

Current consumption of plastic in Sri Lanka is 265000 Mg per annum!

Five types of plastic molding

- Extrusion molding
- Compression molding
- Blow molding
- Injection molding
- Rotational molding

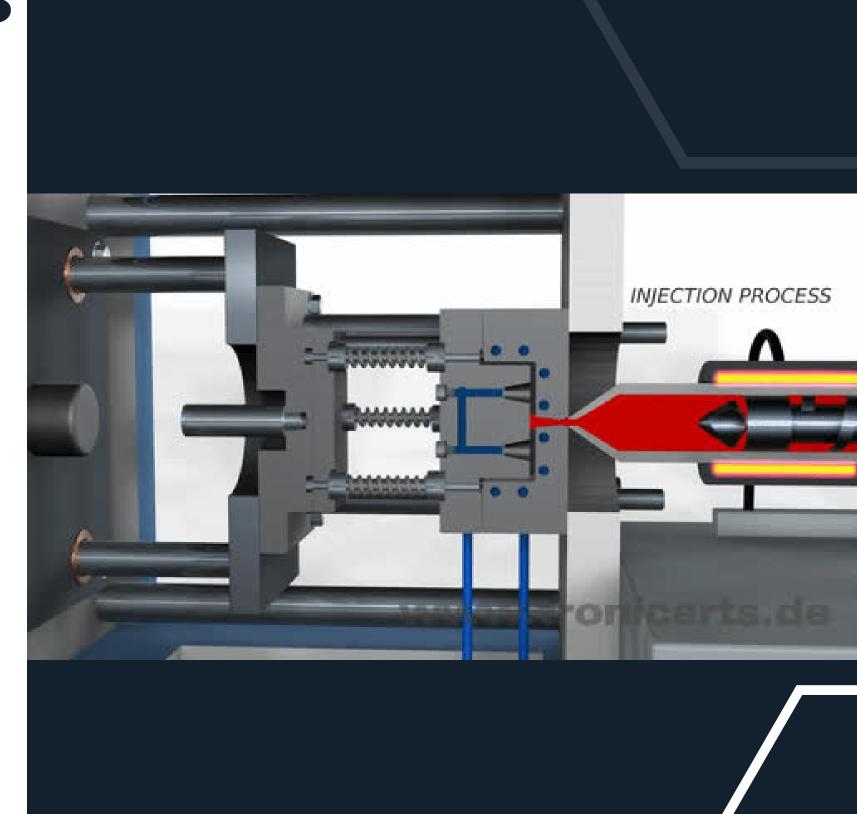
Injection molding is the most common method for manufacturing plastic parts, particularly in high volumes.

Injection molding process

Injection molding is a process for producing parts by

- Injecting molten material into a mold
- Cools down and hardens
- Eject the mold

