Lundin Mining SAP ERP Analytics with SAP BTP

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Lundin Mining
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Agenda

Lundin Mining Digital Transformation

- Business Objectives

Multi-Cloud Strategy

- RISE with SAP S/4HANA, Private Cloud Edition
- Microsoft Azure
- SaaS

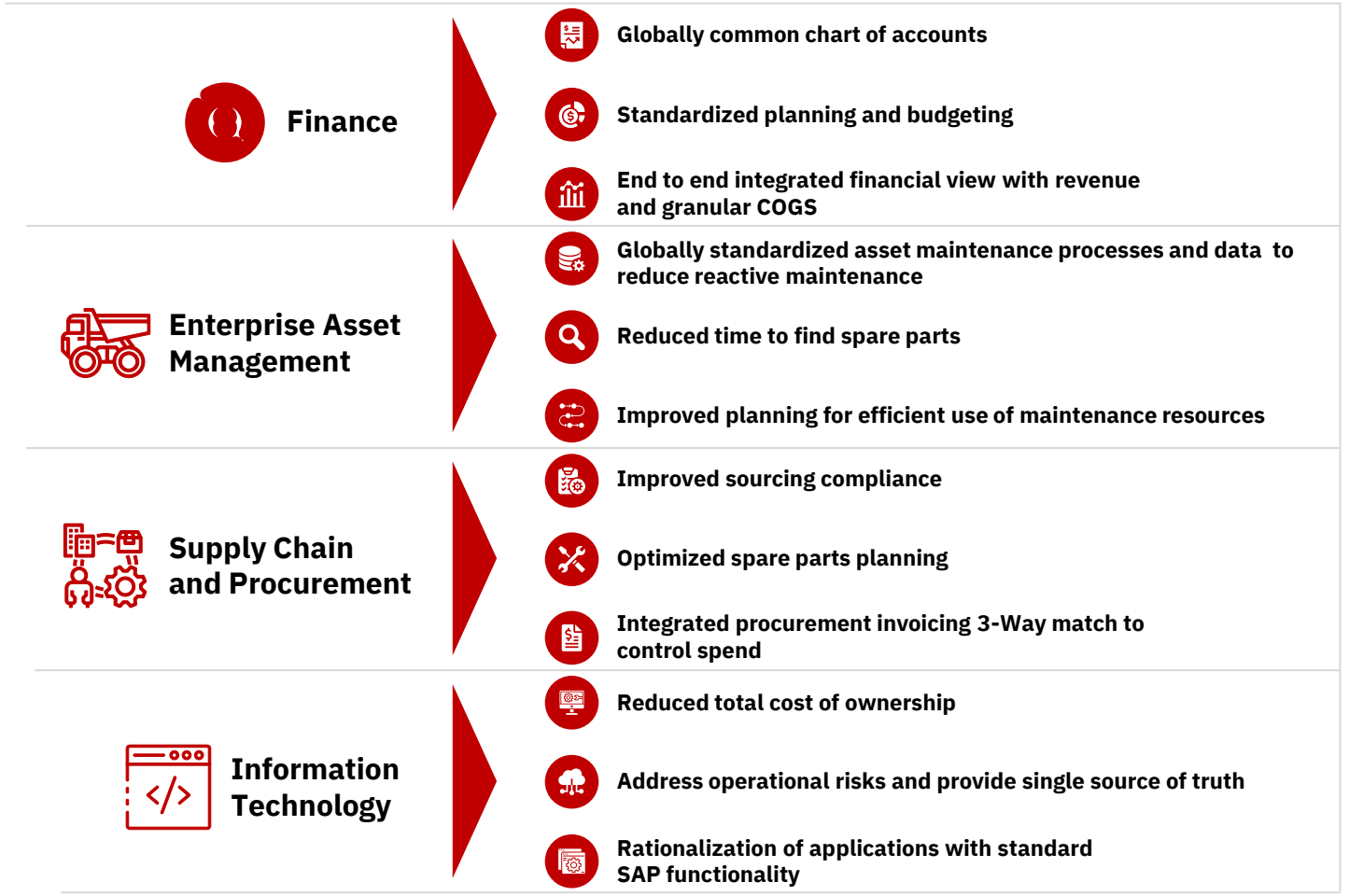
Analytics Strategy

- SAP Analytics Cloud
- SAP Data Warehouse Cloud
- Azure Analytics

About Lundin Mining

Lundin Mining is a diversified Canadian base metals mining company with operations and projects in Argentina, Brazil, Chile, Portugal, Sweden and the United States of America, primarily producing copper, zinc, gold and nickel.

