SUMMARY

In the first section, the introduction is given. It covers a company description that includes the services that the company provides. Issues that the company is facing is described such as stationary registering station. Implementing a mobile bar code scanner has been discussed. The goal of the thesis has been stated, developing and testing an Android application that would enable inserting data to the server via mobile scanner. For testing the application, an SQL server was created that enables testing application without connecting it to the companies server, failing in the last.

The second section covers the literature review. The review covers lean philosophy, case studies of implementing a digital solution, and lean production. Additionally, possible benefits and drawbacks of digitalization were discussed.

The third section covers processes flow in the warehouse. In this chapter, processes such as receiving raw materials were described. In addition, the process of updating the value of the batch was described. The challenges and wastes of processes were described in the chapter. Explanation on how digitalization resolves those wastes were presented.

In the fourth section, processes flow during assembly is discussed. The chapter describes several processes that were used during the assembly for specific products. However, only a collection of the components is described in detail, with additional focus on moisture-sensitive components. The issue and inefficiency were described.

In the last fifth chapter, the digital solution is described. The process mentioned in previous chapters were summarized with their drawbacks. The chapter contains information about the user interface for the Android app and data exchagne between the server and the user.

The main goal of the thesis was achieved, an Android app was created that enables more convenient and ergonomic information exchange between server and user.

The possibility for future improvement includes connecting the application to the SAP server and increasing the number of procedures that could be digitalized. The research lacks a quantitative amount of increased productivity. However, a digital app already prevents possible errors in processes such as collection and dryer checks, which creates added value to the company.