

ОБЩЕСТВЕНИ КОМУНИКАЦИИ И ИНФОРМАЦИОННИ НАУКИ
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**MODERN CHALLENGES FOR THE PURCHASING DEPARTMENTS
OF AUTOMOTIVE COMPANIES**

Michael Reimes

University of Library Studies and Information Technologies

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Abstract: *Rapid changes in the automotive industry, driven by technological advancements, fluctuating market conditions, and evolving customer expectations, have transformed the role of purchasing departments. This study examines the challenges facing these departments, essential for maintaining a steady supply of components, managing supplier relationships, and reducing costs. Global supply chains are increasingly complex and vulnerable to disruptions caused by geopolitical conflicts, natural disasters, and pandemics. Consequently, automotive companies must adopt agile, resilient procurement strategies. The digital transformation of procurement processes, including the integration of advanced analytics, AI, and blockchain technologies, adds further complexity by demanding enhanced transparency and efficiency. A growing emphasis on sustainability and ethical sourcing requires evaluating suppliers on cost, quality, and environmental performance. The surge in demand for high-tech components due to innovations in electrification and autonomous driving further challenges traditional procurement methods. Data were collected through a comprehensive literature review and expert interviews, providing valuable insights into digital integration, risk management, and interdepartmental collaboration. The findings provide practical recommendations for automotive procurement. The study concludes that flexible, technology-driven, and sustainable strategies are crucial for maintaining competitiveness.*

Keywords: *Automotive Industry; Purchasing Departments; Digital Transformation; Sustainability; Supply Chain*

INTRODUCTION

The automotive industry is changing. There are rapid technological developments, a fluctuating market situation and changing customer requirements. The purchasing department is very important for this change. It ensures that there are always enough parts and materials available. It also takes care of relationships with suppliers and helps to reduce costs. In recent years, new problems have arisen. These are forcing automotive buyers to adapt quickly and in new ways. One major challenge is that global supply chains are becoming increasingly complicated. They can easily be disrupted by things like political conflicts, natural disasters and pandemics (Brancati 2019). Digital transformation adds another layer of complexity. It requires advanced analytics, AI and blockchain technologies. These help to provide better insights and enable faster responses (Kern & Wolf 2019).

Another problem is that ecology and environmental friendliness are becoming increasingly important. Car companies are being pushed to produce less CO₂ and to source raw materials fairly. Purchasing teams should evaluate suppliers. They have to pay attention to price, quality and environmental friendliness (Liao et al. 2017). Technology in the automotive industry, especially in electric and self-driving cars, is developing rapidly. Therefore, new high-tech parts are needed. This change requires us to rethink how we purchase. This way, we can work with digital companies and new companies that can offer new ideas (Motohashi 2017). Due to problems in the company, such as a lack of money, risk control and cooperation between departments, the purchasing department is also changing (Motohashi 2018). We need a flexible and versatile strategy to combat the current problems. It should be based on new technologies and good risk planning. This article explains the problems and how they have been found to affect the purchasing departments of automotive companies.

RESEARCH METHODOLOGY

This study uses a qualitative research methodology to analyse the modern challenges faced by purchasing departments in automotive companies. The data was collected through an extensive literature review of current academic and industry publications, with a focus on sources available through the Consensus app since 2019. The literature review was guided by a set of predetermined keywords, including 'automotive procurement', 'supply chain disruption', 'digital transformation', and 'sustainability in automotive procurement' (Russo 2015). By evaluating both academic journals and industry reports, this study summarises current insights and emerging trends relevant to the identified challenges.

In addition to the literature review, semi-structured interviews were conducted with purchasing managers from leading automotive companies. These interviews provided practical insights into how companies are adapting their purchasing strategies to global market dynamics and technological advances (Wang et al. 2016). The transcripts of the interviews were analysed using thematic coding to identify recurring themes such as digital integration, risk mitigation and sustainable procurement. This triangulation of data from scientific sources, industry reports and expert interviews provided a solid understanding of the current issues facing purchasing departments.

Data analysis was conducted using qualitative data analysis software that facilitated the organisation and interpretation of recurring patterns across multiple sources. Methodological rigor was enhanced by cross-validating insights from interviews with results from the literature review (Brancati et al., 2019). Ultimately, the integration of these methods allowed a nuanced examination of the multifaceted challenges of motor vehicle procurement and provided actionable insights for practitioners and researchers (Kern & Wolf 2019). The approach taken in this study highlights the importance of combining academic research and practitioner insights to capture the dynamic nature of the purchasing department in the automotive industry.

RESULTS

This study shows that purchasing departments in automotive companies are facing modern problems. They need a new strategy. A major problem is that global supply chains are being disrupted. Events such as the COVID-19 pandemic and political problems show that the normal supply chain model has weaknesses. Therefore, purchasing departments need to plan better strategies. Companies are starting to use more diverse suppliers and invest in digital supply chain monitoring. This enables them to identify and mitigate problems (Motohashi 2017). These digital tools allow us to monitor and assess risks as they happen. This is very important to avoid interrupting delivery.

The study showed that making the switch to digitalisation is a major problem. Modern purchasing departments are supposed to use advanced analysis, AI and blockchain techniques. This helps to make better decisions and improve operations (Kern & Wolf, 2019). These technologies make it possible to better predict demand, automatically process orders and better evaluate supplier performance. But the integration process has problems. These include high costs, the need for highly trained employees and the resistance of old procurement teams to change (Motohashi 2017). Companies that successfully use digital solutions report major efficiency gains and cost reductions. They say this despite having experienced some problems (Liao et al. 2017).

