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

Rufino Bolado-Gomez

22th January 2019

MetMap

The University Of Sheffield.

Advanced Manufacturing Research Centre

BOEING

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aerospace & nuclear manufacturing

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

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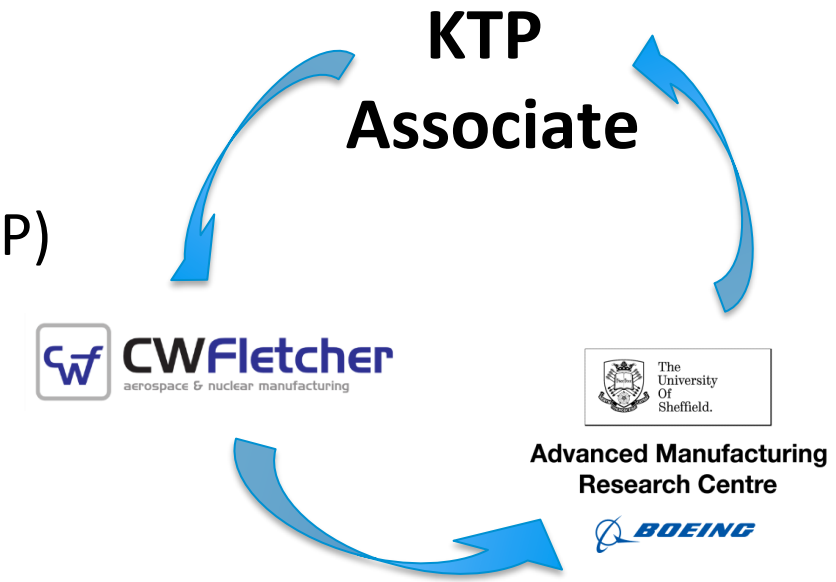
- Capabilities: CNC machine tools, welding, heat treatment, press work
- Customers: Kawasaki Heavy Industries, Rolls-Royce, GKN Aerospace, Meggitt

Journey @ CWF

- Knowledge Transfer Partnership (KTP) in Process Monitoring & Control (Jun 2016 – Jun 2018)



