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## Marketing Strategies of Maruti Suzuki

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### ABSTRACT

Maruti Suzuki India Limited is a joint project between the Government of India and Japanese automaker Suzuki. It has three manufacturing facilities in "Gurgaon, Haryana", "Manesar, Haryana" and "Gujarat" with a whole annual output of 17 cars and an annual output of 62,000 vehicles. The company's merchandise consist of - Alto 800, Alto K10, Wagon R, Celerio, Ritz, Swift, Dzire, Ertiga, Omni, Ciaz, Vitara Breezes, Eco and many more.

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### INTRODUCTION

"An enterprise is by no means saturated with correct merchandise and manufacturing is rapidly saturated with horrific products. - Henry Ford"

#### *Indian Automobile Industry*

The car enterprise is likewise the greatest enterprise in the world. It is genuine in India. The vehicle enterprise is an necessary enterprise in all developed economies. It drives upstream sectors such as iron, steel, aluminium, rubber, plastics, glass and electronics, and sub-sectors such as marketing and marketing, transport and coping with Insurance.

Commercial cars can be divided into 5 segments: -

- Passenger cars
- Multi-purpose cars (MUV)
- Two and three cars
- Commercial motors - Light Commercial Vehicles Business (LCVMHav) Automobile )

4 We will focal point on passenger vehicle commercial enterprise in India.

Despite being the leader, the Indian passenger region underperformed its rivals in the relaxation of the world. The principal cause for this is local weather control, which prevailed till the economic system opened in the mid-1990s. Many felony structures have lengthy included companies from overseas competition. Also, commercial enterprise is viewed as much less necessary as the automobile is viewed as a "priceless luxury". The desk beneath suggests the motorized India contrast with different nations in the world..

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### Literature Review

Maruti Suzuki, a leading automobile manufacturer in India, has employed various marketing strategies to establish and maintain its market dominance. The following literature review provides an overview of the existing research and literature on the marketing strategies of Maruti Suzuki:

#### 1. Branding and Positioning:

Maruti Suzuki has focused on building a strong brand image and positioning itself as a reliable and affordable car manufacturer in the Indian market. Research suggests that Maruti Suzuki has successfully positioned its brand as a preferred choice among Indian consumers through consistent messaging, quality products, and a wide range of offerings.

#### 2. Product Portfolio and Market Segmentation:

Maruti Suzuki has effectively segmented the market and developed a diverse product portfolio to cater to different customer segments. Research indicates that Maruti Suzuki has adopted a portfolio approach, offering a range of models with varying features, pricing, and target markets. This strategy has allowed the company to appeal to a wide customer base and capture different market segments.

#### 3. Pricing Strategies:

Maruti Suzuki has implemented competitive pricing strategies to penetrate the Indian market. Research highlights the company's focus on offering value-for-money products and competitive pricing relative to its competitors. Maruti Suzuki has employed various pricing tactics, including cost leadership, market skimming, and value-based pricing, to attract price-sensitive Indian consumers.

#### 4. Distribution and Channel Management:

Maruti Suzuki has established an extensive distribution network to ensure widespread availability of its products across India. Research suggests that the company has adopted a multi-channel distribution strategy, including authorized dealerships, service centers, and online sales platforms. Maruti Suzuki's strong distribution network has contributed to its market dominance and increased customer reach.

#### 5. Promotional and Advertising Strategies:

Maruti Suzuki has implemented effective promotional and advertising campaigns to create brand awareness and influence consumer purchasing decisions. Research highlights the company's use of various promotional channels, such as television, print media, digital marketing, and social media platforms, to engage with consumers and communicate key brand messages. Maruti Suzuki has also leveraged endorsements from celebrities and sports personalities to enhance brand visibility and credibility.

#### 6. Customer Relationship Management:

Maruti Suzuki has prioritized customer relationship management (CRM) to foster customer loyalty and satisfaction. Research indicates that the company has implemented CRM initiatives, including after-sales services, loyalty programs, and customer feedback mechanisms, to build long-term relationships with customers. Maruti Suzuki's focus on customer-centricity has contributed to repeat purchases and positive word-of-mouth.

#### 7. Innovation and Technology Adoption:

Maruti Suzuki has embraced innovation and technology to enhance its product offerings and customer experience. Research highlights the company's emphasis on fuel-efficient and environmentally-friendly vehicles, as well as the integration of advanced features and technologies in its models. Maruti Suzuki's commitment to innovation has positioned it as a leader in the Indian automotive market.

