



Article

# Development of a Business Model by Introducing Sustainable and Tailor-Made Value Proposition for SME Clients

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**Abstract:** Due to the combination of vast technology trends brought by Industry 4.0, present-day consumers need and stiff global competition and require businesses from across many industries to constantly innovate. Clients request multifaceted support from manufacturers and service providers while the transition towards new symbiotic ecosystems disrupts traditionally established processes in some sectors. This is largely happening in the global automotive industry where in-car and around-the-car services with asset-sharing concepts are taking a dominant role rather than plain vehicles sales and car ownership. In our paper, we investigate the possibilities of new and improved business collaborations between a car retailer operating in several European countries and its SME (small and medium-sized enterprises) customers across various sectors currently owning car fleets of at least five vehicles. We test several hypotheses and conduct a systematic statistical analysis of the proposed business model's aspects on the sample of almost 200 SMEs from five countries in Southeast Europe. By using the  $\chi^2$  test and a one-tailed *t*-test we tested both frequency data and the continuous variables. Research indicates that SMEs look for new ways to organize their fleet management strategy more efficiently and thus more precisely plan associated costs. Regardless of the country of origin, SMEs want to explore a business model with more introduced to their fleet management and are ready to accept new technologies for fleet management operations.

**Keywords:** automotive industry; business model; outsourcing; SMEs

## 1. Introduction

The automotive industry has been recognized as one of the leading industries in the development of innovative products, processes and organizational solutions [1]. The structure of global car sales will drastically change. By 2035, the main carriers of revenue and profits are shifting from traditional sales, after-sales and financial services to holistic intermodal mobile solutions. The corporation has an economic and moral responsibility not only for the shareholders [2] but also for society and the environment. The dynamics of these changes will become visible in the next few years, even if

this fundamental change in the sales structure will not be fully utilized before 2025. Strong cyclical industries must be constantly monitored, as negative changes in these sectors will automatically aggravate the recession of the economic cycle [3]. Therefore, car manufacturers have to set a course for future sales by focusing on strategic investments. The most important efficiency indicator in the automotive industry is the fleet consumption of its product portfolio [4]. Progress in digitalization in the automotive industry, as well as the establishment of an autonomous drive, have initiated a phase of fundamental change. By 2035, mobility services as new sources of revenue could account for as much as 50% of the car industry's revenue [5]. The automotive industry as a type of cyclical industry is sensitive to the business cycle, so revenue is generally higher in periods of economic prosperity and expansion and lower in periods of economic decline and contraction [6].

The automotive industry has traditionally been crucial for the environment; increased environmental concerns and developed regulations have recently led to a change in production trends to better manage resources and energy [1]. Development of the Internet and new technologies related to it pushed the automotive industry towards a new sharing economy model.

### *1.1. Sharing Economy and Millennials*

The unlimited possibilities and necessity of the Internet enable the connection of various people from all over the world and the sharing of information. The importance of an online and physical presence is becoming more and more equal. Habits, ways of learning, and communication are changing. At the world level, there are few manufacturers, a lot of middlemen, and most consumers. Production, distribution, exchange and consumption are different from the economic system that represents the system of today—the sharing economy [7].

The sharing economy has generated growing interest across a wide spectrum, including investors, established companies, researchers, politicians [8]. Self-defined platforms for sharing are increasingly covered by important sectors of the economy, such as transport, accommodation and rent, retail, office space and logistics, finance and consumer loans and the labor market. They operate in labor markets, capital markets and markets for goods and services, and affect the overall economy [7]. According to one estimate, 51% of the adult population in the United States, or 105 million people, use one of the platforms for a sharing economy [8]. The Exchange is based on trust between service users. Consumption is viral, the exchange is a value in itself, and accessibility gets primacy over possession.

The digital economy represents the future of economic growth in the world and the EU. It is estimated that the digital economy will create almost one million new jobs and more than 500 billion euros of new growth in EU countries by the end of 2020. With unified policies like the digital single market, the EU can offer much to its citizens as well as becoming more competitive when compared to the US and some Asian countries. [9,10].

According to Botsman and Rogers [11], “collaborative consumption” is characterized as “critical mass, leisure time, community trust and trust between foreigners.” The exchange fee may be tangible or intangible. At the center of this economic solution are young people, especially millennials (people born from the early 1980s to the early years of the new millennium). It is a population that grew up using the Internet and technological means, has a different view of the world from its ancestors, recognizes supply and demand, and can create a way to connect them more efficiently. They have ideas and information on how to do something new and different, connect with people from all over the world and exchange experiences.

Traditional ways of sharing, exchanging, borrowing, trading, renting and giving are redefined using digital technology that is revolutionary and includes ways in which people consume and share their knowledge [12]. Such technologies allow sharing of what people do not traditionally use during full-time work, for example, houses and cars [13,14]. In a combination with the new technologies, the sharing economy represents the basis for better resource utilization, the creation of new employment opportunities, strengthening of digital awareness in people and awareness of the importance of ecology and sustainable development [13].

