Evolution of Strategic Sourcing in the Automotive Industry: From Cost-Cutting to Value Creation

Manthan Lad
Nidec
Chicago, USA

ABSTRACT

The automotive industry appears to have shifted from cost-oriented sourcing to value-oriented sourcing between 2018–2025, spurred by electrification, digitalization, supply-chain disruptions, and sustainability. Through a systematic review of the research literature, industry reports, and case studies, this article shows that firms which pursued value creation were more innovative, more resilient, and more competitive than their cost-oriented competitors, such as manufacturers' responses to semiconductor shortages, EV battery partnerships, and ESG requirements. Some firms developed collaboration with their suppliers, created online, automated sourcing processes, and implemented commodity management processes that enabled them to improve risk management and scalability. For manufacturers, suppliers, and policymakers, value-oriented sourcing is likely to shift from being perceived as a trend to being perceived as a strategic imperative.

Keywords

Strategic sourcing, automotive industry, value creation, supplier relationships, digital transformation, sustainability, supply chain management, procurement evolution

1. INTRODUCTION

Automotive sector is characterized by competitive production eco-system with complicated supply chains and clusters of suppliers of auto components, with suppliers in the number of thousands at various levels. The old vehicle procurement approach was centered on purchasing cars at rock-bottom prices through competitive bid-based procurement and volume discount-based procurement. It has prompted automobile manufacturers to work with their suppliers as interchangeable parts are often viewed as part of an arm's length relationship with limited value creation, However, changing the auto mercantile requisitioning by amending the value proposition of collaborative procurement relationship to respond to changing consumer preferences, electrification, autonomous technology, sustainability and supply chain disruption as an area for change for procurement [2]. Shifting the auto mercantile requisitioning away from cost savings models to value realization models is at the heart of changing attitudes of consumers, evolving regulations impacting and offering new choices, a realization regarding global supply chains, and overall procurement [3]. The changing attitudes are a response to technology shift, shifts in consumption preferences and related regulation, and the disruption in global supply which all automobile manufacturers have globally experienced since 2018 [4]. Automobile manufactures of the disruption era have realization, sustainable competitive advantage is not simply procurement cost reduction, purchasing people collaborating with suppliers, strategic value addition possibilities should the relationship evolve from barriers to collaborative approaches in the auto supply chains.

2. PROBLEM STATEMENT AND JUSTIFICATION

Traditional purchasing approaches in the automotive industry were inadequate when the industry faced modern pressures, which started with cost being a factor. Certainly, cost-based methods can drive down costs, but have the potential to undermine the quality of the product, creating an environment unfriendly to innovation, and increasing supply risk, ultimately damaging long-term viability [5]. The automotive sector also faced unanticipated challenges from 2020 through 2025 globally in the form of a semiconductor shortage, stock outages, and political events, which highlighted the shortcomings of the cost-based purchasing methods [6]. Moreover, the sector's future interest in electric vehicles, connections, and autonomous cars favors purchasing models that encourage innovative thoughts and collaboration rather than merely slashing costs [7]. Firms that adhere rigidly to the old approach risk losing their competitive advantage as they are faced by emerging cost-oriented techniques employed by rivals to encourage innovation and optimize operations [8].

3. OBJECTIVES

This review paper aims to:

- Characterize the change of automobile buying decision-making strategy from cost reduction to value creation.
- Identify today's enablers and motivators of strategic changes in souring.
- Discuss how sustainability requirements, supply chain strength, and digital technologies drive sourcing strategy.
- Discuss the results and value of value-creating sourcing practices for automobile assembly.
- Provide current information concerning future improvements in strategic sourcing in the automobile industry.

4. RESEARCH METHODOLOGY

This analysis has included important information from the latest peer-reviewed articles, market studies, and case studies that were published between 2018 and 2025. To design a research strategy that is appropriate for the topic, the research design was to undertake a systematic literature review to build a strategy that is grounded in peer-reviewed articles, industry researches, and credible studies relating to strategic vehicle procurement. Some of the sources were omitted by reason of the thoroughness of the strategy, their appositeness to previous research works relating to car procurement, and that they were recently produced works that take advantage of current trends and practices.