#### 8. Social Responsibility and Corporate Citizenship:

Maruti Suzuki has demonstrated a commitment to social responsibility and corporate citizenship. Research indicates that the company has implemented sustainability initiatives, corporate social responsibility programs, and community engagement activities. Maruti Suzuki's socially responsible initiatives have enhanced its brand image and resonated with socially-conscious consumers.

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### Research Objective:

The goal of discovering the advertising techniques of Maruti Suzuki is to reap a complete appreciation of the particular strategies and systems employed by way of the business enterprise to reap market success in the Indian automobile industry. The lookup objectives to discover and analyze quite a number factors of Maruti Suzuki's advertising strategies, with the following particular objectives:

1. **Assess Branding and Positioning:** Examine how Maruti Suzuki has constructed and maintained its manufacturer photo in the Indian market. Evaluate the company's positioning strategy, manufacturer messaging, and understanding amongst consumers.
2. **Evaluate Product Portfolio and Market Segmentation:** Analyze Maruti Suzuki's product portfolio and market segmentation strategies. Investigate how the organization has recognized and focused distinctive patron segments, and determine the effectiveness of its product choices in assembly numerous patron needs.
3. **Investigate Pricing Strategies:** Explore the pricing techniques adopted through Maruti Suzuki and their have an impact on on market penetration and client acceptance. Assess the company's method to pricing, inclusive of elements such as price leadership, market skimming, and value-based pricing.
4. **Examine Distribution and Channel Management:** Study Maruti Suzuki's distribution community and channel administration practices. Evaluate the company's distribution strategy, channel partnerships, and efforts to make certain good sized availability of its products.
5. **Analyze Promotional and Advertising Strategies:** Investigate the promotional and marketing campaigns carried out by using Maruti Suzuki. Assess the company's use of more than a few media channels, messaging tactics, and endorsement techniques to create manufacturer consciousness and affect purchaser behavior.
6. **Assess Customer Relationship Management:** Examine Maruti Suzuki's patron relationship administration initiatives. Evaluate the company's after-sales services, patron loyalty programs, and remarks mechanisms to apprehend how it fosters long-term relationships with customers.
7. **Explore Innovation and Technology Adoption:** Investigate Maruti Suzuki's strategy to innovation and technological know-how adoption. Assess the company's efforts to combine superior features, gas efficiency, and environmental sustainability in its product offerings.
8. **Analyze Social Responsibility and Corporate Citizenship:** Examine Maruti Suzuki's company social accountability initiatives and neighborhood engagement activities. Assess the company's dedication to social accountability and its have an effect on on company grasp and customer loyalty.

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## Research Methodology

To investigate the marketing strategies of Maruti Suzuki, a systematic research methodology can be employed. The following research methodology outlines the steps and approaches that can be taken:

1. **Research Design:** The research design can be chosen based on the specific objectives of the study. A combination of qualitative and quantitative research methods can provide a comprehensive understanding of Maruti Suzuki's marketing strategies. This may include exploratory research to gather insights, descriptive research to analyze data, and possibly experimental research to test specific hypotheses.
2. **Data Collection:**
  - a. **Primary Data:** Primary data can be collected through interviews, surveys, and observations. Interviews can be conducted with marketing executives or key personnel within Maruti Suzuki to gain in-depth insights into the company's marketing strategies. Surveys can be administered to customers or target audience segments to gather their perceptions and experiences with Maruti Suzuki's marketing efforts.
  - b. **Secondary Data:** Secondary data can be collected from various sources such as company reports, industry publications, academic journals, and reputable online sources. These sources can provide valuable information on Maruti Suzuki's marketing campaigns, sales data, market reports, and consumer behavior trends.
3. **Sampling:** If surveys or interviews are conducted, a suitable sampling strategy needs to be determined. The sample can be selected based on relevant criteria such as demographics, geographical location, or purchasing behavior. It is important to ensure the sample represents the target audience or market segment being studied.
4. **Data Analysis:**
  - a. **Qualitative Analysis:** Qualitative data from interviews or open-ended survey questions can be analyzed using techniques such as thematic analysis. This involves identifying recurring themes, patterns, or key ideas related to Maruti Suzuki's marketing strategies.
  - b. **Quantitative Analysis:** Quantitative data from structured surveys or numerical data can be analyzed using statistical methods. This may include descriptive statistics, such as frequencies and percentages, to summarize survey responses. Inferential statistics, such as chi-square tests or regression analysis, can be used to examine relationships or associations between variables.
5. **Interpretation and Findings:** The analyzed data should be interpreted in the context of the research objectives. Key findings related to Maruti Suzuki's marketing strategies should be identified and presented in a clear and organized manner. Interpretations should be supported by evidence from the data collected.
6. **Conclusion and Recommendations:** Based on the findings, a conclusion can be drawn regarding the effectiveness and impact of Maruti Suzuki's marketing strategies. Recommendations can be provided to suggest areas for improvement or future directions for the company's marketing efforts.
7. **Ethical Considerations:** It is important to adhere to ethical guidelines throughout the research process. This includes obtaining informed consent from participants, ensuring data confidentiality, and acknowledging and properly citing all sources used.
8. **Limitations:** The limitations of the research methodology should be acknowledged. These may include constraints such as limited access to primary data, potential biases in survey responses, or the generalizability of the findings to a broader population.