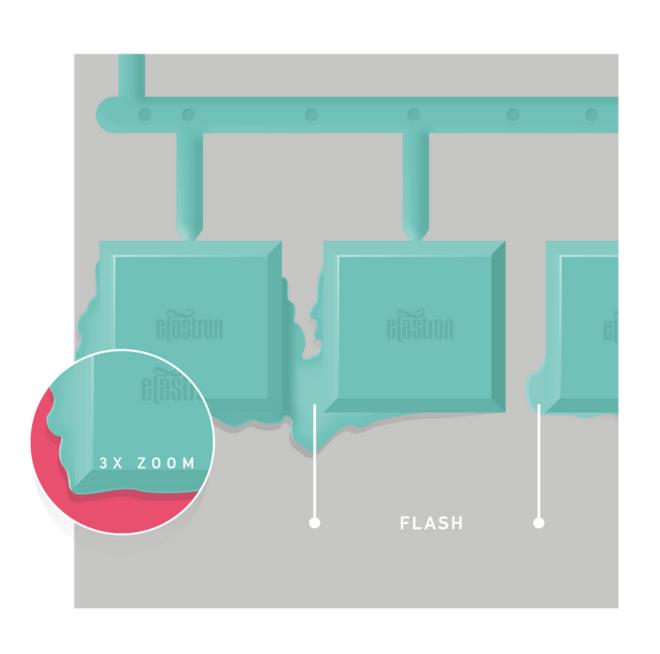
stuck plastic problem



Residue particles can cause many issues in the production environment

- Damage to the mold
- Defects in products
- Waste of resources





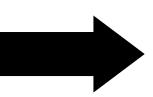
Proposed solutions so far



Manual labour



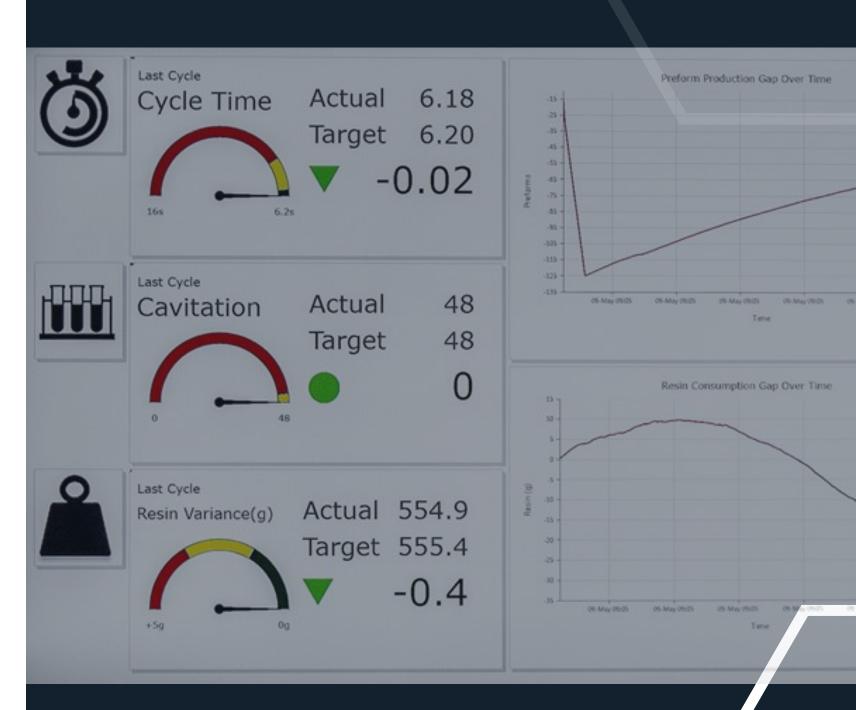
Device to capture each mold and get results by image capturing techniques



Tool to provide statistical data to be used to show the effectiveness of the algorithm

What if we had a method to view statistical data pertaining to different machines?

Molding Machine Dashboard



Benefits for the system



Central view of data

Easy of management

Saves time and resources

• Improves decision making

Up-to-date progress evaluation

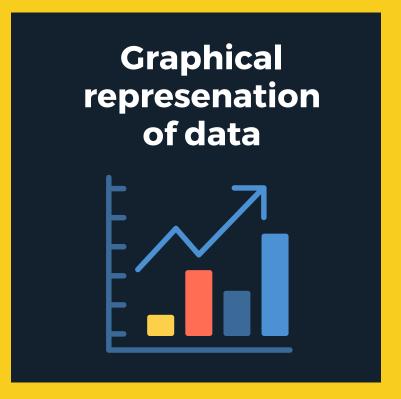


Our Plan

Interfaces for

- Machine overview
- Statistical data of each machine
- Production data

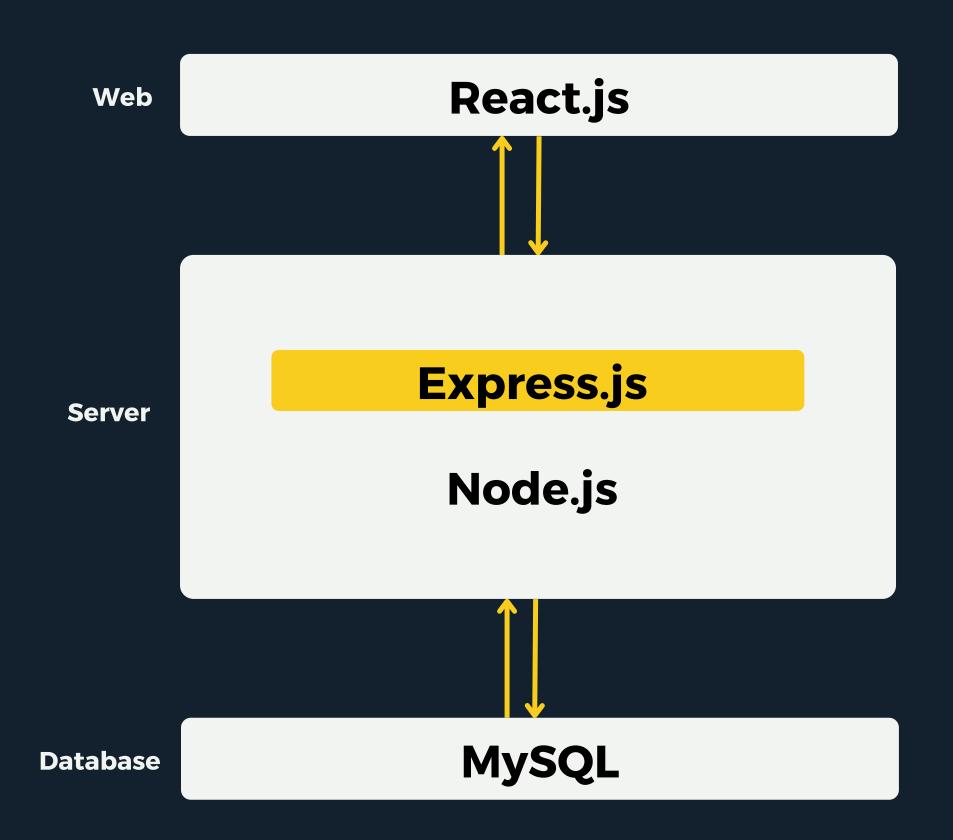
Features







Technology Stack



Project Timeline



Identifying software requirements

Frontend, UI/UX

Development

Works on product increment

Evaluating and Verifying

Discuss success and improvemnts



