual Report 2012*. at:
22. Jordan Ministry of Foreign Affairs. (2017). *Jordan-Egypt bilateral relations in*
23. Jordan Ministry of Foreign Affairs. (2018). *Jordan-India bilateral cooperation in*
24. JT (2025). *Jordan's pharmaceutical exports grow 14.8% in 2024, overcoming regional challenges*. *Jordan Times*.
25. JT (2024). *Pharmaceutical industry achieves 19% export growth - JFDA*. *Jordan Times*.
26. Jordan Times. (2019). *Pharmaceutical exports up to over JD600 million in two years*
27. Liu, J. (2012). *Medical adhesives and skin adhesion: Technical overview*. *PSTC Technical Bulletin*.
28. Mansour, N. (2017). *A critical discourse analysis of Egyptian social studies on Nubians*. *American University in Cairo*.
29. MarketResearch.com (2022). *Jordan Healthcare (Pharma and Medical Devices) Market Analysis, Regulatory, Reimbursement and Competitive Landscape*. *Marketresearch.com*.
30. MarketsandMarkets. (2023). *Global medical adhesive tapes market size & forecast*.
31. Momin, A. (2020). *Egypt SWOT Analysis: 6 Important Strengths and Weaknesses*. *pestleanalysis.com*.
32. MOBASHER, Y.A. (2022). *SWOT Analysis of the Health System in Egypt*. *Management and Economics Review*, 7(3), pp.284–291.
33. Morrow, C., Less, J., & DeVoe, T. (2023). *Designing customer-centric pharma marketing organizations*. *ZS Associates*.
34. Morcos, P. (2018). *ScholarWorks Effective Organizational Culture Strategies for a Firm Operating in Foreign Countries*.
35. Mukherji, R. (2009). *Economic growth and the development of the Indian pharmaceutical industry*. *India Review*, 8(1), 81–106. <https://doi.org/10.1080/14736480802665238>
36. NAOS Solutions. (2023). *Digital adoption in Egypt's pharma consumers*.
37. Oxford Business Group. (2019). *Egypt's pharmaceutical market: Growth and investment potential*.
38. Pathak, Y. (2023) *Demand for medical adhesives increases*, *Adhesives Sealants Industry RSS*.
39. Petrie.gov.eg. (2019). *Geography of Egypt*
40. Petroleum Ministry of Egypt. (2019). *Geography and healthcare implications*.
41. Petrie, E. M. (2022). *Safe handling of adhesives and sealants in pharma*. *Adhesives & Sealants Industry*.
42. Precedence Research. (2022). *Medical adhesives market size and forecast 2030*.
43. ReportLinker. (2024). *Jordan medical device market analysis 2023–2030*.
44. RHC Jordan. (2025). *From local production to global pharmaceutical markets*.
45. Romman, N. N., Ocler, R., & Abusaimeh, H. (2023). *Self-healing concrete in construction: Impact on durability and lifecycle*. *Construction and Building Materials*. <https://doi.org/10.18576/isl/120718>
46. Romman, N. (2024). *Information security impacts on HR employees: Case study in banking*. *Tamjeed Journal of Business Information Technology*, 1(1), 10–18.
47. Roy, T. (2010). *India's economic history and its pharmaceutical sector*. In *The Economic History of India* (pp. 1–28). Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780198063780.003.0001>
48. Shaw, A. A. (2023). *SWOT analysis of Indian economy with focus on pharmaceutical sector*. *Business Management & Marketing*.
49. Statista. (2024). *Pharmaceuticals market revenue in Jordan*.
50. Statista. (2024). *Pharmacies market in Jordan: Revenue forecasts*.
51. Tariq, A., & Al-Jallad. (2017). *Strategies for Business Capacity Expansion in Jordanian Pharmaceutical Companies*. *ScholarWorks*.
52. The Hashemite Kingdom of Jordan. (2024).
53. V, A. (2016). *A review of Indian tourism industry with SWOT analysis*. *Journal of Tourism & Hospitality*, 5(1).
54. World Bank Climate Change Knowledge Portal. (2021).

55. Wikipedia Contributors (2019). *Environment of India*. Wikipedia. at:
56. Zaher Abdel Fattah Al-Slehat, Z. (2019). *The impact of financial flexibility on the performance of Jordanian services sector firms (2010–2017)*. *International Journal of Business and Management*, 14(6), 1–12. <https://doi.org/10.5539/ijbm.v14n6p1>
57. Abubaker, J., Al-Shaer, B., Telfah, E., Jaradat, H. A. M., Ababneh, A. A., & Ahmad, R. K. B. (2025, July). *The role of artificial intelligence in enhancing personalized learning and adaptive assessment in Jordanian universities: towards a smart education future*. In *2025 International Conference on Smart Learning Courses (SCME)* (pp. 75-80). IEEE. doi:10.1109/SCME62582.2025.11104867



Nizar N. Romman

Nizar Nail Rumman is an Assessor in the Department of BTEC, School of Business, International Standards Academy of Education (ISO), He earned his Master of Business Administration (MBA Global, International Business) from the University of Bedfordshire, Luton, United Kingdom (2018-2020) and a bachelor's degree in civil engineering from The Hashemite University (2011-2017) Also, several scientific studies have been published on the study of self-healing in the cement sector, where the market impact was studied (orcid.org/0000-0001-6813-4417).and professional background includes leadership roles in human resources and project management, notably as a Managing Director at the KPSIN project (You can view the overview through (https://jordanict.com/whos_who_Jordan ICT_PDF_2023.pdf)), and also contributed to youth empowerment through his work as a Business Instructor & Consultant at Youth Power Project. Mr. Rumman's expertise encompasses entrepreneurship, project management, and business education, complemented by recent certifications in Data Analytics and Business Intelligence Technology. His diverse experience provides a practical foundation for his academic contributions in business studies.



Rodolphe Ocler

Dr. Rodolphe Ocler is a private consultant working with the University of Teesside and Plymouth and associated with Iseor (Institut de Socio-Économie des Entreprises et des Organisations). As a former senior lecturer at the University of Bedfordshire he has taught strategy and qualitative research methods for over 15 years. Joining the University in April 2011, he has been instrumental in the MBA and transnational education (TNE) programs.

Before Dr. Ocler headed the Strategy, Management, and Entrepreneurship department at Chambéry Savoy Business School and developed training for the International Labour Organization. Academically, Dr. Ocler holds a PhD in Strategy from Université Lumière Lyon 2, France, a DEA (Master's in Research) from Université Lumière Lyon 2/ E.M Lyon, France, and a BCom in Finance and Accounting from the University of Toronto, Canada. He is also recognized by the French Ministry of Education with a Qualification aux fonctions de Maîtres de conférences. His teaching portfolio includes Strategic Management for MBA programs and PhD seminars. Dr. Ocler's research interests encompass Discourse Analysis, Storytelling, Corporate Social Responsibility, Qualitative Research Methods, and Critical and Postmodern Approaches to Management. He has contributed as Guest Editor for *Society and Business Review*.