While economy leading companies have already implemented important steps that are considered to be part of the fourth industrial industrialization, local companies often lack those realization steps. Many companies are not using robots neither are they digitalized. The factory simulation is established to show them the advantages as well as giving them input for implementation.

Looking at the advantages, the aim should be to improve their factoring process. The primary goal of the fourth industrial revolution for local companies should be to reduce failures during production and with that saving money. But with knowing how to establish a more digitalized production system, companies can also use the other benefits that are coming along. As examples one can take a possible reduction of workers or the information chain for customers.

To improve the understanding of the simulated production process, a real-world factory is taken as example. The example is about a rim manufacturer for cars. In their factory they have a warehouse, an oven, a milling machine and after production workpieces get stored depending on colour. The rims can be ordered in colours red, blue and white. In the beginning an order picker collects raw material, puts it into an oven to temper the material. After the hardening is finished, the workpiece needs to be carried to the milling machine. After that, a person need sort it by colour into the right chute for the final storage.

The factory simulation shows how to automate all these work steps. For implementation at first robots are introduced. All the work steps that were executed by a human can also be handled by a robot. That means that one robot can fetch the raw material, a further robot can deliver the workpieces to the factoring sites. Convey belts can transport the workpieces between the factoring steps and finally to the chutes. With using a colour detecting sensor, sorting workpieces can be executed automatically. After implementing the robots just one worker to overview all production steps is necessary. As a reduction in total number of laborers is possible, a result is lower production costs.

To make it easier for the worker overviewing the production site production will be digitalised. This includes that data is gathered, analysed and visualized. In a final step, the pillar of artificial intelligence is deployed. An intelligent software is then in charge of controlling the production. It can also work with the provided production site data. If all is working perfectly together, there is just a production site manager of the rim producing company necessary to overview the progress of the factory, as execution, monitoring and controlling is done by software tools.