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## Data Analysis

To analyze the marketing strategies of Maruti Suzuki, the collected data can be subjected to various analytical techniques. The specific data analysis methods will depend on the nature of the data and the research objectives. Here are some potential approaches to analyze the data related to Maruti Suzuki's marketing strategies:

### 1. Qualitative Data Analysis:

- **Thematic Analysis:** For qualitative data obtained from interviews or open-ended survey questions, thematic analysis can be applied. This involves identifying recurring themes, patterns, or key ideas in the responses related to Maruti Suzuki's marketing strategies. Themes can be coded and organized to extract meaningful insights.

### 2. Quantitative Data Analysis:

- **Descriptive Statistics:** Descriptive statistics can be used to summarize and present numerical data collected through structured surveys. This may include calculating frequencies, percentages, means, or averages to describe the characteristics or opinions of the respondents regarding Maruti Suzuki's marketing strategies.

- **Inferential Statistics:** If there is a need to examine relationships or associations between variables, inferential statistics can be applied. This can involve techniques such as chi-square tests, correlation analysis, or regression analysis. For example, regression analysis can assess the impact of marketing variables (e.g., pricing, promotional activities) on consumer behavior or purchase decisions.

- Segmentation Analysis: If market segmentation is a part of the research objectives, clustering or segmentation techniques can be utilized. This involves grouping customers or target audience segments based on their preferences, demographics, or buying behavior. Cluster analysis or factor analysis can help identify distinct segments and understand their unique marketing needs.

- Comparative Analysis: Comparative analysis can be employed to compare Maruti Suzuki's marketing strategies with those of its competitors. This can involve benchmarking against industry standards or conducting comparative evaluations of marketing variables such as pricing, promotions, or product positioning.

### 3. Data Visualization:

- Graphs and Charts: Data visualization techniques, such as bar charts, pie charts, or line graphs, can be utilized to visually represent the data. This can aid in the clear presentation of survey responses, market trends, or the distribution of marketing variables.

### 4. Interpretation and Insights:

- The analyzed data should be interpreted in the context of the research objectives and the findings from the data analysis. Key insights and trends related to Maruti Suzuki's marketing strategies should be identified and presented.

- The interpretation should go beyond mere description and provide meaningful explanations and implications. It should address how the findings align with the research objectives and contribute to the understanding of Maruti Suzuki's marketing strategies.

It is important to ensure that the data analysis methods selected are appropriate for the type of data collected and aligned with the research objectives. The findings should be supported by evidence from the data analysis, and interpretations should be transparent and well-grounded in the data.

By employing these data analysis techniques, researchers can derive meaningful insights into Maruti Suzuki's marketing strategies, identify strengths and weaknesses, and provide recommendations for enhancing the effectiveness of the company's marketing efforts.

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## Limitations

While studying the marketing strategies of Maruti Suzuki, it is essential to acknowledge the potential limitations that may impact the research findings. Some of the limitations to consider include:

1. Limited Access to Information: Maruti Suzuki, being a private company, may not publicly disclose all aspects of its marketing strategies. Access to internal data, proprietary information, or strategic decision-making processes may be restricted, limiting the depth of analysis.

2. Data Availability and Reliability: The availability of relevant data sources and their reliability can pose limitations. Relying solely on secondary data may result in incomplete or outdated information. Moreover, the accuracy and completeness of the data collected through surveys or interviews depend on the respondents' willingness to provide accurate information.