The importance of the model of sharing economy was quickly recognized by the automotive industry. More and more automotive companies are reviewing their positions today—seeing themselves not only as vehicle manufacturers but as providers of mobility. The latest example is Volvo as a manufacturer, promoting the “don’t buy your next Volvo, SUBSCRIBE!” concept as a halfway step towards a full car sharing model. Hakkan Samuelson, president of Volvo explained that they want to offer a fully transparent and premium experience to their customers. The monthly subscription has been set at €699 for Western Europe per month and will include some premium tailor-made services, car valeting, servicing, car drop off, and pick up. [15]. However, as the automotive industry slowly crosses into the mobility industry, new players appear as competitors. For example, Apple, one of the leaders in mobility, is entering the category of atomic manufacturers [16].

It is not necessary to spend a lot of time in calculating to see if it’s worth paying more for renting or buying a car roof suitcase if it is used once a year, a large car or a van for a wide family or a motorboat. The sharing economy implies something new and different, enabling a high level of savings on the part of users versus the purchase of goods or services in the classical market, according to the business-to-business model. Sharing platforms can also be non-profit peer-to-peer but most are based on the business-to-peer model.

There is a debate about whether the shift from ownership to the sharing economy between the millennials will continue in the long run. Some argue that this trend reflects a fundamental change of thinking that can prevail over time because access is increasingly identified with freedom and convenience and ownership is considered less important: “possession is limited, access is unlimited.” Others think millennials will return to ownership of things, as they grow up and their needs will change, or when career advancement and improved economic circumstances will enable them greater purchasing power [17].

However, owning a car is no longer as important as it used to be, thanks to improved public transport and the sharing economy. Young millennials fit into this lifestyle because they see a much greater advantage in car sharing than having a car. That is why some millennials buy cars to profit with them as members of Uber and Lift, transporting other people.

### *1.2. Literature Overview*

The traditional way of selling cars in showrooms slowly loses primacy with digital technologies, as customers use the Internet, social networks and mobile channels to gather the information they need to make smarter purchases. In the meantime, digital technologies in the car quickly redefine the after-sales thanks to the global network market. Today, two-thirds of customers are starting a search for a new or a used car online. More and more of them decide what to buy before they go into the sales shop, which often reduces the role of dealers in the sale. Selling without a clear strategy is a waste of time. Such a strategy is based on thinking about what is best at a given moment, and not on a clear vision of what sales actually want to achieve. Most companies account for 80% of the income coming from 20% of customers, which indicates that a group of 20% of clients generates 80% of a company’s business. This 20% of clients bring four times more traffic than the other 80% [18–20]. This principle is known as the Pareto principle. In order to lead the business with success and bring profit, the sellers must have all the tools and skills that will help them.

Digitalization and new business models have revolutionized many industries, and the automotive industry will not be an exception. According to the McKinsey study [5], some authors report that the car industry is shrinking; however, it is claimed that growth is accelerated and comes out from new revenues, which are driven by business models based on new mobile technologies, data linking and enhanced functions. The qualitative change of the production chain is too big and difficult change for a number of companies. For other companies, this is a necessary challenge and for the environment and society of people, it is the future and the life-long need [21].

According to the KPMG survey [22], more than 75% of car industry executives believe that an online car will generate more revenue over the entire lifetime than 10 offline cars, making the

traditional way to measure market share based on the number of cars sent in history. The question is, who in this era of digitalization will earn revenue, and whether information companies such as Apple or Google will contact the customers of automotive manufacturers, as these companies still do not have a clearly defined and completed business concept in the car industry due to where traditional carmakers continue to dominate the market [23].

A more recent approach to reduce automobile ownership is through the use of vehicle sharing programs (VSPs). A VSP involves a fleet of vehicles located strategically at stations across the transportation network. In its most flexible form, users are free to check out vehicles at any station and return them to stations close to their destinations. Vehicle fleets can be comprised of bicycles, low emission cars, or electric vehicles. Such systems offer innovative, low-cost, and flexible solutions to the larger mobility problem and can have positive impacts on the transportation system as a whole by reducing urban congestion [23]. The emerging “sharing economy” is particularly interesting in the context of cities that struggle with population growth and increasing density [24]. Car manufacturers are directly involved in car sharing operations, searching for new channels to sell their cars [25]. Furthermore, car manufacturers, beside the traditional way of trying to make their industry more sustainable [26], now have a new tool, that comes from implementation of the sharing economy principles into the new business strategy. With the constant pressure on all players in automotive to cut down on emissions and pollution, while having a new generation of millennials running businesses, companies who adopt principles of green marketing, as a holistic approach will gain a competitive edge. Accepting the principles of green marketing increases the value of the company’s products, the company gains a competitive edge, improves its image, gets to new markets [27]. There are two kinds of trends of the eco-innovation policy involved, one to do with environmental pollution and the other with the innovation and diffusion of new technologies [28,29]. These would certainly include the automotive sector with its high resource-consuming industry, both in manufacturing and in usage phases of product life cycle [30].

