



# Defects optimisation for an auto component manufacturer

Design intelligent real time alert system for line defects to improve process yields

## The Auto Aftermarket Challenge

To improve management capability for reducing process defects:

1. Providing near real-time targeted alerts for defects
2. Provide visual analysis and alert for shop floor resolution

The production line has 7 process lines running through 13 phases. The production yield was ~85%. Quality control was a manual process resulting in unaccounted leakages in addition to the yield loss.

Management wanted to reduce manual check and introduce intelligent control systems

## How the Product Helped

- Create data models for data captured from different systems and frequencies


- ✓ Pre-built and Proven solution for Auto Aftermarket built on world-class future proof AI technology
- ✓ Developed by an experienced team of Auto, Data Science and Technology experts
- ✓ Minimal upfront investment of a secure SaaS product bolted on to any sales system
- ✓ Clear roadmap including predictive analytics for product lifetime expectancy and market potential
- ✓ Digilytics approach is based on voice of mechanic and understanding of how engagement should be enhanced
- ✓ Digilytics is a nimble and flexible AI technology startup with a deep focus on the Auto Aftermarket business

- Developed rules and recommendation procedures the alerts generated
- Designed visualization suited for maximum adoption in the shop-floor

## Business Impact

- An interactive Rejections Analyzer was created to provide visual alerts for process defects
- An intelligent alert system was designed to provide real time notification to defined user groups to take immediate recommended actions

**DEFECTS VISUALISATION AND CONTROL**  
Details



DESCRIPTION			
Home Live view			
PART DETAILS			
Part Description	Part No:	Machine Description	Machine no
Black sealant	DC7091	Dispensing Machine	K3283
CHARACTERISTIC DETAILS			
Characteristic Description/no:	USL	LSL	Unit
Weight / 01	4.28	3.72	Gram

DEFECT DETAILS					
Result Value	Second of Time Stamp	Uniquepart Id	Line	Location Id	Status
0.000	13/10/2017 12:29:12 PM	0402546703	FA1	00000000001100330001100010001	Red
0.000	12/10/2017 9:13:35 PM	0602524431	FA1	00000000001100330001100010001	Red
4.230	25/10/2017 9:18:47 AM	402570958	FA2	00000000001200330001100010001	Yellow
		402570959	FA3	00000000001800330001100010001	Yellow
		402570960	FA5	00000000001900330001100010001	Yellow
		402570961	FA4	00000000002000330001100010001	Yellow
		402570962	FA6	00000000002300330001100010001	Yellow
		402570963	FA7	00000000002400330001100010001	Yellow
		5.000	06/09/2017 11:52:26 AM	5111111111	FA1