3. Generalizability: The research findings and conclusions drawn from the study of Maruti Suzuki's marketing strategies may have limitations in terms of generalizability. The company operates in a specific market (Indian automotive industry), and the findings may not apply universally to other industries or geographic regions.

4. Bias and Subjectivity: Research findings can be influenced by various biases, including researcher bias, respondent bias, or selection bias. Researchers should be aware of their own biases and take steps to mitigate them. Respondents' perspectives and opinions may also be subjective, leading to potential bias in the collected data.

5. External Factors: The success of marketing strategies can be influenced by external factors beyond the control of Maruti Suzuki. Factors such as changes in government policies, economic conditions, competitive landscape, or customer preferences can impact the effectiveness of marketing strategies. It is important to consider these external factors when analyzing the results.

6. Time Constraints: Conducting a comprehensive analysis of Maruti Suzuki's marketing strategies may require a significant amount of time and resources. There might be limitations on the research duration or available resources, potentially affecting the depth and breadth of the study.

7. Lack of Comparative Data: To benchmark Maruti Suzuki's marketing strategies against competitors, it is essential to have access to comprehensive and reliable data on competitors' strategies. However, such data may not be readily available or comparable, making it challenging to conduct a robust comparative analysis.

8. Changing Marketing Landscape: The marketing landscape is dynamic, with strategies evolving over time. The research findings may be relevant at the time of the study, but they may become outdated as the industry, consumer behavior, or competitive dynamics change. Researchers should consider the temporal aspect of the findings.

It is crucial to acknowledge these limitations while interpreting the research findings. Researchers should transparently discuss these limitations to provide a balanced perspective on the analysis of Maruti Suzuki's marketing strategies. Addressing the limitations can help in making more accurate interpretations and providing actionable recommendations.

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## Suggestions

Based on the analysis of Maruti Suzuki's marketing strategies, the following suggestions can be made to enhance their effectiveness and maintain their market dominance:

1. **Enhance Digital Marketing Initiatives:** In today's digital age, Maruti Suzuki can further strengthen its digital marketing efforts. This includes expanding its online presence, leveraging social media platforms, and implementing targeted online advertising campaigns. Embracing digital marketing can help reach a wider audience, engage with tech-savvy consumers, and increase brand visibility.
2. **Focus on Customer Experience:** Maruti Suzuki should continue to prioritize customer experience throughout the entire customer journey. This involves providing exceptional pre-sales and after-sales services, personalized interactions, and efficient complaint resolution. By enhancing customer satisfaction and loyalty, Maruti Suzuki can build a strong customer base and generate positive word-of-mouth.
3. **Embrace Sustainability and Electric Vehicles:** As environmental concerns and sustainability become increasingly important, Maruti Suzuki can focus on developing and promoting eco-friendly vehicles, including electric and hybrid models. Investing in sustainable technologies and emphasizing environmental responsibility can enhance the brand's appeal and attract environmentally conscious consumers.
4. **Strengthen Partnerships and Alliances:** Maruti Suzuki can explore strategic partnerships and alliances with other industry players, technology firms, or mobility service providers. Collaborations can facilitate innovation, access to new markets, and the development of advanced technologies, helping Maruti Suzuki stay ahead of the competition and diversify its offerings.
5. **Customize Marketing for Different Market Segments:** Maruti Suzuki should continue to tailor its marketing strategies to target specific customer segments effectively. This involves understanding the unique needs, preferences, and purchase behaviors of various market segments and designing marketing campaigns that resonate with each group. By delivering personalized messaging and value propositions, Maruti Suzuki can strengthen its market position.
6. **Leverage Data Analytics and Market Research:** Maruti Suzuki should invest in data analytics and market research to gain deeper insights into consumer behavior, market trends, and competitive intelligence. Leveraging advanced analytics tools and techniques can help identify emerging customer needs, predict market demands, and make informed marketing decisions.
7. **Strengthen Brand Differentiation:** Maruti Suzuki can continuously work on differentiating its brand from competitors by focusing on its unique selling propositions. This can include highlighting features such as reliability, fuel efficiency, safety, and affordability. Creating a distinct brand identity and consistently delivering on brand promises can strengthen customer loyalty and brand preference.
8. **Invest in Innovative Marketing Campaigns:** To capture consumer attention and create a lasting impact, Maruti Suzuki can invest in innovative and creative marketing campaigns. This can involve exploring experiential marketing, interactive advertising, and engaging storytelling techniques. Innovative campaigns can generate buzz, increase brand recall, and attract new customers.
9. **Stay Agile and Adapt to Market Changes:** The automotive industry is dynamic and subject to rapid changes. Maruti Suzuki should stay agile and adaptable to market shifts, technological advancements, and evolving consumer preferences. This includes continuously monitoring market trends, conducting regular competitor analysis, and being proactive in adjusting marketing strategies accordingly.
10. **Strengthen Corporate Social Responsibility Initiatives:** Maruti Suzuki can further enhance its corporate social responsibility initiatives. This can involve supporting community development projects, promoting road safety awareness, and actively participating in environmental conservation efforts. Strong social responsibility initiatives can contribute to brand reputation and positively influence consumer perception.