Success in 2030 will require automobile companies to anticipate market trends in advance and explore new business models of mobility as well as economic and consumer sustainability. In order to do so, they must proactively analyze consumer preferences. It is necessary to pay great attention to changing demographics in key markets, in particular, the increase in urbanization and the instability of emerging economies. Every car company must be very clear on how it plans to create added value for its customers. In other words, it has to determine the rules of the game. Unique processes, tools, knowledge, skills and organization must be established, which will enable them to deliver this value better than the competition, which will bring them ultimate success [31]. A company with a good atmosphere has more satisfied and faithful customers and employees. Their suppliers are more willing to cooperate, and investors are more tolerant and willing to finance the development of businesses [32].

Not only that the automotive market we know will change for good due to changes in habits of consumers and automotive business paradigm will change as well whereas main profit wells will shift. SMEs (small and medium enterprises) can also become a source of innovation and increased productivity [33] whereas those who recognize the chance to change the model of behavior and offer given to the market will be the ones to succeed.

Anyhow, the focus of the activity of car manufacturers in Europe over next 5 years will be on developing new markets and that is why South East Europe (SEE), area to be researched, plays such an important part together with former Soviet and Stan countries. This focus will not be seen only through the improvement of their dealer network but also through improvement in the offer given towards end-users—SME in this case. It is expected that emerging markets continue with steady performance (continued growth) over the next 10 years. With volumes growing, it is needed to investigate willingness of SEE businesses to change and adopt new models of car sharing, smart mobility and products subscription where the entire market will become super EASCY—electrified, autonomous, shared, connected and yearly updated. One of the tools that reveals the ways in which companies operate is the business model.

The business model explains how the company creates, delivers and accepts value by showing the key business elements that are taking place in it. Moreover, it often links the performance of the company with its business model [34]. Some authors recognized the sharing economy as a unique business model [34,35]. At the same time, the practical use of the sharing business as a business model extends from building business models (with start-up companies) to innovations in the business model (for companies already in business) [36]. The literature on open innovation often directly links business models and open innovation. In fact, open business models facilitate the integration and commercialization of external resources [37,38].

The literature also provided evidence of the important role of business models in enterprise performance, competitiveness and innovation at the enterprise and industry level [39]. Business models define how a company creates, delivers and captures value for its stakeholders [40]. However, the importance of implementation of the business model is seen as a key for sustainability of the automotive industry [41,42].

The goal of this paper is to determine the importance of new business models in sales and how they contribute to easier adaptation to new market conditions, especially since sales in the automotive industry is a transition from traditional to digital, with the constant development of intelligent mobility. South East Europe is adopting new models as local markets develop and one of these models is full fleet management service or operational lease service. Fleet management refers to the applications, tools, technologies and practices that help businesses maintain optimal use of their work vehicles from a central platform by an outsourced party for those legal entities whose core business is not transportation.

A large number of SMEs cannot afford to have a completely new fleet of vehicles, because it is a very high investment, both in the purchase, as well as in maintenance, regular servicing and registration. That is why many companies opt for the purchase of older, used vehicles, whether it's passenger cars or light commercial vehicles. Such vehicles often do not meet basic environmental standards. Therefore, as a new business model for small companies, the possibility of renting new vehicles appears in the number that would satisfy their business needs, and the ability to pay fixed monthly wages for vehicles does not represent an overpayment for companies. On the other hand, the obligation to maintain vehicles, spare parts and registration takes over the company's share. Apart from the fact that companies get a fleet of new vehicles under favorable conditions, all these new vehicles also have newer, environmentally friendly engines, less fuel consumption, and emit less polluting substances compared to older models, which certainly contributes to better air quality and greater environmental protection.

Authors have focused on development of a business model by introducing sustainable and tailor-made value proposition for SME clients aiming to show possibilities of new and improved business collaboration between a car retailer operating in several European countries and its SME customers currently owning car fleets of at least five vehicles. The results are expected to provide professionals with relevant data on business revenue and modelling models based on innovative sales strategies.

An interesting area where this research is conducted is SEE, because companies in SEE covers both ends—automotive companies who are offering vehicles through new services and interfaces and clients/users who are car users. It covers their behavioral thinking on new data, new ways of utilizing their car parks but also new technological solutions in terms of measuring their performance in terms of car usage and new platforms to communicate with their car service providers.

## 2. Research Hypotheses

To summarize, all goals can be described through three main points:

1. Explore the Western Balkan SME climate for acceptance of the new automotive business strategy.
2. Explore the crucial factors for SME that lead to the acceptance of the new automotive business strategy.

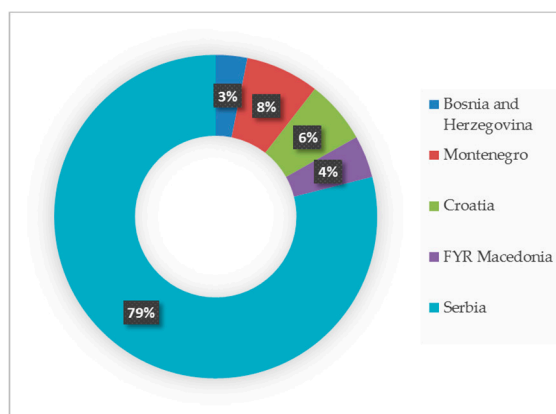
3. Explore the readiness of SME for the acceptance of the new technology into the automotive sale strategies.