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

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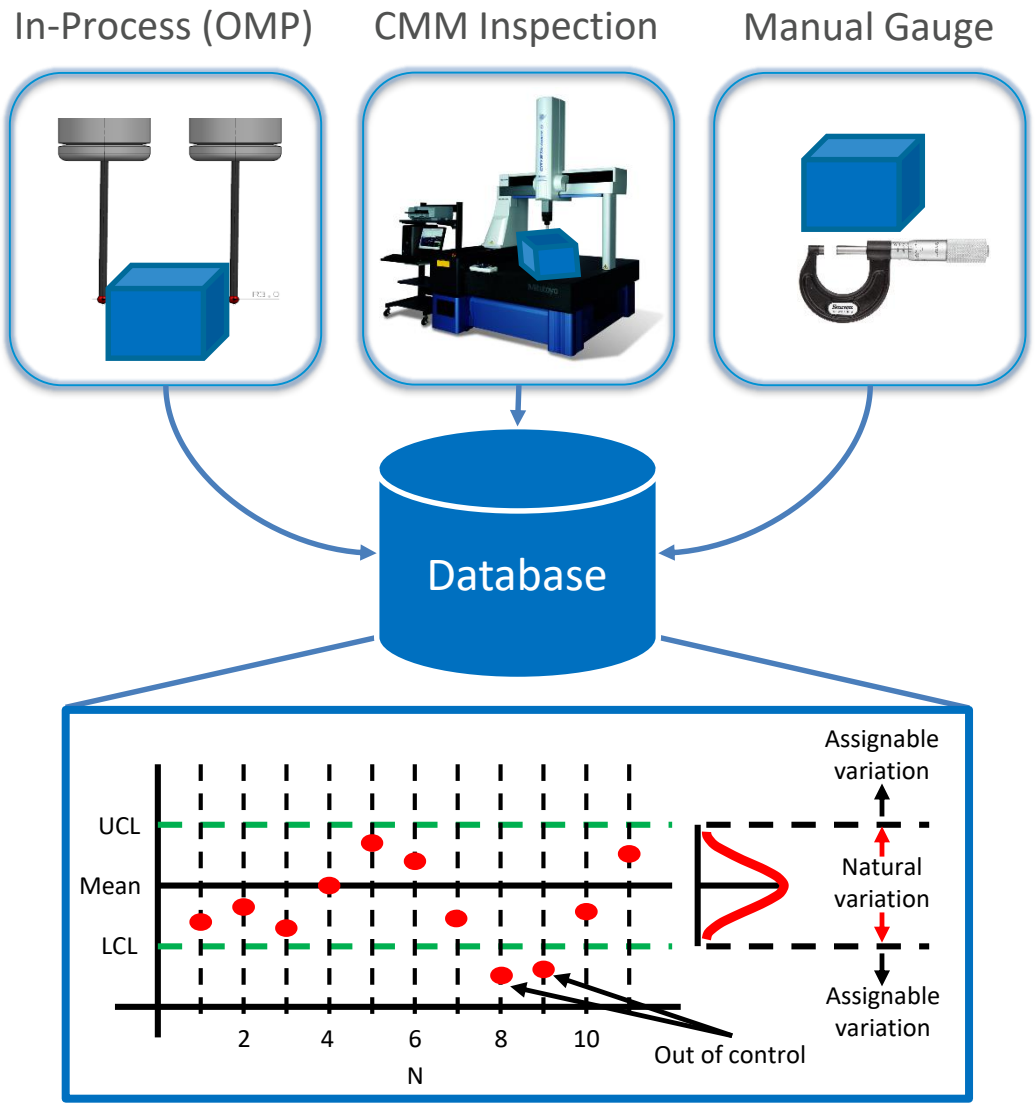
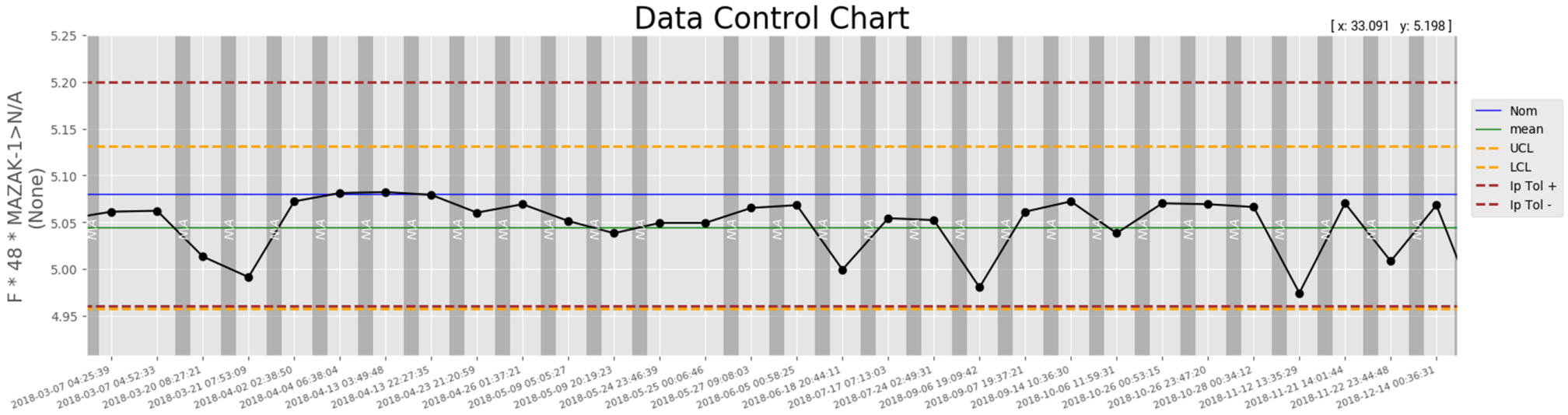
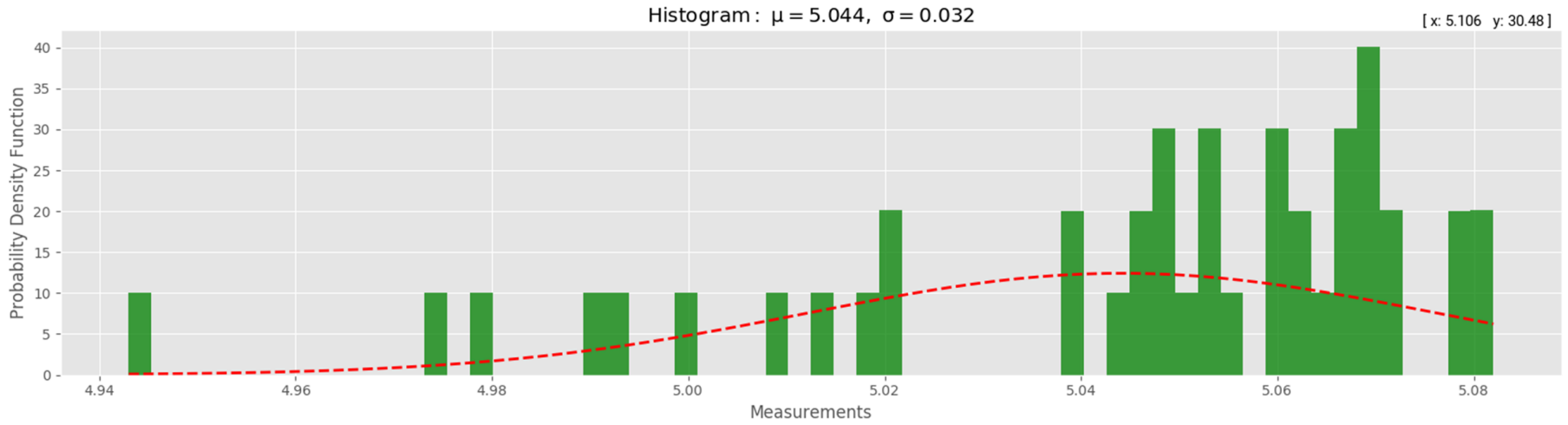
KTP Project


