**Basic description of modeled company.**

Company Kola Novák s.r.o. was founded in 1996, when the owner Václav Novák decided to start a smaller business in České Budějovice. The production mainly specialized in the assembly of bicycles. The company initially employed the minimum number of people required to run. Around 20 people were employed in positions such as laborer, logistics, accountant. Over the years, the company achieved slow growth and therefore could afford to upgrade its facilities and expand its staff. The owner decided in 2010 to introduce into the company IS, which would facilitate the operation and management of the company. The IS fulfilled only the basic functions, but there was a significant improvement in the decision-making and management of the company. In view of his experience with IS, Mr. Richter decided in 2018 to invest in the acquisition of a new information system that would cover all the functions of the company so that he could improve the performance of the entire company.

**Basic description of company**

The company is divided into several departments that cooperate and communicate with each other. The structure of the company can be seen in the following diagram.

**Warehouse**

At this point, the components necessary to complete the wheels in the workshop are stored and products (bicycles) are also stored. The warehouse worker delivers the parts to the workshop according to a predefined parts schedule for production, which the planning manager plans. The warehousekeeper is obliged to record the quantity of delivered parts for production and the parts supplied from suppliers and thus keep complete records. The products are brought from the workshop. The quantity of products is determined by the production plan, which is created by the planning manager. As with the parts, the warehousekeeper is obliged to keep a record of all wheels that were brought from production.

**Workshop**

The workshop is where workers who assemble bicycles from parts delivered from the warehouse work. The production manager ensures that the daily wheel production standard is adhered to and also ensures the overall smoothness of operation. Records of individual workers are kept, which helps the HR department in decision-making processes. This means, for example, the possibility of a bonus or the need to dismiss an employee.

**Logistics Department**

This separation in order to avoid the lack of components in the warehouse, excess of components or in extreme cases, the impossibility of storage.

This department takes care of the optimization of the mode of transport, means of transport and handling and sets a timetable for the use of these means.



**Planning Department**

The planning department creates a production plan, itemized items for a particular department. It tries to optimize and allocate costs of the company. It is also responsible for recording data related to the department's activities.

**Personnel Department**

The HR department keeps records of all employees. It continuously monitors their performance and also the performance of the department as a whole. It handles the requirements of individual personnel applications, takes care of the ongoing education of employees and their retraining, and handles the requirements of employees in the field of social policy. It takes care of hiring new employees and also dismissing them.

**Accounting and sales department**

This separation takes care of the economic part of the enterprise. It carries out operations on individual accounts, ensures invoicing, checks accounting documents, ensures inventory of assets, manages the creation of documents, calculates wages for employees and creates payroll sheets. It takes care of the employee's personal file, secures his health insurance company and notifies the insurance company of the employee's arrival. It manages the employee's attendance system, his bonuses and the change of his personal data. Provides tax agenda. It carries out documentary inventories and takes inventory inventories.

**Bicycle Development Department**

In order not to be left behind by the competition, the company must constantly develop new products and this is the department that is in charge of developing new bikes that would succeed against the competition. The main activities of this department are monitoring of the wheel market, testing of new wheel prototypes and their subsequent putting into production.

**System surroundings**

The enterprise as a whole is made up of the production enterprise. By surrounding we can understand what surrounds this complex.

**Inputs**

As inputs of this system we can take:

* Components - are delivered to the company. They are then stored and served for subsequent assembly of products
* Workforce - is accepted through the HR department.
* Invoices paid from vendors - are paid for delivered products
* Legislation - Company relations are governed by law
* New business equipment - equipment needs to be updated over time individual departments

**Outputs**

As outputs of this system we can take:

* Products - are manufactured in a workshop and then stored in a warehouse
* Payroll of employees (including social and health insurance)
* Deliveries - are transported by carriers
* Company invoices paid - are paid to component manufacturers