Thinking data in aerospace manufacturing – present & future at CW Fletcher

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22th January 2019





Advanced Manufacturing Research Centre







- SME Aerospace & Nuclear manufacturing
- Workforce of ~ 190 people with a turnover of ~£24 million













- Capabilities: CNC machine tools, welding, heat treatment, press work
- Customers: Kawasaki Heavy Industries, Rolls-Royce, GKN Aerospace, Meggitt





Journey @ CWF

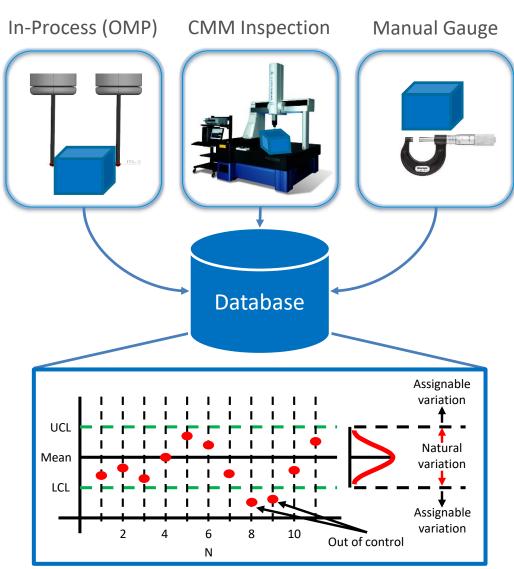


 Technology Applications & Strategy – new job role (Jul 2018 – present)