Table 1: List of Papers Reviewed

Ref No.	Authors & Year	Focus Area	Key Findings
[1]	Mohamed et al. (2021)	Automotive Companies in Morocco	Supplier collaboration and innovation improve integration and performance in automotive supply chains.
[2]	Jagani et al. (2024)	Electric Vehicle Ecosystem	EV transition reshapes supplier roles; collaboration and adaptability are essential for competitiveness.
[3]	Lukin et al. (2022)	Comparative Study in Automotive Industry	Leading automakers align sustainability strategies with SDGs to enhance brand and stakeholder value.
[4]	Khan & Yu (2019)	General SC Trends	Digital technologies, agility, and sustainability will define future supply chain competitiveness.
[5]	Paul et al. (2024)	Procurement Ethics and Cost-Effectiveness	Balancing ethical compliance with cost efficiency is crucial in sustainable procurement strategies.
[6]	Crosignani et al. (2024)	U.S. Export Controls	Geopolitical tensions and export restrictions drive the need for supply chain decoupling strategies.
[7]	Longo et al. (2019)	Sustainable Mobility	Integration of EVs with renewable energy supports sustainable transport but requires new infrastructure models.
[8]	Bhadaoria (2021)	Indian Manufacturing Sector	E-procurement adoption depends on perceived usefulness, training, and leadership support in manufacturing firms.
[9]	Chen et al. (2020)	Multi-Criteria Decision-Making in Procurement	Combining DEA, TOPSIS, and fuzzy logic enhances supplier selection in complex automotive procurement.
[10]	Sakuramoto et al. (2019)	Automotive Industry	Efficient supply chains directly impact competitiveness in automotive firms.
[11]	Graham et al. (2018)	EV Component Procurement	Sourcing for electric sports cars requires flexible and innovation-focused supplier strategies.
[12]	Ahmed et al. (2021)	AI Application in EV Industry	AI accelerates EV adoption through better consumer targeting, battery management, and automation.
[13]	Zhu et al. (2021)	Automotive Electrical Architecture Trends	Future automotive E/E systems must be modular, scalable, and requirement-driven to handle complexity.
[14]	Llopis-Albert et al. (2020)	Industry 4.0 and Automation	Digital transformation enhances efficiency but requires strategic change in automotive operations.
[15]	Riad et al. (2024)	AI in SC Optimization	AI enables proactive resilience in automotive supply chains through predictive and prescriptive analytics.
[16]	Ogrean & Herciu (2022)	Strategic Performance Reporting	Transparent sustainability reporting is critical for stakeholder trust in electric car manufacturers.

5. SIGNIFICANCE OF THE STUDY

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6. RESEARCH QUESTIONS

- How has strategic auto industry sourcing evolved from cost reduction to value addition during the time of 2018-2025?
- What are the fundamental factors that are shaping this evolution in automotive procurement methodologies?
- How do software technologies, sustainability needs, and supply chain durability issues influence current automobile procurement decisions?
- What measurable outcomes and benefits result from value-creating sourcing approaches compared to traditional cost-focused methods?
- What challenges and barriers impede the implementation of strategic value-creating sourcing in automotive manufacturing?

7. LIMITATIONS

This review is limited by the availability of published studies from 2018 to 2025 and the confidential nature of numerous automotive procurement strategies. The analysis mainly focuses on established car manufacturers and might not completely reflect new market trends or strategies of startup companies. Furthermore, the swift evolution of the automotive industry indicates that certain insights may have restricted long-term relevance as technologies and market circumstances keep changing.

8. DEFINITIONS OF TERMS

Strategic Sourcing: An end-to-end procurement process that integrates purchasing with organizational goals to build enduring value through supplier partnerships, process enhancement, and total cost of ownership management.

Value Creation: Production of economic, operational, and strategic advantage that surpasses historical cost reduction through enhanced quality, innovation, risk management, and competitive advantage building.

Supply Chain Resilience: The ability of automotive supply chains to anticipate, adjust to, and recover from interruptions while maintaining operational continuity and performance levels with minimal impact.

Supplier Relationship Management: The organized method of developing, maintaining, and enhancing relationships with suppliers to generate shared value and strategic alignment.