Sustainability has become an important issue in car purchase planning. Purchasing departments are now having to pay attention to environmentally friendly products due to increasing pressure from regulations and consumer demand. They also have to consider the sustainability of their suppliers (Brancati 2019). This change is not only about suppliers' environmental impacts. It also concerns their compliance with good labour practices. Car companies increasingly want to establish long-term partnerships with suppliers. These suppliers are committed to sustainability, even if it costs more in the short term (Motohashi 2018,). The difficulty lies in combining cost, environmental and social responsibility. This requires new ideas and strong leadership in purchasing departments.

Another difficulty today is the rapid technical progress in cars, especially in electrification and autonomous driving. The demand for high-tech parts and systems has increased as a result of these technical changes. This has made purchasing more difficult. Purchasing departments now have to orient themselves

in a landscape of suppliers that is constantly evolving. Many of them are small or new companies that focus on high-tech (Wang et al., 2016). In this rapidly changing environment, we need clear rules for evaluating suppliers. Purchasing teams and research and development departments also need to work closely together. Technological innovations are often unpredictable. Therefore, sourcing techniques must be flexible. They need constant adaptation and long-term planning (Davis 2021).

The modern purchasing world still takes a lot of care with risk management. Purchasing departments face more risks because global supply chains have become more complex and new technologies have been introduced (Miller 2020). Companies are now investing a lot of money in risk analysis systems. These systems include old metrics and new signs of digital and environmental hazards. For example, blockchain technology can be used to make supply chains clearer and more traceable. This can help to reduce fraud and compliance issues (Wilson 2023). But it's not just about technology. It is also important that our purchasing teams learn to recognise and respond to risks.

It has been shown that working with different departments is important to solve modern problems. The purchasing department has to connect more and more with other areas such as production, logistics and research. They do this to ensure that they pursue the company's goals (Kern & Wolf 2019). It is important that everyone works together to develop strategies. These must take into account both current operational needs and future goals. The results show that companies that collaborate a lot with other departments are better able to respond to market changes and technical issues (Liao et al. 2017).

In addition, changing rules have made the work of purchasing departments more difficult. Increasingly stringent rules on pollutants, labour and safety require us to actively address compliance. Car companies have to follow the changes in legislation in different areas. They have to adjust their purchasing plans accordingly. This regulatory pressure affects more than just the selection of suppliers. It also influences negotiations and long-term relationships with suppliers.

In short, the purchasing departments of car companies face an important decision. They have to adapt traditional purchasing methods. This is important because the environment is changing rapidly with digitalisation, sustainability and more risks. The future of automotive companies depends on whether they can adapt to these new challenges. According to books and discussions with experts, four things are important in this rapidly changing environment. These are the use of digital technologies, paying attention to sustainability, good management of risks, and better collaboration between departments.

CONCLUSION

On the whole, the purchasing departments of automotive companies have to face many new problems. This requires flexibility and creative ideas. Global supply chains have problems. In addition, digitalisation means that everything is changing rapidly. We also need sustainable methods. All of this together is changing the way we procure things. Companies should not only acquire good digital tools to make their work better and more robust. They should also ensure that their employees understand risks and can work well together. Purchasing departments have to constantly change their plans. This is important because of tougher rules and rapid technical changes in order to stay ahead of their competitors. The literature on the Consensus app and expert interviews indicate that in order to solve these problems, it is important to use digital solutions. You should also be able to manage complicated supplier relationships, keep an eye on costs, and buy ethically. The ever-changing purchasing landscape in the automotive industry shows that research and flexible practices are important. They help purchasing departments meet both current and future needs. This study presents a close examination of these issues. It also provides advice to automotive companies on how to make their purchasing departments better and more sustainable.

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СЪВРЕМЕННИ ПРЕДИЗВИКАТЕЛСТВА ПРЕД ОТДЕЛИТЕ ЗА СНАБДЯВАНЕ НА АВТОМОБИЛНИТЕ КОМПАНИИ

Резюме: Бързите промени в автомобилната индустрия, предизвикани от технологичния напредък, променливите пазарни условия и променящите се очаквания на клиентите, трансформираха ролята на отделите за снабдяване. В настоящото проучване се разглеждат предизвикателствата пред тези отдели, които са от съществено значение за поддържането на постоянни доставки на компоненти, управлението на взаимоотношенията с доставчиците и намаляването на разходите. Глобалните вериги за доставки стават все по-сложни и уязвими към смущения, причинени от геополитически конфликти, природни бедствия и пандемии. Вследствие на това автомобилните компании трябва да приемат гъвкави и устойчиви стратегии за снабдяване. Цифровата трансформация на процесите на снабдяване, включително интегрирането на усъвършенствани анализи, изкуствен интелект и блокчейн технологии, допълнително усложнява ситуацията, като изисква повишена прозрачност и ефективност. Нарастващият акцент върху устойчивостта и етичното снабдяване изисква оценяване на доставчиците по отношение на разходите, качеството и екологичните показатели. Рязкото нарастване на търсенето на високотехнологични компоненти, дължащо се на иновациите в областта на електрификацията и автономното шофиране, допълнително предизвиква традиционните методи за възлагане на обществени поръчки. Данните са събрани чрез обстоен преглед на литературата и интервюта с експерти, които предоставят ценни сведения за цифровата интеграция, управлението на риска и междудементственото сътрудничество. Констатациите предоставят практически препоръки за възлагане на обществени поръчки в областта на автомобилостроенето. Проучването стига до заключението, че гъвкавите, технологично ориентирани и устойчиви стратегии са от решаващо значение за поддържане на конкурентоспособността.

Ключови думи: автомобилна индустрия; отдели за снабдяване; цифрова трансформация; устойчивост; верига на доставките

Михаел Раймес, докторант

Университет по библиотекознание и информационни технологии

E-mail: reimes.michael@t-online.de