In order to reach these goals, we tested several hypotheses. Since this study is explorative, some of the stated hypotheses are non-directional, and in others, the statement has a clear direction [43]. Firstly, in H1 hypothesis, we assumed that there is no difference in the potential of utilization of the full-service strategy between countries of the Western Balkans, including Croatia, Serbia, Bosnia and Herzegovina, Montenegro and FYR Macedonia. According to the Regular Economic Report of The World Bank (Group for the Western Balkans region) [44], Western Balkans countries are countries with a similar political background that coincides with the similar trends of the main economic indicators. Bearing this in mind, we do not expect the differences in the acceptance of the full-service strategies between the Western Balkan countries. Secondly, in the H2 hypothesis, we wanted to test whether a fixed monthly expense would be the key factor in making a decision about the implementation of the new strategy in the renewal of the fleet. We assumed that financial management is crucial for facing the new business challenges and that companies with great efficacy in the managing liabilities are more competitive on the market [45,46]. Consequently, it is expected that the fixed monthly expense would add more certainty in the development of business performance [47]. Thirdly, in the H3 hypothesis, we inferred that medium-and small-sized companies are ready to take new business strategy related to renewal, maintenance and repair of the fleet. Outsourced maintenance and repair of the fleet are already established a strategy in the fleet management in large-sized companies such as Postal Services all around the globe [48]. In a line with this, we assumed that the same pattern would be observed in the SME which have developed or partly developed vehicle management. Furthermore, we seek for the factors that are in a correlation with the sensitivity of the companies to the full-service model, thus in the H4 hypothesis we supposed that the companies with the larger fleet would be more responsive to the new model as well as the companies that utilize their fleet for the commercial purpose (against the vehicles used as benefit in kind). As one of the downsides of the full-service model in the automotive industry is the question of vehicle ownership. Accordingly, in the H5 hypothesis, we wanted to explore whether this is a significant obstacle for the full-service model. In line with the shared economy values, we assumed that car ownership would not be significant not promoting indicator of the full-service strategy [49]. Finally, in the line with the global trends of communication, especially for the purpose of the sharing economy [10,11,16], in the H6 hypothesis, we tested the readiness of the SME for implementation of the internet technologies. As the global trends of the sharing economy influence every brunch of industry and markets, we assumed that customers are ready to take the advantage of the online communication via official websites for the purpose of purchasing a new car. However, because buying a car always represents a large expense, we hypothesized that the personal contact in the car showroom is still important in the vehicle purchasing process.

### 3. Materials and Methods

#### 3.1. Research Sample

In order to examine previously stated hypotheses a research sample that consists of over 190 enterprises from the western Balkan region was formed. Approximately 60% were small and medium-size enterprises with less than 50 employees. Around 80% of them are situated in the Republic of Serbia (Figure 1).



**Figure 1.** Distribution of the Western Balkan countries in the sample of SMEs (small and medium-sized enterprises).

### 3.2. Questionnaire

A questionnaire entitled “ABS-2018” (Automotive Business Strategy—2018) was created in order to collect the data related to this research. This questionnaire covered several research indicators related to the hypotheses in the study, namely:

1. General data about the company—this part has the questions about the enterprise headquarters, yearly income given in Euros, size of the business and size of the vehicle fleet,
2. Management of the vehicle fleet—it contained questions whether the firm has a fleet management department, what is the fleet role and about the importance of the enterprise business,
3. Attitude about the possibility of outsourcing the vehicle fleet,
4. Key questions about the full-service strategy—questions about the conditions that would make the enterprise convert to the outsource model,
5. The importance of vehicle ownership for the enterprise—questions whether enterprise own or rent their vehicles,
6. Communication issues—questions about which would be the easiest, the most trusted way to communicate, close deals and make arrangements about fleet management.

The electronic version of the questionnaire was made with the Google forms and was distributed via email to the managers from different SMEs. During June and July 2018, they were asked to complete the questionnaire within the period of two weeks.

### 3.3. Statistical Analysis

The data were analyzed with *Statistica 12* software (StatSoft, Tulsa, USA) [50]. Each of the hypotheses was tested with appropriate statistical analysis. Descriptive statistics, including the arithmetic mean, median and the standard deviation were used to get a general overview of the survey results.

Frequency data were tested with the  $\chi^2$  test, and the continuous variables (the average scores) were analyzed with a one-tailed *t*-test.

In order to check the validity of H6 we have set a crisp boundary of 20 cars i.e., companies with more than 20 cars in their vehicle fleet were considered as companies with a sufficiently large vehicle fleet. Using this criterion, a  $\chi^2$  test was performed on the frequencies.

### 3.4. Variables

Variables in this research were answers to questions from ABS-2018 questionnaire. Sometimes the answers were represented as a frequency of given alternatives. For some questions, when the answer was a preferred value on the five-point Likert scale, we used the average score.