Total Cost of Ownership: A comprehensive cost assessment method that considers every direct and indirect purchasing expense associated with all decisions throughout the product life cycle

9. LITERATURE REVIEW AND RELATED WORK

9.1 Historical Context of Automotive Sourcing

The evolution of automotive sourcing has progressed through various phases influenced by manufacturing models and competitive demands. Initial sourcing methods emphasized mainly cost reduction via bidding and supplier changes, perceiving sourcing as a transactional process lacking significant strategic value [9]. Although cost savings were achieved in the short-run, the trade-offs in product quality, the lack of innovation, and the exposure to supply chain risks increased complexity problems as overall vehicle technologies increased. Studies point out that vehicle manufacturers traditionally maintained arm's-length relationships to negotiate on the price instead of creating value with suppliers [10]. The problem with these practices is that they did not translate well when electrification, connectivity, and autonomous driving systems required technical expertise and technical innovation from suppliers. Procurement and sourcing has its foundations in the era of Henry Ford's mass production philosophy which emphasized cost savings, part interchangeability, and standardization. The mass production model was suitable at times of constant technology utilization and demand, but advancements in vehicles demonstrate that simple cost-based approaches are insufficient in an industry characterized by complexity and technology. Modern cars have close to 30,000 parts sourced around the world, which means cost-based strategies are no longer relevant. Old-style practices also saw suppliers as commodity sources which drove poor supplier relationships and bottom-line pressures without any associated breakthrough in service, quality, or innovation.

During the 1980s and 1990s, it became apparent that there were shortcomings in transactional sourcing, as Japanese manufacturers began to utilize cooperation within their supplier partnerships to support higher levels of quality and efficiency. This form of cooperative engagement for product development emphasized joint problem-solving and joint innovations, which began to undermine the Western sourced competitive strategy that cost reduction served as the foundation. As a result, in the early 2000s, global manufacturers began to take their first steps toward sourcing strategically. The initial efforts of strategic sourcing aimed at quality improvements would eventually transition into supplier development programs, long term partnership agreements, and joint innovation projects. In time, the intentions began to shift from quality improvements, to encouraging speed of innovation, enhancing risk management, and lasting wholesale operational excellence. After a period of time and experiencing the benefits of these supplier partnership relationships, the industry began to leverage them as competitive strategy. The value proposition shifted from adversarial cost, transactional negotiations to joint partnerships built on value co-creation. Beginning with these competitive strategies employing supplier partnerships set the stage for today’s multidimensional sourcing strategies.

9.2 Drivers of Strategic Sourcing Transformation

The evolution of automotive sourcing has been driven by converging drivers that necessitate substantial changes in procurement practices. The foremost driver is technology disruption, with car manufacturers increasingly reliant on suppliers to provide expertise on electric powertrains, semiconductors, software, and advanced materials (11). Whereas internal combustion engine vehicles have mechanical components, electric vehicles have incorporated a number of components that are closely integrated yet require specific capabilities and assurances from suppliers, and have co-development needs. The electrification of vehicles has resulted in batteries, motors, and power electronics becoming mission-critical components. In this regard, vehicle manufacturers are partnering with specialized suppliers and co-developing solutions to meet demand (12). Leading electric vehicle manufacturers are forming long-term partnerships with battery suppliers while also co-developing. This is characterized by collaborating on developing and applying capabilities, road mapping technology, and planning supply for the future. Supply partnerships with battery manufacturers are critical because battery packs account for 25 - 40% of the total value of electric vehicles cost and are therefore highly consequential

for vehicle performance and competition, making the sourcing of batteries a key strategic option.

The implementation will vary, as Tesla has built a Gigafactory to demonstrate its vertical integration strategy, while BMW and Ford have partnered with suppliers to secure value from supplies and share hardship. The semiconductor shortage from 2020 - 2022 demonstrated that the pooled benefits of collaborative firms were beneficial: collaborative firms recovered faster with fewer interruptions than firms with transactional supplier relationships, reinforcing that deep supplier relationships built on trust are valuable. At the same time, the transition to software-defined vehicles and increased digitalization, introduced new suppliers requiring collaboration with technology firms, chip manufacturers, and software developers (13). Supplier relationships such as these typically involve value sharing and distinct special management practices, unlike ordinary purchasing procedures. The requirements for autonomous driving technology complicated relationships with suppliers in order to allow for the purchase of services from companies specializing in AI, sensor-making, etc. To this end, there are different supplier needs for supplier relations.

Transformational drivers are further motivated by environmental and regulatory forces. The EU's Corporate Sustainability Reporting Directive and accompanying rules prioritize ESG performance at the top of the procurement agenda. Automobile makers now evaluate suppliers not only by cost and quality, but by compliance, certification, and risk management capabilities. Due to that, consumer pressure for sustainable and responsible sources of supply in the automobile supply chain has increased those expectations. Consequently, technology changes, supply emergencies, digital complexities, and sustainability requirements, among others, all advocate for the demise of cost-based models. Unlike concentrating solely on cost, strategic procurement practice has evolved from the simple to the more complicated model that recognizes and addresses resilience, innovation, and social responsibility in addition to cost reduction.