Lundin Mining ERP Transformation



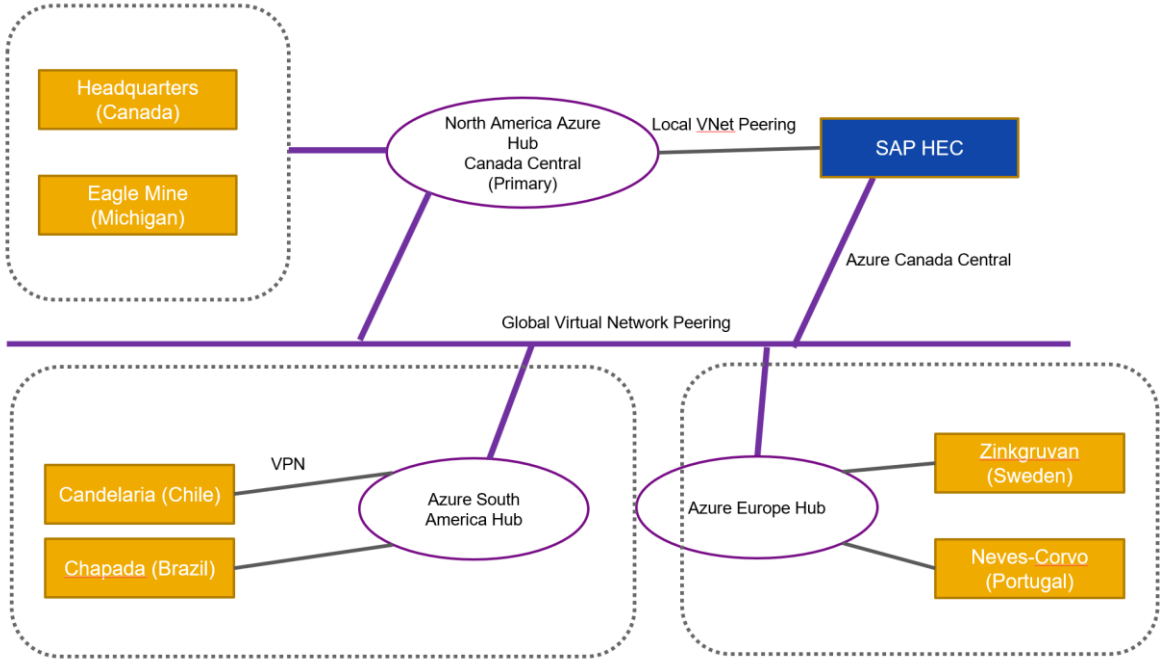
Single ERP Instance, Centrally located

Single S/4HANA system

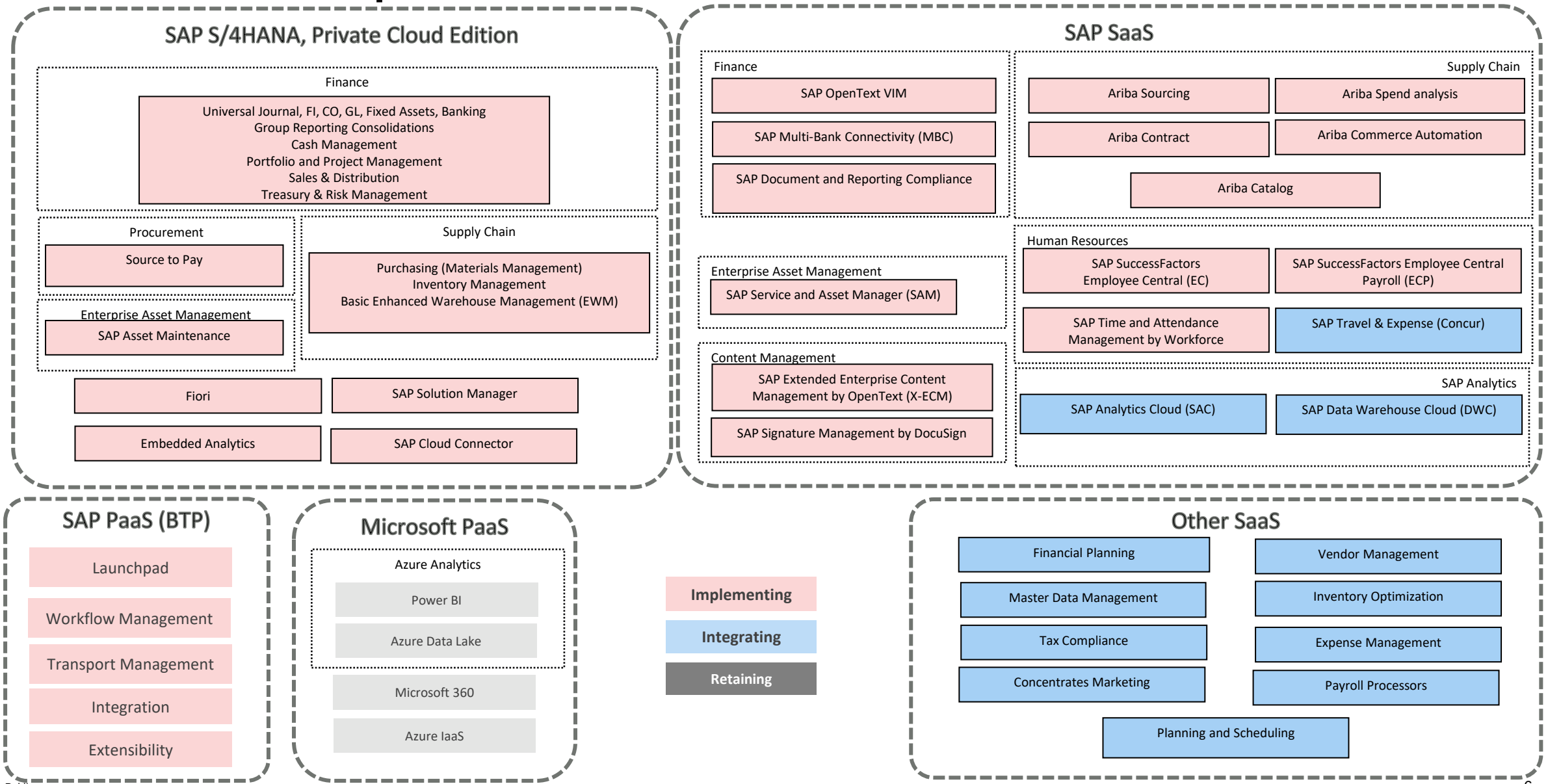
- Less complexity
- Less cost (TCO)
- Ability to scale centrally for additional acquisitions

The strategic network design is based on connectivity to Azure global network backbone.

