

Abstract

The number of batteries and especially accumulators, which we use, is growing every time and collection with take-away is growing too. Now it is absolutely important look for a way to optimization, which can be for example building new processing equipment. Graduation thesis deal with data analysis from battery collection, data processing and building a data model in four variants. Graduation thesis work with number of battery and accumulators in czech households and bring answer to question „How many batteries we have got approximately in our households?“ Output is processing questionnaire about Research of battery in households, which is used in next work. The main output is data model. Model work with distance of take-way route on principle Service area and Transportation theory. Data are obtained by ArcGIS and processed in Excel. The output are map schematics which are based from four studies. First study shows present state, next shows battery factory in another capital town in regions of the Czech Republic. Third shows variant battery factories in three biggest cities and fourth battery factory in all czech cities, that have 100 000 residents. The best combinations is probably study with three biggest cities, because in this study is saving 50 % of costs and withal it is not necessary build many new battery factories. Data model is assembled universal so, it is possible to use then with small revision for another collection projects.