In-Process (OMP)
CMM Inspection
Manual Gauge
Database
UCL
Mean
LCL
2
4
6
8
10
N
Out of control
Assignable variation
Natural variation
Assignable variation

Data Visualization & Analysis





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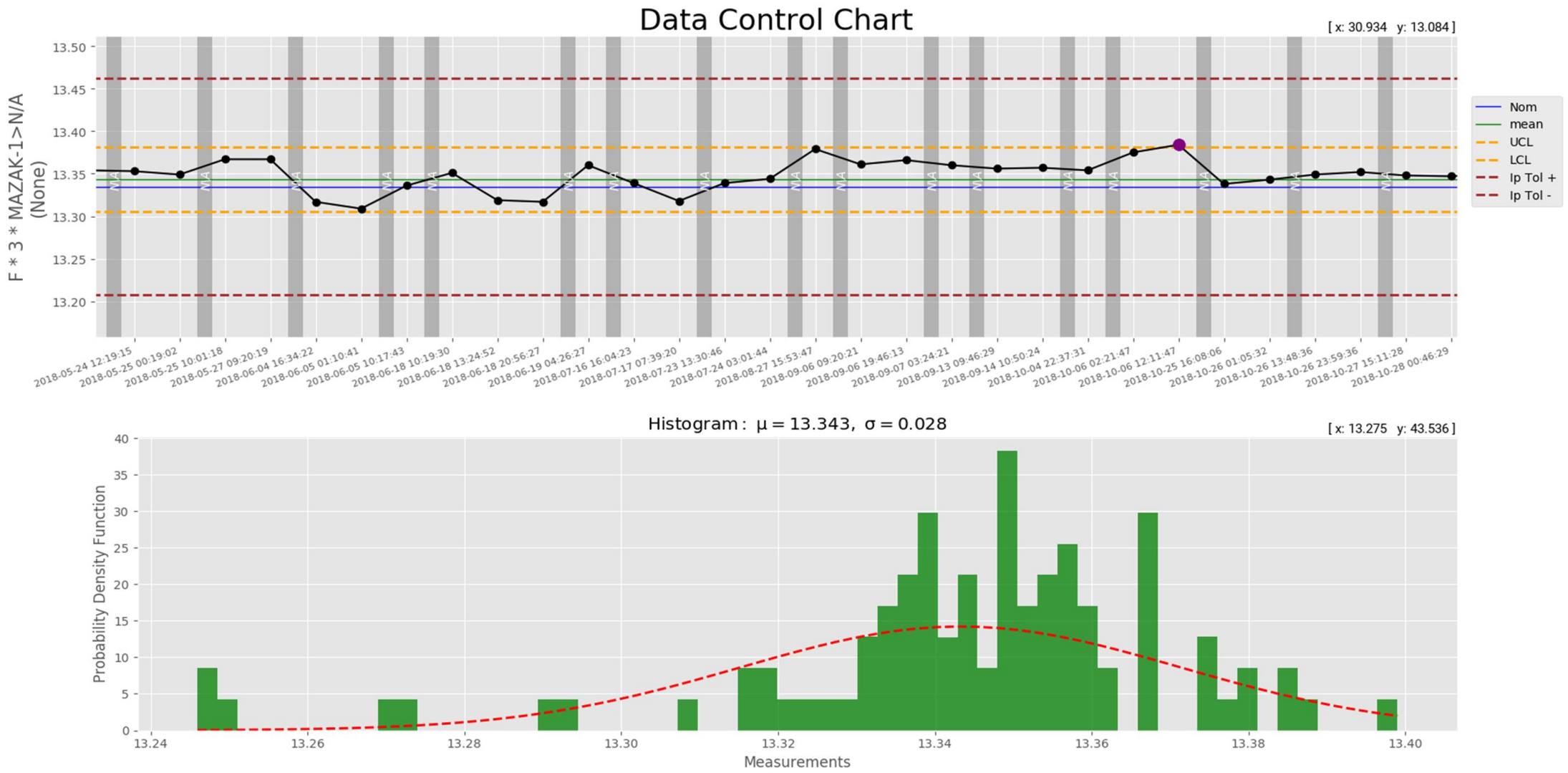
Data Visualization & Analysis



