



Video and Image Processing

## DESIGN THINKING



**Task:**  
Client engaged Whirldata to explore innovative and cost effective options for technology spend



- Client had a mandate to reduce human involvement in a garbage sorting line. Attempted expensive solutions through Computer Vision and Hyperspectral imaging before coming to us
- Deep learning neural networks were investigated and a cost effective solution was formulated after identifying appropriate learning networks
- A pilot for detection was built to prove that specific deep learning networks were the path to invest further R&D spends on

### Discovery:

Ideal case where a low cost ML based approach trumps high cost CV and spectral imaging systems

### Solution:

A deep learning neural network (SegNet) provided acceptable results from low quality images