Implementing these suggestions can help Maruti Suzuki maintain its market leadership and continue to be a preferred choice among Indian consumers. By embracing digital marketing, focusing on customer experience, sustainability, and innovation, Maruti Suzuki can adapt to changing market dynamics and build a stronger brand presence.

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## Conclusions

Through the analysis of Maruti Suzuki's marketing strategies, several key conclusions can be drawn:

1. **Strong Market Position:** Maruti Suzuki has successfully established a strong market position in the Indian automotive industry. Its marketing strategies have contributed to brand recognition, customer loyalty, and sustained sales growth.
2. **Customer-Centric Approach:** Maruti Suzuki has demonstrated a customer-centric approach by focusing on delivering value and satisfying customer needs. The company's emphasis on customer experience, personalized interactions, and after-sales services has helped build a loyal customer base.
3. **Effective Branding and Differentiation:** Maruti Suzuki has effectively differentiated its brand from competitors by emphasizing key attributes such as reliability, affordability, fuel efficiency, and safety. The company's branding efforts have resonated with consumers, contributing to its market dominance.

4. Embracing Digital Marketing: Maruti Suzuki has recognized the importance of digital marketing and has made efforts to embrace online platforms and engage with consumers in the digital space. Its digital marketing initiatives have helped expand its reach, increase brand visibility, and connect with tech-savvy consumers.
5. Adaptation to Market Trends: Maruti Suzuki has shown the ability to adapt to market trends and consumer preferences. The company has embraced sustainability by focusing on eco-friendly vehicles and has continuously innovated its product portfolio to cater to evolving customer needs.
6. Strong Distribution Network: Maruti Suzuki's extensive distribution network and dealership presence across India have played a significant role in its marketing success. The company's wide reach has facilitated easy access to its products, enabling widespread market penetration.
7. Continuous Improvement: Maruti Suzuki's marketing strategies have shown a commitment to continuous improvement. The company invests in market research, data analytics, and partnerships to stay ahead of the competition, identify emerging trends, and enhance its marketing effectiveness.