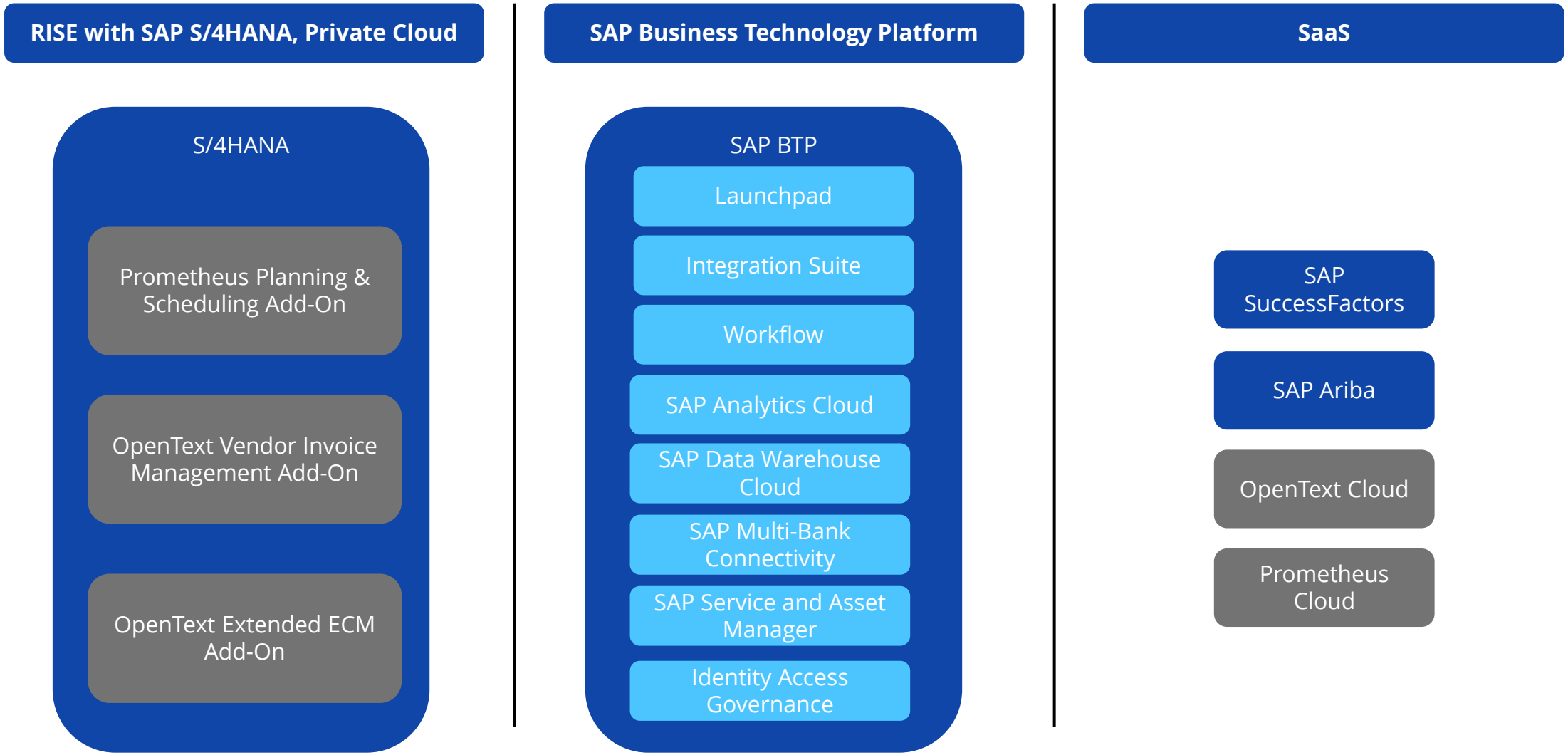
- S/4HANA is hosted in Azure Toronto Region (Canada)