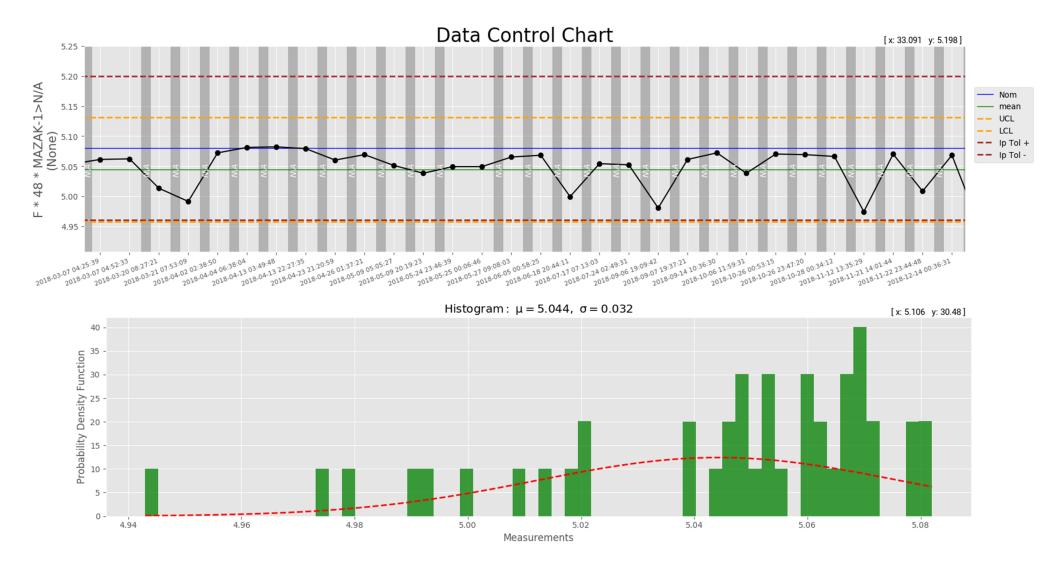


KTP Project



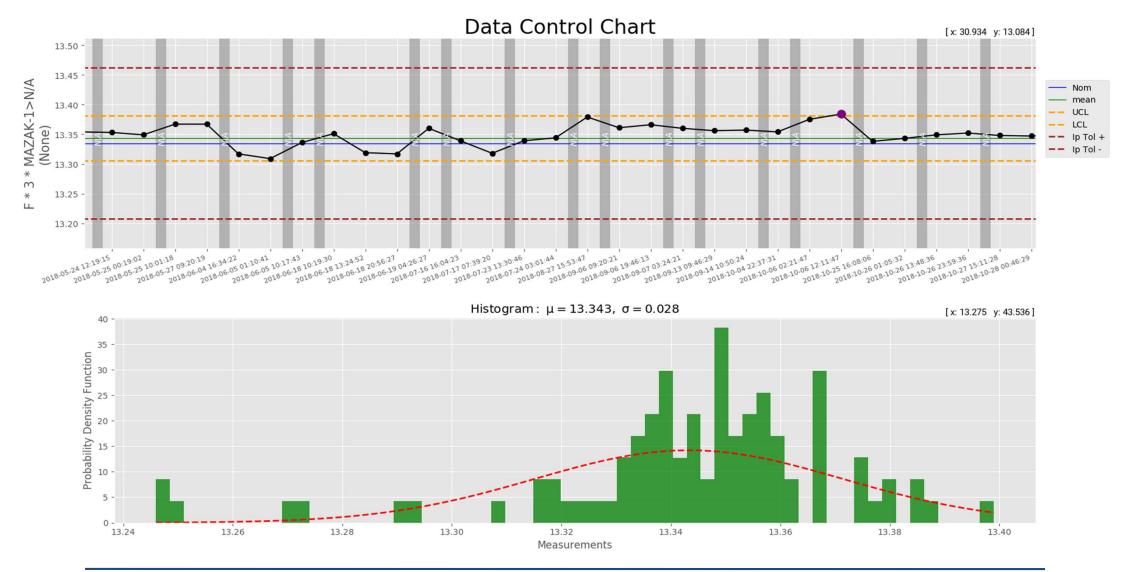


Data Visualization & Analysis





Data Visualization & Analysis



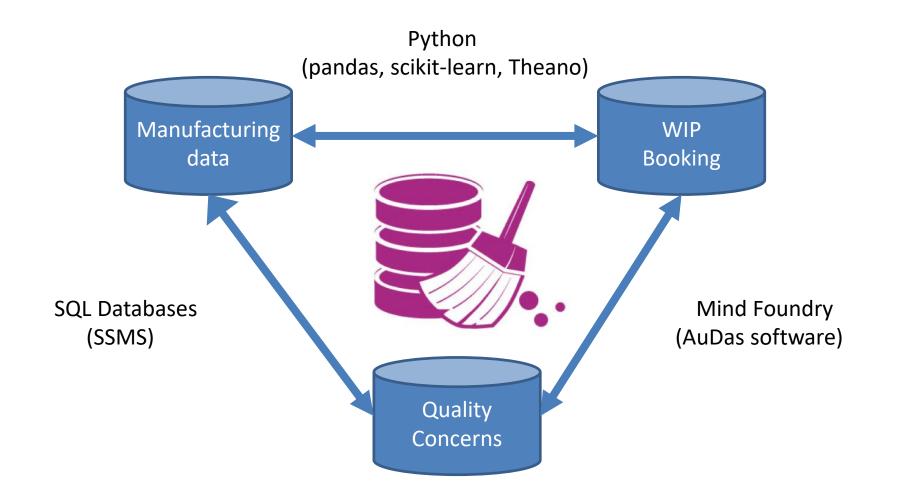


Future Data Insights



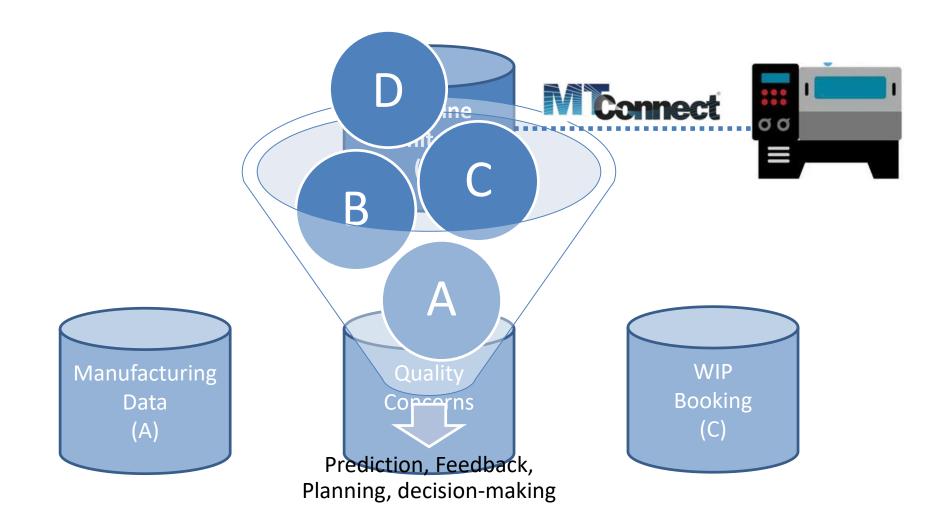


Future Data Insights





Future Data Insights





Future Data Visualization



Health & Safety Table - 2018

Fingers/Thumb Hands/Wrist	Date	Accidents	Damage to	Hazards	Near Miss
Legs/Knees/Hips	2017-12-(1			
Back/Neck Head	2018-01-(3	0	0	0
Feet/Ankle/Toes Elbow/Shoulder/Arms	2018-02-(3	0	0	0
Ribs/Chest/Abdomen/Groin Face/Ears	in 2018-03-(8	0	0	0
Eyes Respiratory	2018-04-(3	0	0	0
Multiple	2018-05-(3	0	33	0
Other	2018-06-(2	0	14	0
	2018-07-(4	0	13	0
	2018-08-(4	0	13	0
	2018-09-(3	0	9	1

Date	Accidents	Damage to	Hazards	Near Miss	SES	Unison	Fabricatio	Goods in/	Quality	Maintenan	Scrap/Was	Chemical	Yard	Security	I.
2017-12-(1														^
2018-01-(3	0	0	0	3	0	0	0	0	0	0	0	0	0	
2018-02-(3	0	0	0	0	1	0	0	0	0	0	0	0	2	
2018-03-(8	0	0	0	2	1	5	0	0	0	0	0	0	0	
2018-04-(3	0	0	0	0	1	2	0	0	0	0	0	0	0	
2018-05-(3	0	33	0	0	2	0	0	1	0	0	0	0	0	
2018-06-(2	0	14	0	1	0	0	0	0	1	0	0	0	0	
2018-07-(4	0	13	0	1	0	0	1	0	0	0	0	0	0	
2018-08-(4	0	13	0	1	1	1	0	0	0	0	0	0	0	
2018-09-(3	0	9	1	1	1	0	0	1	0	0	0	0	0	-









Thank you.

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Future Data Insights \mathbf{O} **Natural Variation Out-of-control** Cyclical **Global trends**