9.3 Digital Transformation in Automotive Sourcing

The emergence of digital technologies has transformed auto-sourcing by providing real-time insight, enhanced supplier assessment, and data-driven decision-making [14]. Advanced analytical tools can evaluate suppliers based on various factors such as cost, quality, innovation, delivery, and sustainability, all in real-time. E-Procurement and e-Sourcing software allow firms to choose suppliers based on total costs, risk, and fit for the firm – not price per product. Latest technologies allow more value to be created for the entire business by achieving more balance between different aspects. Latest developments in artificial intelligence and machine learning made such technologies first of their kind. Supplier selection can be performed more accurately by AI-powered tools, contracts can be written, and supply chains can be operated [15]. Machine learning can also evaluate future-performing suppliers, understand changes in markets and predict global risks to automatically come up with plans for sourcing that build value while taking minimal risk. Predictive analytics can help supply managers to take a "forward-looking" approach to solve potential supply problems for the future. Through these platforms, supply chain managers can check suppliers' financial strength, production capability, quality trend, and potential new risks and therefore avoid failures by suppliers and reduce dependency on reactive management.

Sourcing has been improved by the Internet of Things through provision of real-time information of production, logistics, and quality through sensors in the supply chain. It enhances transparency to plan for demand, handle quality, and collaborate with suppliers. Blockchain technology enables transparency and trust through combined use of immutable transaction and compliance records, especially for multi-tier supply chains and audit for regulatory compliance. Collaboration-oriented platforms and cloud-based platforms have enabled co-product development, virtual co-innovation, and real-time problem-solving between automobile firms and suppliers. Such collaboration tools facilitate geographic distance through increased innovation velocity and operational effectiveness. Robotic process automation can also automate mundane procurement processes, including invoicing, ordering, and redeployment of procurement resources to focus on supplier development and relationship-building. Together, these digital technologies enable automobile firms to change their approach to sourcing from reactive cost management to proactive value management through predictive intelligence, transparency, and collaboration-based innovation.

9.4 Sustainability and ESG Integration

Automotive sourcing prioritizes Sustainability and ESG (Environmental, Social, and Governance) factors mainly because of regulations, consumer pressure, and business sustainability goals. Also, auto manufacturers are beginning to score suppliers on ESG metrics, notably carbon emissions, labor practices, responsible sourcing, and the use of Environmental Management Systems (EMS) [16]. Parenthetically, the industry's ambition for carbon neutrality by 2050 is ramping up additional purchasing pressure for suppliers to prioritize emissions reduction, renewable resources, or other environmental interventions. Considering scope 3 emissions, which are created indirectly through activities in the supply chain, are 70-80% of total emissions, supplier engagement is vital for effectively decarbonizing. Manufacturers record scores for suppliers that include ESG metrics in addition to normal factors such as costs and quality. For this to succeed, sometimes well-managed firms must create sustainability programs in coordination with suppliers, which includes establishing emission records, establishing expectations for renewable energy, establishing that firms and suppliers work toward emissions reductions, and so forth. Many times implementing sustainability programs has proven to take time and investment on the part of the firm and would be considered development of suppliers; however, it appears that longer-term strong sustainable programs lead to resilience. Of equal importance is the social responsibility dimension related to labor rights of workers, community engagement, and diversity. Due to criticism of global supply chain practices, in auto supply chains, auditing of supply chains and sustainability for suppliers is utilized. Also, under the auspices of providing social responsibility, providing training to workers and community engagement has the added benefit of increasing awareness to the supply tiers of responsibility.

Procurement now also requires traceability and elements of transparency. Suppliers and retail brands are being asked for transparency in material and sourcing practices that comply with international regulations regarding conflict minerals, forced labour and environmental compliance. Greater transparency decreases risk and instils consumer confidence. Additional policies for circular economy also are influencing purchasing decisions, and auto firms are making investments in waste reduction through closed-loop and material recovery. Supplier enablement is the key to integrating ESG practices

into supply chains. Auto firms can make investments in Supplier Enablement, in the form of training, capital, and bonuses, to collaborate with suppliers, and reduce environmental degradation and bolster management and labour practices. Evidence indicates that companies embracing an ESG approach to sustainability and sources of criteria benefit from better risk management, bolstered reputation, and stronger supplier relationships compared to price-centric traditional companies. Embedding ESG practices can broaden the focus of purchasing from costs to strategic purchasing based on sustainability and the long-term good and ultimately transform the underlying goal of purchasing.