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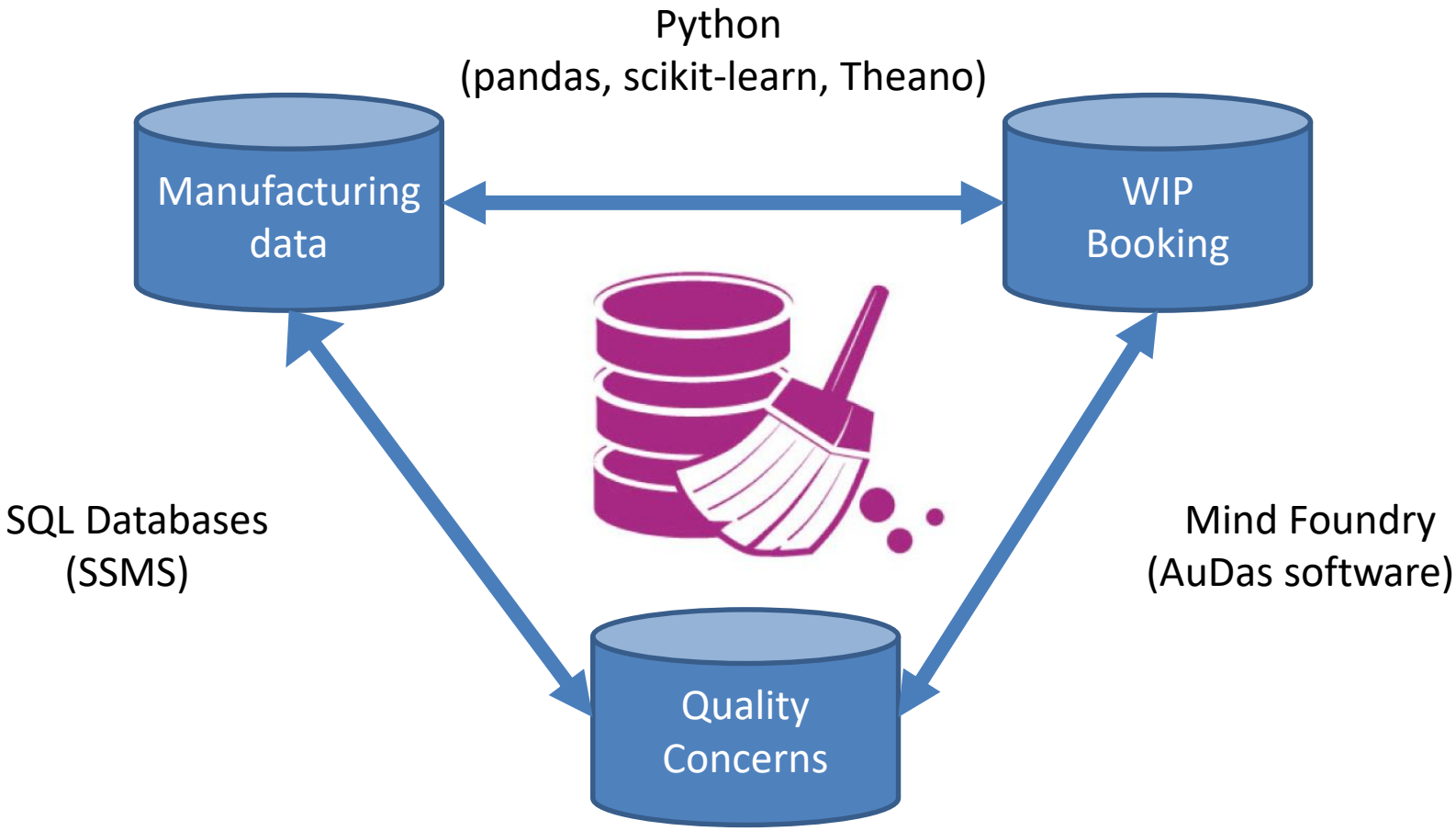
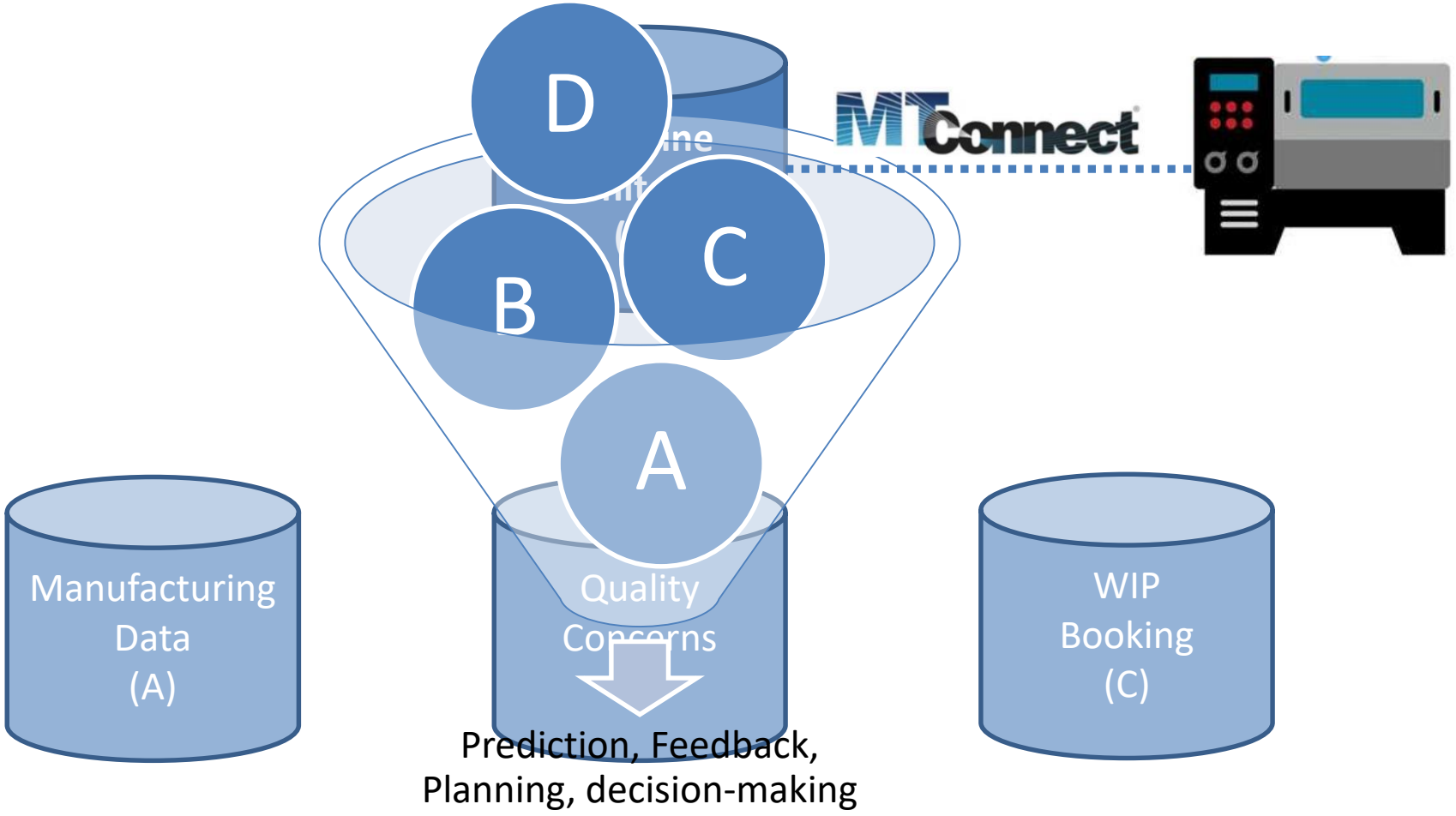
Future Data Insights