## 4. Results and Discussion

### 4.1. Testing the Difference between Western Balkan Countries

In order to test the first hypothesis, the origin of the company was cross-tabulated with the frequency answers on the question that evaluate the opinion about outsourcing the fleet management. Since the 80% of the SME sample is settled in Serbia, the rest of the sample was merged in the one broader category, which was named as Region (it contained answers for all other countries, namely, FYR Macedonia, Montenegro, Croatia and Bosnia and Herzegovina). Differences in the frequency answers were tested with the  $\chi^2$  test, which did not show the level of statistical significance:  $\chi^2(2) = 4.356, p = 0.113$  (see Table 1). In other words, the absence of the difference between Western Balkans countries was confirmed: Serbia, as well as the rest of the region, has the same trend in answers toward outsourcing model of fleet management. Namely, 53% of the overall sample answered that management of the company did not consider the outsourcing, 35% that management did, and approximately 12% of the tested participants do not know anything about such strategy.

**Table 1.** Cross-tabulation for the questions that refer to an opinion about fleet management in relation to a country where the head office is settled.

$\chi^2(2) = 4.36$ $p = 0.11$	Did Company Management Consider Outsourcing as the Option for the Fleet Management?							
	Yes		No		Don't Know		Total	
	f	%	f	%	f	%	f	%
Region	10	25.64	21	53.85	8	20.51	39	100.00
Serbia	55	37.93	76	52.41	14	9.66	145	100.00
Total	65	35.33	97	52.71	22	11.96	184	100.00

%—Percent was calculated in the relation to the category; f—frequency.

### 4.2. Testing the Importance of the Fixed Monthly Expenses

To test hypothesis H2, we analyzed answers on the three questions:

- Rate to what extent acquisition of the financial means for the renewal of the fleet represents a great challenge for the company.
- To what extent regular and irregular expenses of the vehicle maintenance influence the cash flow of the company?
- Evaluate how much fixed monthly expense for the vehicle park would facilitate budgeting and planning of the business operations?

For all three items, participants rated on the five-point Likert scale to what extent the statement is related to their opinion, where one represented that the statement was not important and five that it was very important to them. In Table 2, the descriptive statistics are presented together with the hypothesis that was tested and  $p$ -value for the recorded one-sided  $t$ -test.

**Table 2.** Descriptive statistics for the answers for the items a, b and c of the ABS-2018 (Automotive Business Strategy—2018) questionnaire.

Item	Mean $\pm$ SD	Median	Hypothesis	$p$ Value
a	3.39 $\pm$ 1.31	3	$\mu > 3$	0.0003
b	2.45 $\pm$ 1.01	2	$\mu < 3$	0.001
c	3.62 $\pm$ 1.21	4	$\mu > 3$	0.001

SD—standard deviation;  $p$  value for one sided  $t$  test.

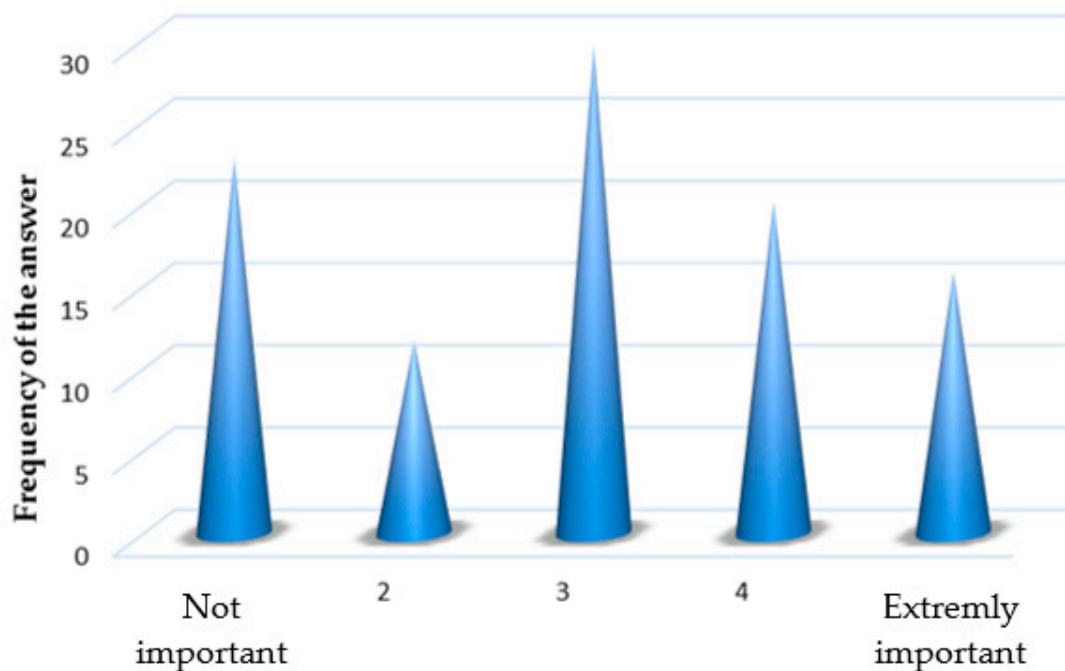
According to results from Table 2, we can conclude that for the majority of the SME, renewal of the fleet represents a great challenge, since the tested hypothesis that the sample mean is greater than the middle answer is accepted ( $\mu > 3$ ). On the other hand, the regular and irregular expenses



for the vehicle maintenance do not influence the company's cash flow, as the one-sided *t*-test for the hypothesis  $\mu < 3$  was significant. Furthermore, the fixed monthly expense would be beneficial for budgeting and business planning for most of the examined companies. Taking all together, we can infer that fixed monthly expense of the vehicle maintenance is an important factor in making a decision about fleet management strategy.