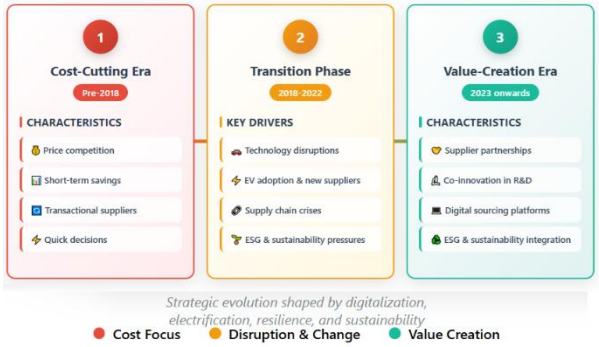

Figure 1: Evolution of Strategic Sourcing in the Automotive Industry

Fig. above depicts the evolutionary change in auto-sourcing from the sole cost reduction approach to value-creation model based on digitalization, electrification, resilience, and sustainability.

10. TECHNICAL INVESTIGATION AND COMPARATIVE ANALYSIS

10.1 Evolution of Sourcing Methodologies

The emergence of strategic sourcing in the automotive industry represents a significant transition from the conventional cost management method to a more proactive value-oriented strategy. In its optimal form, the traditional procurement role functioned as a tactical operation that primarily focused on price, alongside supplier verification or contract management, remaining disconnected from the overall business strategy. Conversely, strategic sourcing is currently operating in sync with the product development cycle duration, technology initiatives, and market approach. All of this uses multi-dimensional forms of supplier evaluation, that examine suppliers on total cost of ownership, innovation capability, financial performance, sustainability performance and strategic fit. This is at complete odds with unit cost based quality review, or simplistic evaluations. While the leaders of performance in this area among manufactures have developed proprietary scorekeeping systems for suppliers and then further refined the procurement strategy on a category management basis of like products and services grouped into strategic categories, some of which were referred to as low grade or low category by the company with each category have its own sourcing strategy and sourcing management resources , it is notable that this was found most effective in high complexity area where professional expertise and critical levels of supply chain partnership were present, such as semiconductor, Hi-tec material or software.

Table 2: Comparative Outcomes of Cost-Driven vs. Value-Driven Sourcing in the Automotive Industry

Dimension	Cost-Driven Sourcing	Value-Driven Sourcing
Innovation Adoption	Low, limited by transactional focus	High, enabled by collaborative R&D
Supply Chain Resilience	Vulnerable to disruptions (e.g., chips 2020)	Faster recovery, diversified risk-sharing
Supplier Relationships	Arm's-length, price-focused	Long-term partnerships, co-development
Lifecycle Cost	Lower upfront but higher downstream issues	Higher upfront, lower lifecycle cost
ESG & Compliance	Minimal integration	Central to supplier evaluation and programs
Long-Term Competitiveness	Weak, reactive	Strong, proactive and sustainable

Table 2 illustrates key differences between cost-driven and value-driven sourcing practices in the automotive industry, highlighting the long-term advantages of collaborative approaches over transactional models.

Lean production and risk-based procurement improve automotive sourcing by reducing waste and risk with suppliers while building resilience. Evidence from research studies has demonstrated that value-oriented firms out-distance firms with sole cost focus, such as reduced recovery time, increased innovation, and total enhanced lifecycle cost. Cross-functional teams, inter-disciplinary teams, and supplier development are critical for developing and creating competitive advantage, sustainability, and, in the long term, stability of operations.