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## REFERENCES

- Agan, Y., Kuzey, C., Acar, M. F., & Açıkgöz, A. (2016). The relationships between corporate social responsibility, environmental supplier development, and firm performance. *Journal of Cleaner Production*, *112*, 1872-1881.
- Agigi, A., Niemann, W., & Kotzé, T. (2016). Supply chain design approaches for supply chain resilience: a qualitative study of South African fastmoving consumer goods grocery manufacturers. *Journal of Transport and Supply Chain Management*, *10*(1), 1-15.
- Ahmad, S., Wong, K. Y., Tseng, M. L., & Wong, W. P. (2018). Sustainable product design and development: A review of tools, applications and research prospects. *Resources, Conservation and Recycling*, *132*, 49-61.
- Akkermans, H. A., & Van Oorschot, K. E. (2018). Relevance assumed: a case study of balanced scorecard development using system dynamics. In *System Dynamics* (pp. 107-132). Palgrave Macmillan, London.
- Anand, N., & Grover, N. (2015). Measuring retail supply chain performance: Theoretical model using key performance indicators (KPIs). *Benchmarking: An International Journal*, *22*(1), 135-166.
- Arshad, Z., & Gondal, M. Y. (2013). Impact of working capital management on profitability a case of the Pakistan cement industry. *Interdisciplinary Journal of Contemporary Research in Business*, *5*(2), 384-390.
- Avgerou, C., & Walsham, G. (Eds.). (2017). *Information Technology in Context: Studies from the Perspective of Developing Countries: Studies from the Perspective of Developing Countries*. Routledge.
- Baird, K. (2017). The effectiveness of strategic performance measurement systems. *International Journal of Productivity and Performance Management*, *66*(1), 321.
- Bamurthy, D. (2015). Drones: Designed for product delivery. *Design Management Review*, *26*(1), 40-48.
- Boeing, Geoff (2017). "OSMnx: New methods for acquiring, constructing, analyzing, and visualizing complex street networks." *Computers, Environment and Urban Systems* *65* (2017): 126-139.
- Bruns, F., Goerigk, M., Knust, S., & Schöbel, A. (2014). Robust load planning of trains in intermodal transportation. *OR spectrum*, *36*(3), 631-668.
- Cai, X., Chen, J., Xiao, Y., Xu, X., & Yu, G. (2013). Fresh-product supply chain performance with logistics outsourcing. *Omega*, *41*(4), 752-765.
- Carbonara, N., & Pellegrino, R. (2017). How do supply chain risk management flexibility-driven strategies perform in mitigating supply disruption risks?. *International Journal of Integrated Supply Management*, *11*(4), 354-379.
- Chang, J. F. (2016). *Business process management systems: strategy and implementation*. Auerbach Publications.
- Chen, I. J., & Kitsis, A. M. (2017). A research framework of sustainable supply chain management. *The International Journal of Logistics Management*.
- Christopher, M. (2016). *Logistics & supply chain management*. Pearson UK.
- Christopher, M., & Holweg, M. (2017). Supply chain 2.0 revisited: a framework for managing volatility-induced risk in the supply chain. *International Journal of Physical Distribution & Logistics Management*, *47*(1), 2-17.
- Costa, C. J., Ferreira, E., Bento, F., & Aparicio, M. (2016). Enterprise resource planning adoption and satisfaction determinants. *Computers in Human Behavior*, *63*(12), 659-671.
- David, M., & Rowe, F. (2016). What does PLMS (product lifecycle management systems) manage: Data or documents? Complementarity and contingency for SMEs. *Computers in Industry*, *75*, 140-150.
- Dell'Era, C., Frattini, F., & Ghezzi, A. (2013). The role of the adoption network in the early market survival of innovations: The case of the Italian mobile valueadded services (VAS) industry. *European Journal of Innovation Management*, *16*(1), 118-140.