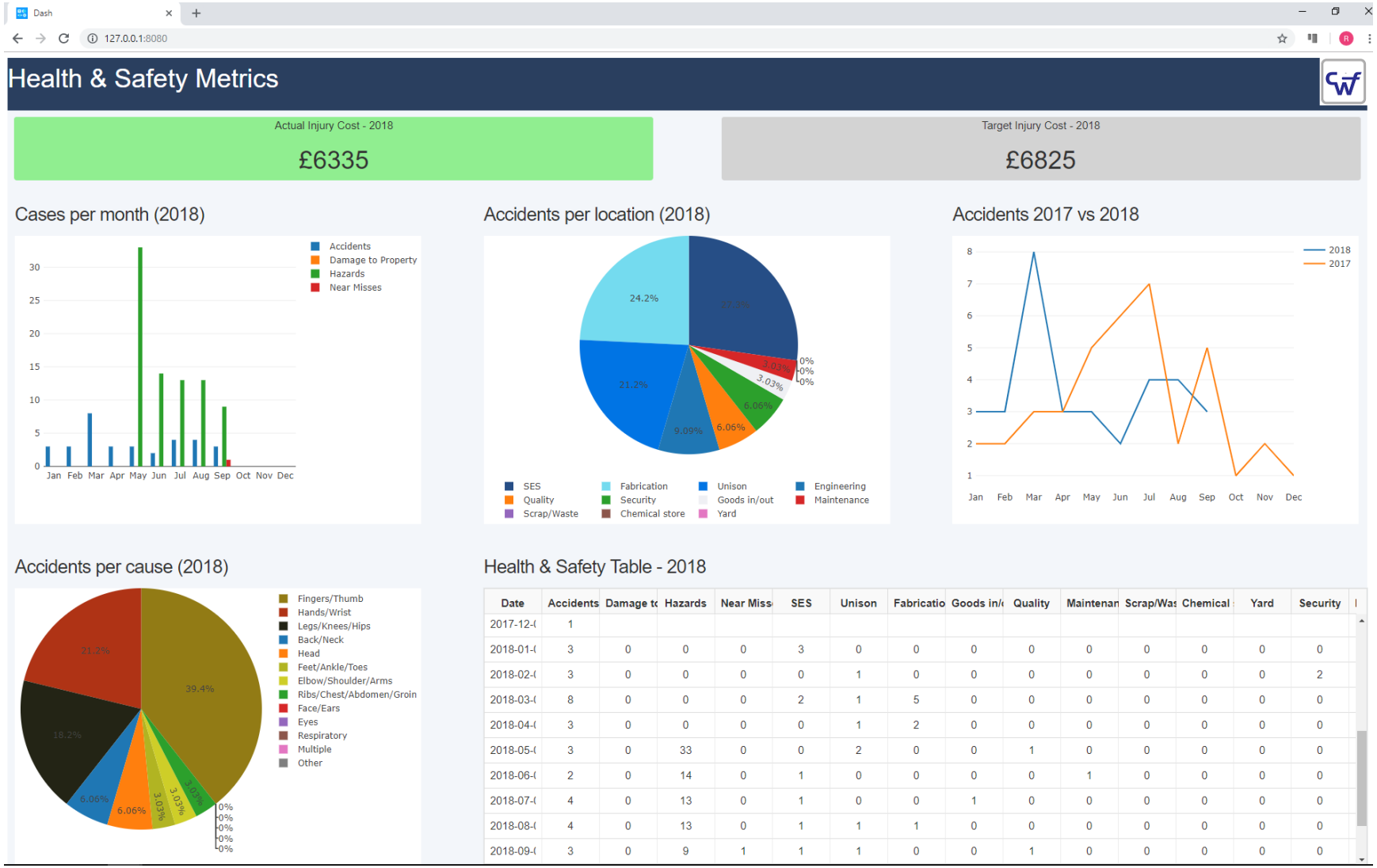
Future Data Insights



Future Data Insights



Future Data Visualization



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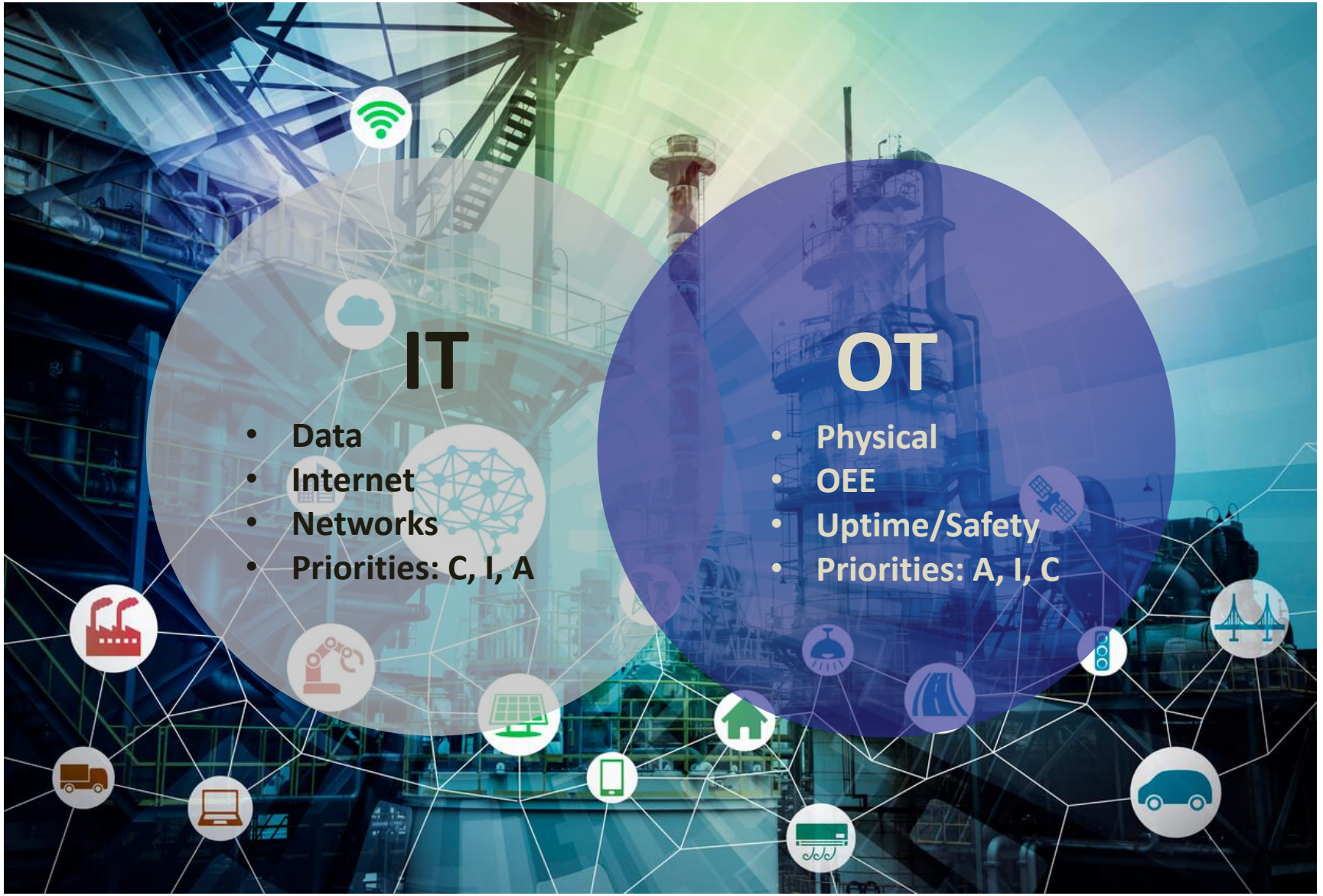
IT
Data
Internet
Networks
Priorities: C, I, A
OT
Physical
OEE
Uptime/Safety
Priorities: A, I, C

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Thank you.