10.2 Supplier Relationship Management Evolution

The nature of supplier relationships in the automotive supply business calls for fundamental modifications in the organizational mindset and in the relationships between people. Historically, relationships among auto suppliers have been hierarchical or otherwise lacking in cooperation and organizations have typically failed to share any substantial information between suppliers—per supplier information sharing has been tightly held. Prior methods of relationship formed settings have weighed in favor outdoing rivals in competition as opposed to creating priors to exploit opportunities to collaborate to lower total system cost. This future requirement of a collaborative mindset will necessitate collaboration in forming value partnerships, collaborative innovation, and establish mutually accepted values that share risks and rewards between suppliers and producers across three peer groupings. The key finders in case study research indicated that some multinational companies effectively managed supplier relationships using tiered relationship management structures to manage supplier-distributor relationships in the automotive supply process. These companies placed their suppliers in three categories: strategic supplier, preferred supplier, and transactional supplier to be strategic in their thinking, to develop greater strategic supplier involvement and cooperation around the competent tier of the relationship. Key or strategic suppliers call for more investment

in relationship management, jointly developing technological collaboration and jointly developing annual partnership agreements to establish annually agreed commitments for creating value in those relationships and provide a competitive advantage to the organization.

10.3 Technology Integration and Digital Sourcing

Implementation of advanced technology in the vehicle procurement process has emerged with a range of innovative techniques that intensify value addition and vehicle procurements improvements to a great extent. Key technologies that enable enhanced interactions and communication with suppliers are supplier portals, e-sourcing software, and web-based solutions. These technologies, in addition to automating and making procurement processes simpler and less complicated, enhance suppliers' activity visibility and knowledge of the effectiveness of suppliers' activities. Advanced technologies like Internet-of-Things sensors, artificial intelligence, and predictive analytics enable auto manufacturers to track the performance of suppliers in real time, their quality, and the risks that come with suppliers, all of which were intangible. Greater transparency enhances supply chain management and shifts the firm-supplier relationship from mere cost reduction focus to value-creating collaboration.

10.4 Risk Management and Supply Chain Resilience

Today, in the automobile sourcing world, risk management and resilience are two aspects to focus on. What has been learned about performance is through going through supply chain problems from 2020 to 2025. Having only a single supply chain to bargain rates for all of its suppliers has proven to be an inferior model of business; it can never be beneficial to auto manufacturers in the event of large disruptions and increased costs. Advanced purchasing methods capitalize on diversified suppliers, diversified locations, and adjustable contract agreements to avoid disruptions to business operations, although usually at the higher operating costs. Research shows that auto manufacturers with superior risk management and resiliency frameworks fare better in the long-term even when they bear additional short-term costs of having excess capacity and leeway.

10.5 Advantages and Disadvantages

For instance, evaluating the strategy of procuring for sources recognizes inherent trade-offs between short-term cost reduction versus value seeking over the longer term. Cost-based procurement can deliver rapid internal payback of funds in competitive industries yet can erode trust and innovation over the longer period. Value-driven sourcing can yield sustainable returns over the longer term, albeit at the cost of organizational maturity and investment. It is something of a contradiction that businesses under financial strain through short-term cost cutting may be deterred from undertaking longer-term, more considered, and strategic approach. The optimal model of sourcing therefore depends upon the size of the business, typically dominant market conditions, and the impact of regulatory frameworks, such that no model of sourcing is universal. Value-based sourcing can create value over time with some stated benefits, such as innovation through supplier relationship, improved product quality, reduced warranty expenditures, or improved risk resilience, which also helps to demonstrate support for ESG compliance and increased competitiveness over time. Further, value-based sourcing has some noteworthy hurdles to overcome increased upfront costs; heightened complexity of governance; and time to implement; and resistance from organizational culture. As challenging is demonstrating the value creation output and accountability or reporting on the value from value-based sourcing can be difficult. Additionally, increased risk and challenge can be established in the organization by fostering an over-reliance on the supplier and investing in the organizational capabilities. In conclusion, in order to pursue sourcing that learns aspect in value-based sourcing, balance needs to be considered related to stakeholder engagement; determining the change process; recognizing value-based sourcing can be a longer-term relationship and developing inherent capabilities in supplier engagement.

11. BENEFITS AND CHALLENGES OF VALUE-DRIVEN SUPPLIER RELATIONSHIPS

Sources of value-added plans indicate remarkable variations among the automobile industry cases, which highlight their important role in the current competitive environment. Whereas value-added strategy's long-term effects can be enormous and tangible, they always impose a chain of problems and challenges when it is to be implemented. The following sections will give a detailed analysis of various important aspects concerning value of innovation; seeking operational excellence; achieving operational success; complexities in measuring organizations; and involvement of suppliers in all cases of these complexities.

11.1 Innovation and Technology Development

Manufacturing businesses that care for their partners and customers have higher rates of innovation when they are compared to businesses that focus on cutting costs. Reciprocal relationships with suppliers support the environment for successful research and innovative product concepts. Collaboration facilitates sharing advanced technologies to come up with concepts that benefit all. Collaboration facilitates quick product development and enhances market capability.

