

Streszczenie w języku angielskim

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Car Sharing Management and Sustainable City Transport Development

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Constant technological development and innovation modifies existing patterns of acting, transforms the labour and service markets, and influences science, establishing at the same time new attitudes and behaviours, previously unknown and unexplored. Another noticeable phenomenon on the other hand is the diminishing private possession of items in favour of sharing them between multiple users, which facilitates an economy of sharing. It is in this context that car sharing services find their place, which realize a principle of growth based on short-term vehicle rental offered by specialized providers through dedicated mobile applications. This form of city mobility has been available in all the most populous cities in Poland since 2015, and has thus become an alternative to possessing a private vehicle on the one hand, and to local public transport on the other.

It is in this backdrop that forms the premise for an elaboration of the topic of car-sharing management with regard to sustainable city transport. **The main purpose** of this thesis is to formulate a set of good practices in car sharing management in the context of sustainable growth of city transport systems. Such a catalogue of practices has been established on the basis of a research of available literature, the author's own research, and theoretical knowledge gained in the course of his studies. Its main concept assumes a realization of several **detailed research goals:**

- C1. A structuring of theoretical knowledge regarding car sharing and the essentials of sustainable city transportation development.
- C2. A definition of factors impacting the appeal of car sharing services to users, from the clients' point of view.
- C3. A demarcation of the influence car sharing services exert on public transportation in cities.
- C4. An assessment of the role of municipal authorities in the development of car sharing services.

C5. An operationalization of electric vehicle implementation with regard to levels of demand for car sharing services.

In order to attain these research goals several working hypotheses have been formulated and reviewed. **The main hypothesis** postulates that car sharing services have a positive impact on the development of sustainable city transport systems. This is supported by five **detailed hypotheses**:

H1. The increasing appeal of car sharing among clients limits the need for private vehicle ownership and usage, and thus has a positive impact on the development of sustainable transport systems in cities.

H2. The use of car sharing services reduces demand for public transport.

H3. A positive engagement of municipal authorities impacts the expansion of car sharing services.

H4. Modern and consumer-friendly IT Solutions, which support car sharing management, broaden the client base of such services.

H5. The introduction of electric vehicles as part of car sharing service offerings increases users' interest in such services.

The elaboration of this topic and the verification of its hypotheses required various research methods and tools. The theoretical part, which comprises the subject matter of the thesis, is divided into three chapters, and is based on an analysis of both Polish and international specialist literature. **The first chapter** delineates the theoretical basis for sustainable development in city transport management. **The second chapter** presents a detailed characteristic of car sharing services, based on Polish and international publications. It also presents a concept of economy, a historical outline of the development of such services both in Europe and worldwide, and the results of a review of foreign publications concerning their influence on private vehicle ownership. **The third chapter** presents the process of implementing car sharing services in Polish cities. A research questionnaire conducted among the service's users and city officials, and a structured interview conducted with businessmen active in this market segment, form the basis for the empirical part of this thesis. Results of this research are presented in two chapters. **The fourth chapter** presents the methodology of the research process, a characteristic of the research sample, and an analysis of the variations in the services' use and management, supported by a comparative analysis of the services' ratings and aspects of its development and administration by way of comparison and interpretation of the results gathered from all the researched groups. The last **fifth chapter** focuses on placing car sharing services in the context of sustainable development of cities, and results in an original set of best practices in car sharing service management with some

recommendations regarding city mobility based on vehicle sharing.

Research conducted among the three groups active in this field has led to a verification of auxiliary hypotheses, and thus to a **positive verification of the main hypothesis**. It has to be concluded then, that car sharing services have had a positive impact on the sustainable development of transport in cities. They facilitate a tangible change of attitudes towards mobility among the users of such services, which tend towards increased sustainability. And although the actions resulting from these new attitudes are not always radical (involving for example the selling of vehicles by private owners) and are not commonplace in every city, both in the cities in question and in locations where car sharing services are available one can expect an increase in the interest in this kind of service in the coming years, along with a decreasing trend in private car ownership and what follows: a reduced demand for parking space. All these developments will shape cities in a more environment- and inhabitant-friendly manner which is sure to improve their image as well as their living standards. It has to be concluded that car sharing services are a force which strengthens this change towards sustainable development in Polish cities.