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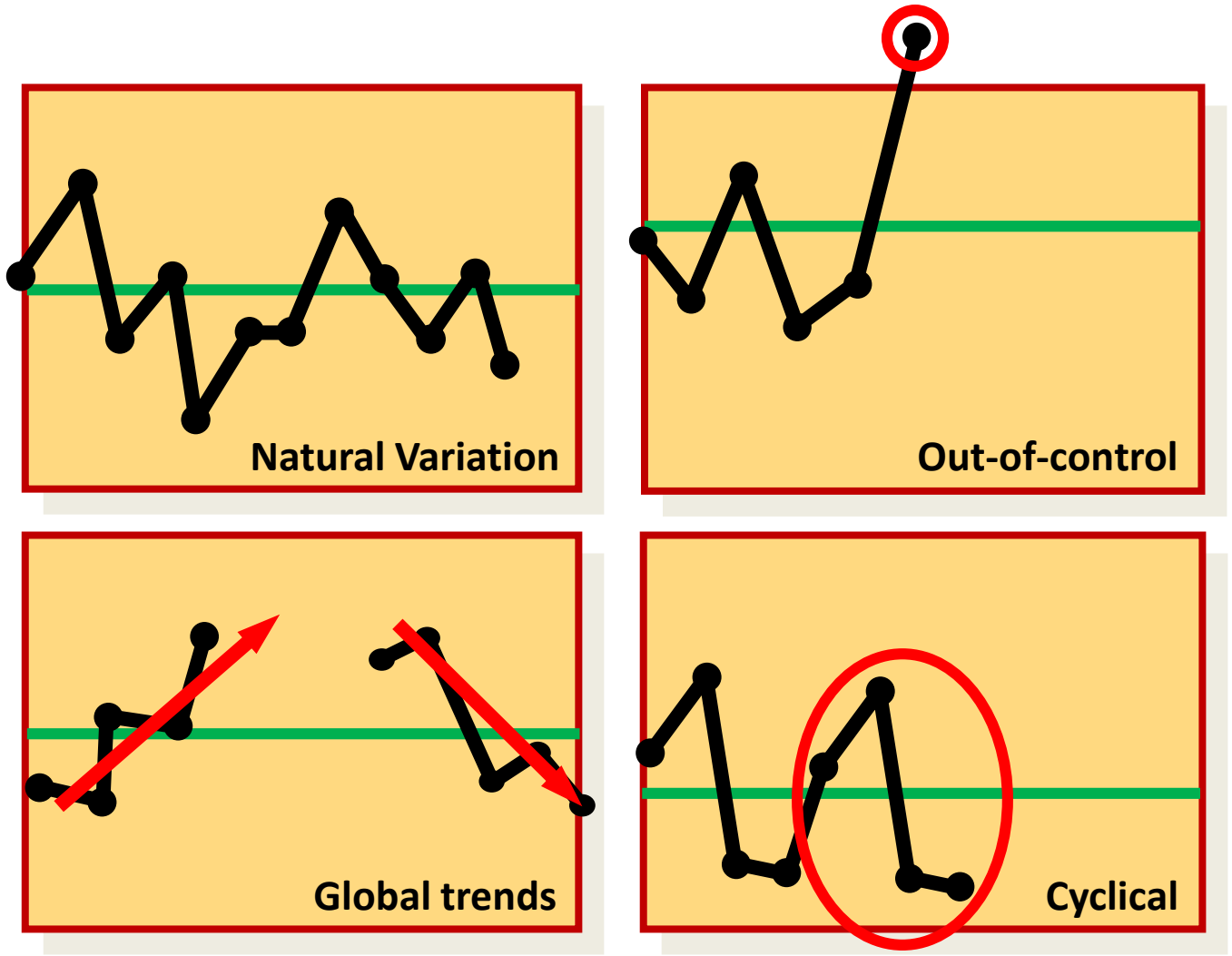
Future Data Insights