Research establishes that those companies that enjoy longstanding relationships with suppliers enjoy rewards of lowered cost of doing business, increased product value, and world-leading products. These traits drive revenue growth and widened consumer access, establishing healthy relationships as crucial to success.

11.2 Operational Efficiency Enhancements

Elevating purchasing adds value beyond reducing costs—it also makes operations more effective. Productive relationships with suppliers mean better yield, fewer defects, reduced warranty costs, and a higher percentage of on-time delivery. In fact, our understanding from surveys of manufacturers of motor vehicles is that those that have productive relationships with suppliers, relations defined as more than just transactions, experience fewer defects, better consistency in products, and overall higher factory productivity than firms that just purchase on a transactional basis.

11.3 Financial Performance Impact

From the value point of view, value-driven procurement organizations pay more for the up-front procurement of their product, prior to accumulating the final deliverable. When quality, innovation and supply chain efficiency are made to operate, they translate into resilient profitability and shareholder value. Automobile manufacturers that are strategic in their procurement operation enjoy higher return on

investment, profitability and revenue over those that are cost-oriented manufacturers.

11.4 Organizational Culture and Change Management

The value concept is straightforward, yet putting it into practice to build out an integrated strategy requires fundamental design and cultural transformations. Procurement departments tend to eschew quick fixes that represent short-term expenses even if they save in the long run. Our experience has shown that strategy implementation requires powerful change management, dedicated leadership, and programs to build teamwork between departments. Over the past ten years, strategic advances in procurement has been hindered by roadblocks such as cultural opposition, inadequate employee education, and inefficient measures of poor performance that don't monitor progress.

11.5 Measurement and Performance Evaluation

Another daunting aspect is measuring performance. Traditional procurement practices evaluate cost reductions after the fact without recognizing the larger context of other potentially value-creating avenues. Automakers will have to adopt a robust measurement system, which encompasses all aspects of innovativeness, securing value from supply chains, minimize costs through quality, and minimize risk. Industry experts and partners will determine KPI for measures of cross-functional balance of cost, quality, and outcomes of strategic partnerships.

11.6 Supplier Capability Development

Lastly, value-creating sourcing is only successful as suppliers' capabilities are upgraded. Suppliers either lack fundamental capabilities or resources to meet higher expectations for innovation, sustainability, and quality. Automakers need to invest in development through training, capital provision, and technology transfer to suppliers. Studies focus heavily on inclusive programs that allow suppliers to align their strategies with the strategic objectives of OEM partners.

12. CONCLUSION AND FUTURE WORK

The transformation of car-making strategic sourcing cost-saving to value-creating is a paradigmatic change in the relationships between manufacturers and suppliers and the organization of the procurement decision-making process. The outperforming firms adopted collaborative models that prioritize innovation, quality, efficiency and risk management over cost savings with transactional models to have a proven return on investment, implying risks and costs are elevated in the short run with proven higher long and improved ultimate performance defined as profitability, operational flexibility, and competitiveness in the benefits of these approaches. Research on the sourcing strategies under different situations, using as practical case studies the 2020-2022 shortages of semiconductors , electric vehicle supply chain and enhanced ESG compliance obligations have shown that value sourcing strategies have outperformed cost based models. The data shows the action plan to transform from cost-cutting to value creation, remains more than an exciting theory, it is a real time to engage in a fact-based mission of balancing resilience and competitive advantage, in development of a more resilient industry.

Continued use of digital technologies, pursuit of sustainability goals, and application of risk management techniques all represent value-based sourcing principles more strongly. It is possible for organizations to build their capabilities through next-generation analytics made possible by artificial intelligence and gain value from multiple dimensions at once. Artificial intelligence-based platforms that accept principles of the circular economy are especially good at operating through closed-loop supply chains. Future research through academically focused industry standardization and relationships with suppliers is necessary for maintaining long-term knowledge of value. Future challenges will come through changes to organizational culture, individual skill development, and identification of ways to use experience through metrics that go beyond standard criteria for capabilities. Indications show that value-based-sourcing organizations in transition will be better suited to respond to disruptions, capitalize on emerging opportunities, and ultimately be successful in the market as leaders in sustainability.