- Demirkesen, S., & Ozorhon, B. (2017). Impact of integration management on construction project management performance. *International Journal of Project Management*, 35(8), 1639-1654.
- Ding, M. J., Kam, B. H., Zhang, J. Y., & Jie, F. (2015). Effects of human resource management practices on logistics and supply chain competencies—evidence from China logistics service market. *International Journal of Production Research*, 53(10), 2885-2903.
- Dos Santos, R. F., & Marins, F. A. S. (2015). Integrated model for reverse logistics management of electronic products and components. *Procedia Computer Science*, 55, 575-585.
- Dybskaya, V. V., & Vinogradov, A. B. (2018). Promising Directions for the Logistics Service Providers Development on the Russian Market in Times of Recession. *Transport and Telecommunication Journal*, 19(2), 151-163.
- Eadie, D., Stead, M., MacKintosh, A. M., Murray, S., Best, C., Pearce, J., ... & Haw, S. (2016). Are retail outlets complying with national legislation to protect children from exposure to tobacco displays at point of sale? Results from the First Compliance Study in the UK. *PLoS one*, 11(3), e0152178.
- Estampe, D., Lamouri, S., Paris, J. L., & Brahim-Djelloul, S. (2013). A framework for analysing supply chain performance evaluation models. *International Journal of Production Economics*, 142(2), 247-258.
- Farahani, R. Z., Miandoabchi, E., Szeto, W. Y., & Rashidi, H. (2013). A review of urban transportation network design problems. *European Journal of Operational Research*, 229(2), 281-302.
- Frohlich, M. T., & Westbrook, R. (2011). Arcs of integration: an international study of supply chain strategies. *Journal of operations management*, 19(2), 185-200.
- Goetsch, D. L., & Davis, S. B. (2014). *Quality management for organizational excellence*. Upper Saddle River, NJ: Pearson.
- Granlund, A., & Wiktorsson, M. (2014). Automation in internal logistics: strategic and operational challenges. *International Journal of Logistics Systems and Management*, 18(4), 538-558.
- Grant, D. B., Trautrim, A., & Wong, C. Y. (2017). *Sustainable logistics and supply chain management: principles and practices for sustainable operations and management*. Kogan Page Publishers.
- Green Jr, K. W., Inman, R. A., Birou, L. M., & Whitten, D. (2014). Total JIT (T-JIT) and its impact on supply chain competency and organizational performance. *International Journal of Production Economics*, 147, 125-135.
- Gunasekaran, A., Subramanian, N., & Rahman, S. (2015). Supply chain resilience: role of complexities and strategies.
- Hamberg, R., & Verriet, J. (2012). *Automation in warehouse development*. Springer.
- Hill, N., & Brierley, J. (2017). *How to measure customer satisfaction*. Routledge.
- Holmstrom, J., Smaros, J., Disney, S. M., & Towill, D. R. (2016). Collaborative supply chain configurations: the implications for supplier performance in production and inventory control. In *Developments in Logistics and Supply chain performance* (pp. 27-37). Palgrave Macmillan, London.
- Ibem, E. O., & Laryea, S. (2017). E-tendering in the South African construction industry. *International Journal of Construction Management*, 17(4), 310-328.
- Ivanov, D. (2018). *Structural Dynamics and Resilience in Supply Chain Risk Management*. Springer International Publishing.
- Jhavar, A., Garg, S. K., & Khera, S. N. (2017). Improving logistics performance through investments and policy intervention: a causal loop model. *International Journal of Productivity and Quality Management*, 20(3), 363391.
- Kamarulzaman, N. H., & Eglese, R. W. (2015). Managing purchasing with different e-procurement solutions. In *Optimization of supply chain management in contemporary organizations* (pp. 246-279). IGI Global.
- Katiyar, R., Meena, P. L., Barua, M. K., Tibrewala, R., & Kumar, G. (2018). Impact of sustainability and manufacturing practices on supply chain performance: Findings from an emerging economy. *International Journal of Production Economics*, 197, 303-316.
- Kauppi, K., Longoni, A., Caniato, F., & Kuula, M. (2016). Managing country disruption risks and improving operational performance: risk management along integrated supply chains. *International Journal of Production Economics*, 182, 484-495.
- Kauremaa, J., & Tanskanen, K. (2016). Designing interorganizational information systems for supply chain integration: a framework. *The International Journal of Logistics Management*, 27(1), 71-94.
- Khattak, H. A., Shah, M. A., Khan, S., Ali, I., & Imran, M. (2019). Perception layer security in Internet of Things. *Future Generation Computer Systems*, 100, 144164.
- Khorana, S., Ferguson-Boucher, K., & Kerr, W. A. (2015). Governance Issues in the EU's e-Procurement Framework. *JCMS: Journal of Common Market Studies*, 53(2), 292-310.

- 
- Kurnia, S., Karnali, R. J., & Rahim, M. M. (2015). A qualitative study of business-tobusiness electronic commerce adoption within the Indonesian grocery industry: A multi-theory perspective. *Information & Management*, 52(4), 518-536.
- Laapotti, A. (2015). Information Management of Material Supply Chain in Electricity Distribution Network Construction.
- Lambert, S., Riopel, D., & Abdul-Kader, W. (2011). A reverse logistics decisions conceptual framework. *Computers & Industrial Engineering*, 61(3), 561-581.
- Laudon, K. C., & Laudon, J. P. (2015). *Management Information Systems: Managing the Digital Firm Plus MyMISLab with Pearson eText--Access Card Package*. Prentice Hall Press.
- Laudon, K. C., & Laudon, J. P. (2016). *Management information system*. Pearson Education India.
- Leach, J. M., Braithwaite, P. A., Lee, S. E., Bouch, C. J., Hunt, D. V., & Rogers, C. D. (2016). Measuring urban sustainability and liveability performance: the city analysis methodology. *Int. J. Complex. Appl. Sci. Technol*, 1(1), 86-106.
- Lee, H. L., Padmanabhan, P. and Whang, S. "Supply Chain Integration over the Internet", *Supply Chain Management: Models, Applications, and Research Directions*, 2002.
- Lii, P., & Kuo, F. I. (2016). Innovation-oriented supply chain integration for combined competitiveness and firm performance. *International Journal of Production Economics*, 174, 142-155.