

## Objective

TE Connectivity is a technology company that designs and manufactures connectivity and sensor products for harsh environments in a variety of industries, such as automotive, industrial equipment, data communication systems, aerospace, defence, medical, oil and gas, consumer electronics, energy and subsea communications. TE Connectivity has a global presence and serves customers across multiple countries.

TE Connectivity has two plants in Pune, India (Shirval and Wagholi). Shirval plant specializes in lead/cable. It has machines to cut leads as per the specification provided by the automotive manufacturer. The product has to adhere to the specification provided by the manufacturer. Lead cutting process involves multiple steps. It mandates periodic measurements of the end product. These measurements are validated and recorded for future references. Measurements are inspected and approved by quality personnel. At present, the process is manual and error prone. The team uses paper forms to record the measurements.

## Scope

VAST developed a solution to automate Lead Order Management workflow end-to-end. It spans across multiple roles wiz – process engineer, Quality engineer, Supervisor and Operator.

## Challenges

We worked very closely with TE team to understand their existing manual work flows, internal processes and standard. We spent time to understand and study different personas who are going to interact with the system, conducted multiple interviews with end users to define solution. It has to be an intranet application which should work without internet connectivity. UI has to be as easy and straight forward as possible as some of the users of the systems are not tech savvy.

## Technology

- Node.js
- React.js
- MongoDB
- Bootstrap (CSS Framework)

## Benefits

The new system helps TE, to remove manual paper work and redundancies and provide rich data insights that can be further used to improve overall productivity.

## Key features

UI design is responsive. Operator use the system through tablets. Data is stored in the mongoDB document format, it provides fast data retrieval and search.