

4 SUMMARY

In the world of exhibition design and engineering, function follows form. Generally the artists and designers generate ideas and visualize the exhibition and the engineering comes second. Sometimes good creative ideas occur when parts are already in production and the redesigning cycle is chaotic. When exhibits are in manufacturing phase, the engineer's work does not end, it is actually more intense due to such changes. The exhibit is in its finishing stages during the writing of this thesis and it has been a great experience designing and building this exhibit so far.

The design changed a bit compared to the original idea, but generally the objectives were met. The bike has been tested successfully and is likely to be one of the most popular exhibits in the amusement centre. The exhibit has already received the attention of media. Estonian journalists tried out the prototype and played the game. See the news article at [15].

For a bit of critical introspection, some parts of this exhibit can be improved. The biggest potential for improvement is the pedalling experience. The friction belt on the shaft does offer some resistance, but it would be much better if a flywheel could be implemented. It would have been easier to buy an exercise bike and use its pedalling and flywheel system. „Inventing the bicycle“ is not a good approach and existing products should be used as much as possible to speed up the development. The design would be completely different with this approach, because the huge flywheel must be concealed, thus making the exhibit look more like a motorcycle, rather than a bicycle.

The next step is to build the 3 other bicycles, one of which will have a smaller frame and is going to be used by children. I am also working on other exhibits simultaneously. The critical deadline is October 18th 2019, the day before the grand opening of PROTO Invention Factory in Noblessner Foundry, Tallinn. [16]