13. REFERENCES

[1] Mohamed, A., Sultan, H., & Slimane, M. (2021). Impact of Disintegration Practices and Innovation on the Levels of Integration and Performance of the Supply Chain: Case of Automotive Companies in Morocco. International Journal of Managerial Studies and Research, 9(5). https://doi.org/10.20431/2349-0349.0905003

[2] Jagani, S., Marsillac, E., & Hong, P. (2024). The Electric Vehicle Supply Chain Ecosystem: Changing Roles of Automotive Suppliers. Sustainability, 16(4), 1570. https://doi.org/10.3390/su16041570

[3] Lukin, E., Krajnović, A., & Bosna, J. (2022). Sustainability Strategies and Achieving SDGs: A Comparative Analysis of Leading Companies in the Automotive Industry. Sustainability, 14(7), 4000. https://doi.org/10.3390/su14074000

[4] Khan, S. A. R., & Yu, Z. (2019). Future Trends in Supply Chain. In EAI/Springer Innovations in Communication and Computing (p. 261). Springer International Publishing. https://doi.org/10.1007/978-3-030-15058-7_12

[5] Paul, P. O., Ogugua, J. O., & Eyo-Udo, N. L. (2024). Sustainable procurement practices: Balancing compliance, ethics, and cost-effectiveness. International Journal of Scientific Research Updates, 8(1), 27. https://doi.org/10.53430/ijsru.2024.8.1.0044

[6] Crosignani, M., Han, L., Macchiavelli, M., & Silva, A. F. (2024). Geopolitical Risk and Decoupling: Evidence from U.S. Export Controls. In Staff reports. https://doi.org/10.59576/sr.1096

[7] Longo, M., Foiadelli, F., & Yaïci, W. (2019). Electric Vehicles Integrated with Renewable Energy Sources for Sustainable Mobility. In IntechOpen eBooks. IntechOpen. https://doi.org/10.5772/intechopen.76788

[8] Bhadaoria, K. K. K. K. S. (2021). Decisive factors for the adoption of E-Procurement in manufacturing firms in India. Psychology and Education Journal, 57(9), 6124. https://doi.org/10.17762/pae.v57i9.2686

[9] Chen, J., Xu, Z., Gou, X., Dongbin, H., & Zhang, J. (2020). AUTOMOBILE COMPONENTS PROCUREMENT USING A DEA-TOPSIS-FMIP APPROACH WITH ALL-UNIT QUANTITY DISCOUNT AND FUZZY FACTORS. Technological and Economic Development of Economy, 27(2), 311. https://doi.org/10.3846/tede.2020.13176

[10] Sakuramoto, C., Sério, L. C. D., & Bittar, A. de V. (2019). Impact of supply chain on the competitiveness of the

automotive industry. RAUSP Management Journal, 54(2), 205. https://doi.org/10.1108/rausp-07-2018-0051

[11] Graham, G., Burns, L., Hennelly, P., & Meriton, R. (2018). Electric sports cars and their impact on the component sourcing process. Business Process Management Journal, 25(3), 438. https://doi.org/10.1108/bpmj-11-2017-0335

[12] Ahmed, M., Zheng, Y., Amine, A., Fathiannasab, H., & Chen, Z. (2021). The role of artificial intelligence in the mass adoption of electric vehicles. Joule, 5(9), 2296. https://doi.org/10.1016/j.joule.2021.07.012

[13] Zhu, H., Zhou, W., Li, Z., Li, L., & Huang, T. (2021). Requirements-Driven Automotive Electrical/Electronic Architecture: A Survey and Prospective Trends. IEEE Access, 9, 100096. https://doi.org/10.1109/access.2021.3093077

[14] Llopis-Albert, C., Rubio, F., & Valero, F. (2020). Impact of digital transformation on the automotive industry. Technological Forecasting and Social Change, 162, 120343. https://doi.org/10.1016/j.techfore.2020.120343

[15] Riad, M., Naïmi, M., & Okar, C. (2024). Enhancing Supply Chain Resilience Through Artificial Intelligence: Developing a Comprehensive Conceptual Framework for AI Implementation and Supply Chain Optimization. Logistics, 8(4), 111. https://doi.org/10.3390/logistics8040111

[16] Ogrean, C., & Herciu, M. (2022). Sustainability Performance and Reporting – A Strategic Issue for Electric Car Automakers. Studies in Business and Economics, 17(3), 288. https://doi.org/10.2478/sbe-2022-0061