#### 4.3. Testing the Readiness for the New Fleet Management Strategy

In order to test this hypothesis, we analyzed answers to the question: "Evaluate how important is the existence of the outsource partners for the enterprise to function and do business?". Participants rated on the five-point Likert scale to what extent the existence of the outsourcing of the fleet management is relevant and important to them, where lower grade denoted that it is not important to them, and the highest grade that the stated is very important to them. The frequency distribution of the answers is represented on Figure 2. It can be noticed that the middle answer was the most frequent one. The mean of the answers was  $M(190) = 2.95$  with the standard deviation  $SD = 1.31$  and the median  $Mn = 3$ . We tested the hypothesis that the mean of the item is equal to 3 i.e., the middle answer:  $\mu = 3$ . Testing this assumption with the two tailed *t*-test, we did not record a significant result,  $p = 1.00$ , and accordingly, the null hypothesis was accepted. In other words, one can conclude that our SME sample has not formed an attitude towards the existence of the outsource partners when it comes to the maintenance of the fleet.



**Figure 2.** Distribution of the answer frequencies of the client's readiness to make a change in the financial arrangement.

#### 4.4. Testing the Factors of the Fleet Size and the Vehicle Purpose

With this hypothesis, we wanted to explore the relevant factors that influence probability to switch to the fleet management strategy. Firstly, we tested the assumption that companies whose vehicles are used for commercial purposes are more likely to switch their fleet management model.

To test this factor, the companies were divided into two groups: one that commercially uses their fleet and the ones that use vehicles for the sake of employee prestige. Trends of frequency answers are given in Figure 3. There were no significant differences between these two groups were tested with the  $\chi^2(4) = 3.74$ ,  $p = 0.42$ . Accordingly, vehicle purpose is not a relevant factor for taking a new fleet management business strategy.

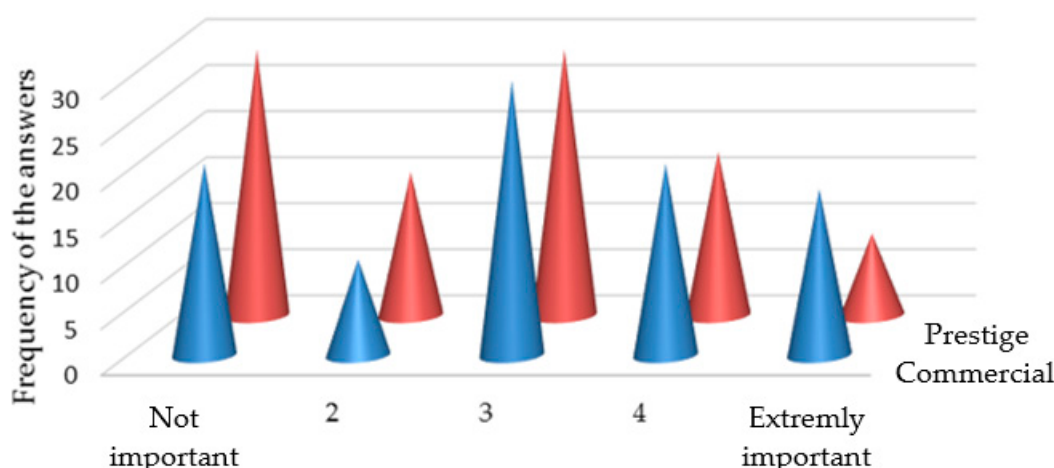


Figure 3. Frequency distributions depending on the vehicle purpose.

The second factor that was tested was the size of the company’s fleet. It was hypothesized that the companies with the larger vehicle fleets would be more likely to convert to the new managing business model. In Table 3, the frequency of the answers to questions about the importance of the outsourcing fleet management related to the size of the fleet is presented. The differences were tested with the  $\chi^2$  test.

Table 3. Importance of the outsourcing partners for the vehicle fleet management in relation to the size of the company’s fleet.

More than 20 vehicles? $\chi^2(4) = 12.556$ $p = 0.013$	Evaluate How Important Is it for you the Existence of the Outsource Partners for the Vehicle Fleet Management?											
	1		2		3		4		5		Total	
	f	%	f	%	f	%	f	%	f	%	f	%
Yes	12	19.35	4	6.45	17	27.42	11	17.74	18	29.03	62	100
No	31	24.41	18	14.17	39	30.71	21	21.26	12	9.45	127	100
Total	43	22.75	22	11.64	58	29.63	32	20.11	30	15.87	189	100

%—Percent was calculated in the relation to category; f—frequency.