SAP S/4HANA Adoption



Multi-Cloud Strategy



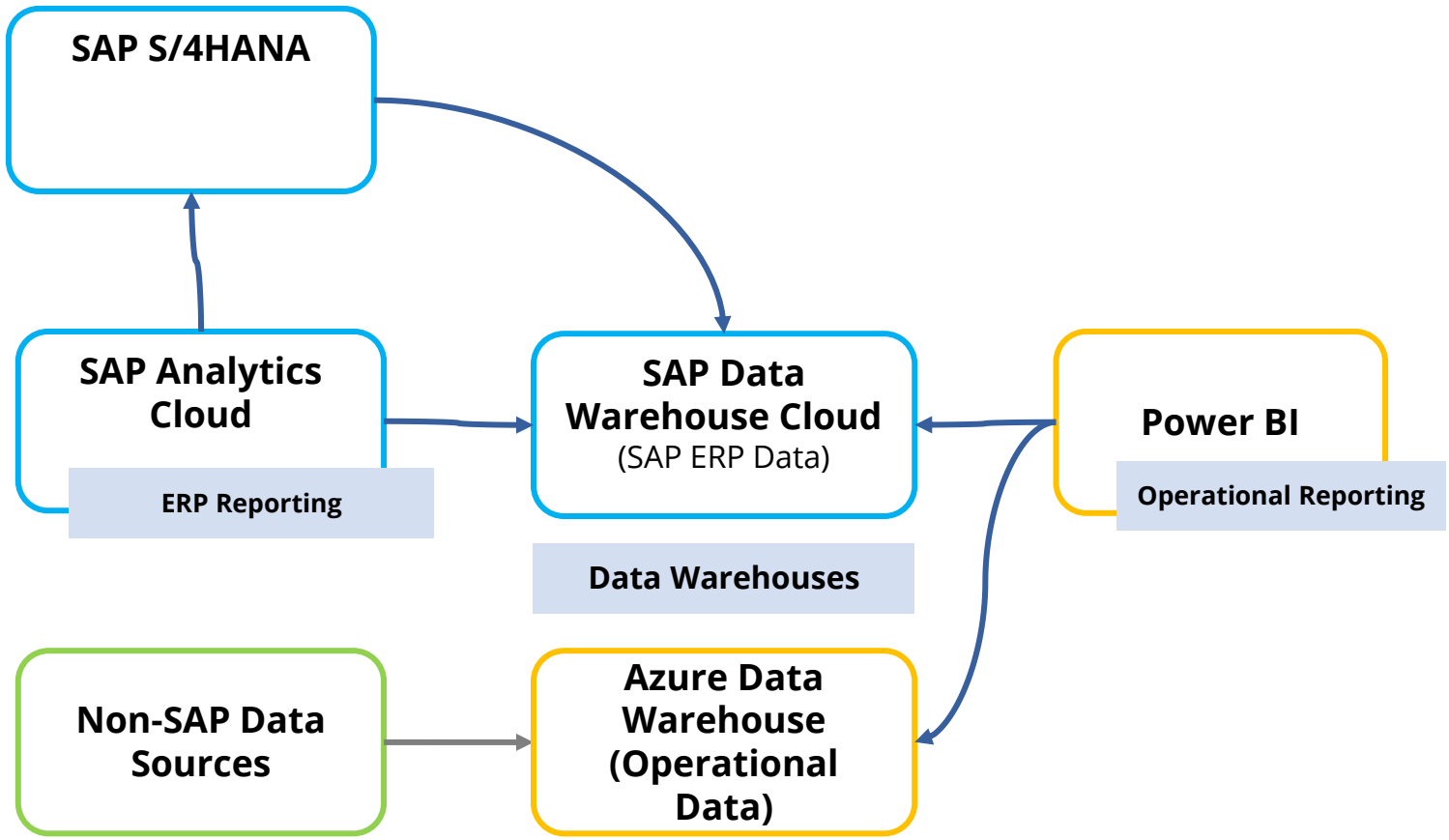
Analytics Strategy

Main challenge was bridging the boundary between SAP S/4HANA data residency and the wider data store for Operations

SAP S/4HANA Analytics leverages SAP Analytics Cloud + SAP Data Warehouse Cloud

Operations Analytics is based on Azure Analytics with PowerBI front end

Views combining ERP and Operations metrics rely on integration between SAP Data Warehouse Cloud and Azure Analytics platforms