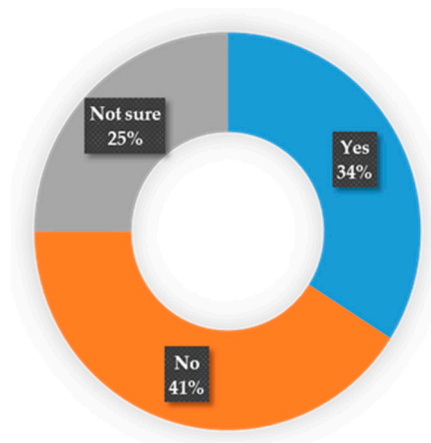
Since the tested differences were statistically significant:  $\chi^2(4) = 12.556, p < 0.05$  one concludes that the companies with large fleets have a different attitude towards outsourcing the management of the fleets. Namely, companies with many vehicles are more likely to outsource maintenance of their fleet.

#### 4.5. Testing the Factor of Vehicle Ownership

Importance of the ownership factor was explored through the analysis of answers to the question: How important is for you that vehicle utilized for business is in your ownership? Again, participants choose one number on the five-point Likert scale. We recorded the mean answer:  $M(190) = 2.59$ ,  $SD = 1.51$ , and median  $Mn = 3$ . Again, a one sided *t*-test was used in order to test the hypothesis that the mean value of the answers is equal to three:  $H_0 (\mu = 3)$ , opposite to alternative hypothesis that the mean value is lower than three, the significant difference was recorded:  $p < 0.01$ .

Thus, we concluded that it is not important to SME that vehicles utilized for business are in the company’s ownership. Moreover, it can be highlighted that 38.74% of the participants find that ownership of the vehicles is not important at all compared to 17.28% that answered that ownership is very important.

A similar conclusion can be made based on the distribution of answers for the item “Does in the financial model that you use ownership represents a benefit for you?”. Distribution of the percentage is presented in Figure 4. It can be noticed that 41% of SME consider that ownership is not beneficial for the business process. Moreover, when asked: In your opinion what is the most important thing after the leasing period expires? Out of the four options most of the participants 53% picked the option to ensure a new contract, on the other, hand only 7% added the option to keep the vehicle in their ownership. Finally, 36% said it depends on the circumstances and 4% were not sure. Using all these findings one can conclude that the ownership of the vehicle is not an important factor and that the clients are ready to change their attitude.



**Figure 4.** Distribution of the percentage of answers about the importance of car ownership.

#### 4.6. Testing the Implementation of Internet Technologies

With the last hypothesis, we wanted to test whether the SME are ready to switch to the online communication model with the service providers in arranging the management of the vehicle fleet.

First, we analyzed the answers to the question: “How much would it mean to you that the complete analysis, demand and offer reception is done online or contactless?”

The arithmetic mean of the answers was  $M(190) = 3.57$ , with the standard deviation  $SD = 1.22$  and the median  $Mn = 4$ . With the one-tailed  $t$ -test, we tested the hypothesis that the mean value is equal to three (or middle answer) ( $\mu = 3$ ), opposite to the alternative that the mean value is larger than three ( $\mu > 3$ ). The test showed a statistically significant difference, with the  $p < 0.05$  ( $p = 0.032$ ), so the  $H_0$  hypothesis was rejected. So, the SME from our sample is ready to accept the new internet technology means of contactless trade.

Furthermore, we wanted to explore to what extent the SME is ready to accept new business communication innovations, so we asked them how much they would like to have the option to close the deal for vehicle fleet management using official company website, mobile phone application or direct personal communication. The distribution of the frequencies of the answers is given in Figure 5. When a  $\chi^2$  test was performed, we recorded the value  $\chi^2(2) = 33.25$ ,  $p < 0.001$ , which reached a statistically significant difference. According to all gathered results, it can be concluded that although SMEs in the Western Balkan countries are ready for new internet tools, when it comes to the car purchasing process, usage of mobile application seems to be too advanced. In that case, the classic face to face way of communication is more preferable.

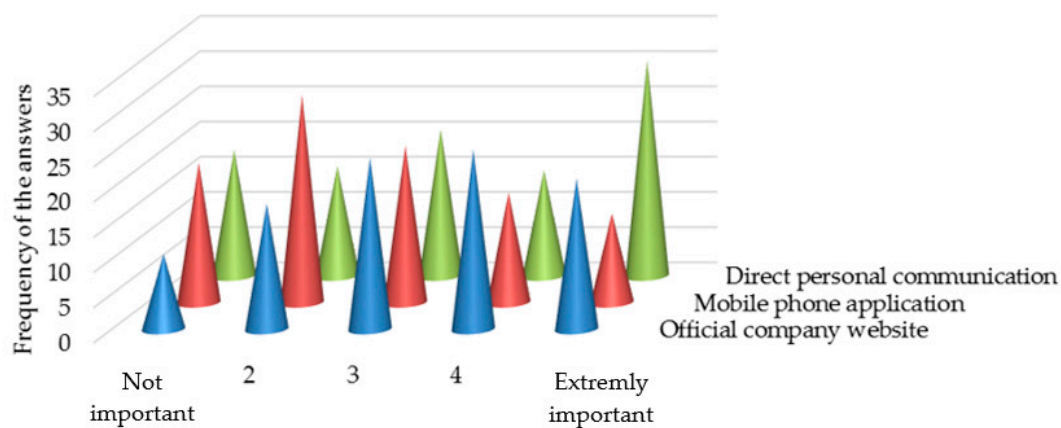


Figure 5. Frequency of the importance of different communication models.