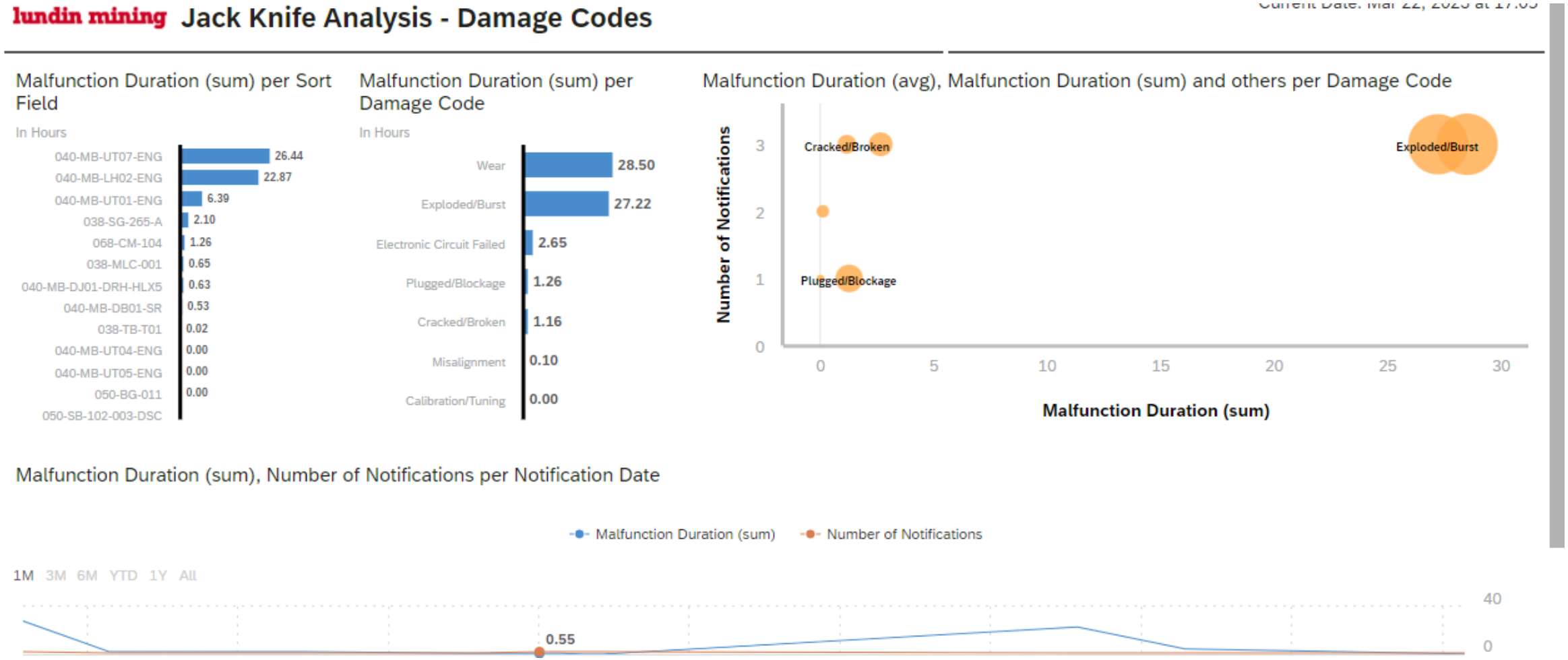
Example Enterprise Asset Management Reports

SAP Analytics Cloud is the main reporting front end for S/4HANA end users
SAP Data Warehouse Cloud serves:
(1) As bridge between SAP ERP and Operational Technology tiers
(2) As data warehouse for snapshots of SAP ERP data for time-series analysis