## 5. Conclusions

The aim of this paper was to determine the importance of new business models in sales and how they contribute to easier adaptation to new market conditions, especially since sales in the automotive industry are in transition from traditional to digital, with the constant development of intelligent mobility. The intention was to explore trends in the Western Balkan region, in order to find readiness of SMEs to adopt new business strategies in the automotive industry. The model itself shows that distracting clients away from “dry” price structured sales will increase volumes and revenues for the vendor only if it recognizes type and level of additional services to be offered and at the right cost.

Results of our study revealed some of the trends in automotive sales strategies in the Western Balkan region:

1. It was found that the whole Western Balkan region is equally interested in the implementation of the outsourcing model of fleet management. This is not surprising since these countries share a similar history, similar culture and finally, similar economic strategies [41].
2. For the majority of the SME, renewal of the fleet represents a great challenge, however, results showed that the regular and irregular expenses for the vehicle maintenance do not influence the company’s cash flow. Further, it was found that fixed monthly expense would be beneficial for budgeting and business planning for the most of the examined companies and that it is an important factor in making a decision about fleet management strategy. As predicted, companies with straight business policy invest their resources in proper budgeting, and therefore, they perceive their benefit from the fixed monthly expense [42–44].
3. Still, our SME sample do not have formed an attitude towards the existence of the outsource partners when it comes to the maintenance of the fleet, probably due to the lack of knowledge about this model.
4. Analysis of the factors relevant for acceptance of the new fleet management strategy revealed that vehicle purpose is not a relevant factor for outsourcing and that the companies with large fleets are more likely to outsource maintenance of their fleet. In other words, companies with larger fleets will have more benefits of fleet management because this strategy will cut the costs of car maintenance.
5. When it comes to exploration of sharing economy factors, it was found that it is not important to SME that vehicles utilized for business are in the company’s ownership. This result is in accordance with the new trends of the sharing economy [13,14], and new “millennial” mindset, where possession of the vehicle and even the house or apartment is not of the greatest value.
6. Analysis of the readiness to accept new internet tools showed that SMEs in the Western Balkan countries are ready for new internet tools. However, when it comes to car purchase process the classic face to face way of communication is more preferable. We supposed that the car purchase

in the Western Balkan countries still represent great cost and as such, customers are not ready to completely implement all internet tools. According to our results, buying a car with one click is for now distant future.

To wrap up, in order to survive organizations, have to change constantly. Today, in the era of digitalization and a high pace of change in the environment, organizations have to change faster, and therefore the current way of sales must follow the trends that exist on the market. The ability of companies to quickly adapt to new sales trends will be their basic ability and capacity. The new way of selling and renting vehicles, with a subscription, comes at a time when the car industry faces a number of problems, long loan periods, and a drop in sales. Companies are looking for new revenue streams and new ways to get customers back. For any type of business, whether small or large, well-organized companies, long-term car rental can be a cost-effective way to improve efficiency, which would reduce vehicle maintenance costs. There are many advantages in renting a car, as opposed to owning it and more and more people and companies seem to move towards solutions proposed by the sharing economy. Car renting and sharing can help solve some of the problems that all major cities encounter, such as congested streets and air pollution. Global giants in the automotive industry, re-branding themselves as “mobility” companies, see rent as a way to turn customers from one-time customers to sources for long-term revenue generation.

Our findings showed that SME in the Western Balkan countries are ready for the implementation of the full fleet business model strategy. However, this readiness is conditioned by the number of vehicles that the company owns. In other words, SMEs with larger fleet are more motivated for the new strategy adoption. Furthermore, the results of this research revealed that the large number of SME does not have an insight into the necessity of the implementation of the straightforward budgeting principles, in order to downsize their costs. This is probably the reason why full fleet strategy is not completely recognized as a more convenient business strategy, compared to the traditional way of purchasing and maintaining vehicle fleet. It might be concluded that Western Balkan SMEs are moving toward more sustainable business approaches, and that is in accordance with the values and principles of the sharing economy.

However, this research has several barriers. Although we evaluated our results in light of the whole Western Balkan region, most of our sample originate from Serbia. Additionally, the sample of SMEs was not representative. In a line with this, extrapolation of some conclusions should be taken with consideration. Furthermore, we used a nonparametric statistic, and this is the additional reason why the results of this study could not be extrapolated to the whole population of SMEs.

On the other hand, there are not many studies that are trying to investigate the relation of the sharing economy and the changing concept of car ownership. Furthermore, there is a lack of investigations into how the sharing economy and new internet technologies influence automotive markets. These trends push the automotive industry to make implementations of a new business model that is more sustainable. Bering this in mind, we can conclude that this research, although explorative, could be the basis for future studies, that could give deeper insight in the relation between sharing economy and automotive industry, and how this relationship could be implemented in more sustainable business models.

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