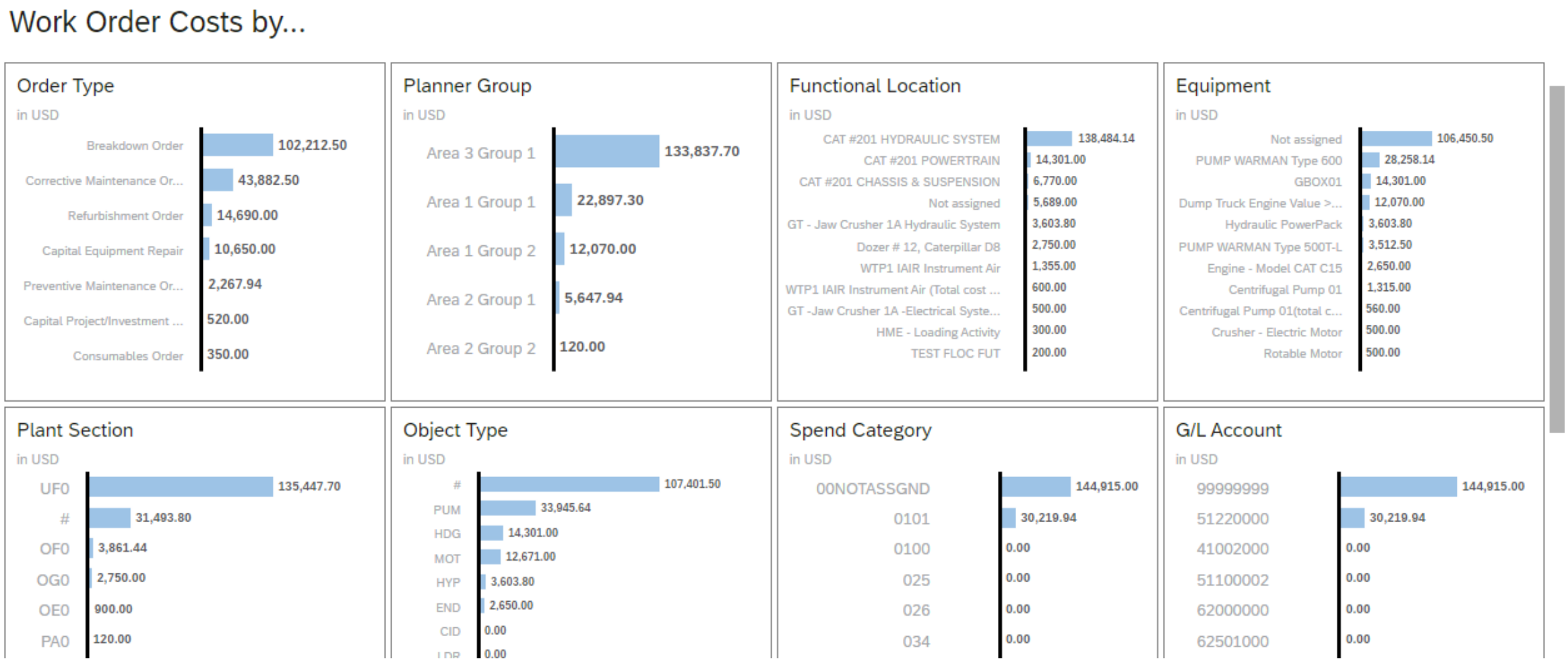
Report	Analytics Platform
PM Assembly Inventory	S4 + SAC
Open/Closed Work Orders	S4
Work Orders by Type	S4 + SAC
Notifications Aging	S4
Work Orders Aging	S4
Work Orders Cost	S4
Planning Accuracy	S4
Installed Components List	S4
Total Cost per Hour	S4
Total Cost per Tonne	S4
Stockout Report	S4
Parts assigned to BOM's	S4 + SAC
Pareto & Jack Knife Analysis	S4 + SAC

Report	Analytics Platform
Breakdown Work Report	S4 + SAC
Stockouts Trend	S4
Pareto Analysis – Failure Cause	S4 + SAC
Backlog Size	SAC + DWC
Work Order Backlog by Equipment	SAC + DWC
Scheduled Compliance (By Task)	SAC + DWC
Unscheduled Work Percentage	SAC + DWC
Preventive Maintenance Compliance	SAC + DWC
Schedule Load	SAC + DWC
Mean Time Between Failures (MTBF)	Azure
Mean Time to Failure after PM Service (MTTF)	Azure
Mean Time to Repair (MTTR)	Azure

Jack Knife Analysis (SAC Report)



Work Orders by Type (SAC Report)



Parts Assigned to BOMs (SAC Report)

lundin mining **Parts Assigned to BOMs**

Current Date: Mar 22, 2023 at 17:07

Number of Parts

44

Number of Parts per Assigned to any BOM

9
Number of Parts Assigned to Material BOM

20.45%
% of Parts Assigned to Material BOM

6
Number of Parts Assigned to EQ BOM

13.64%
% of Parts Assigned to EQ BOM

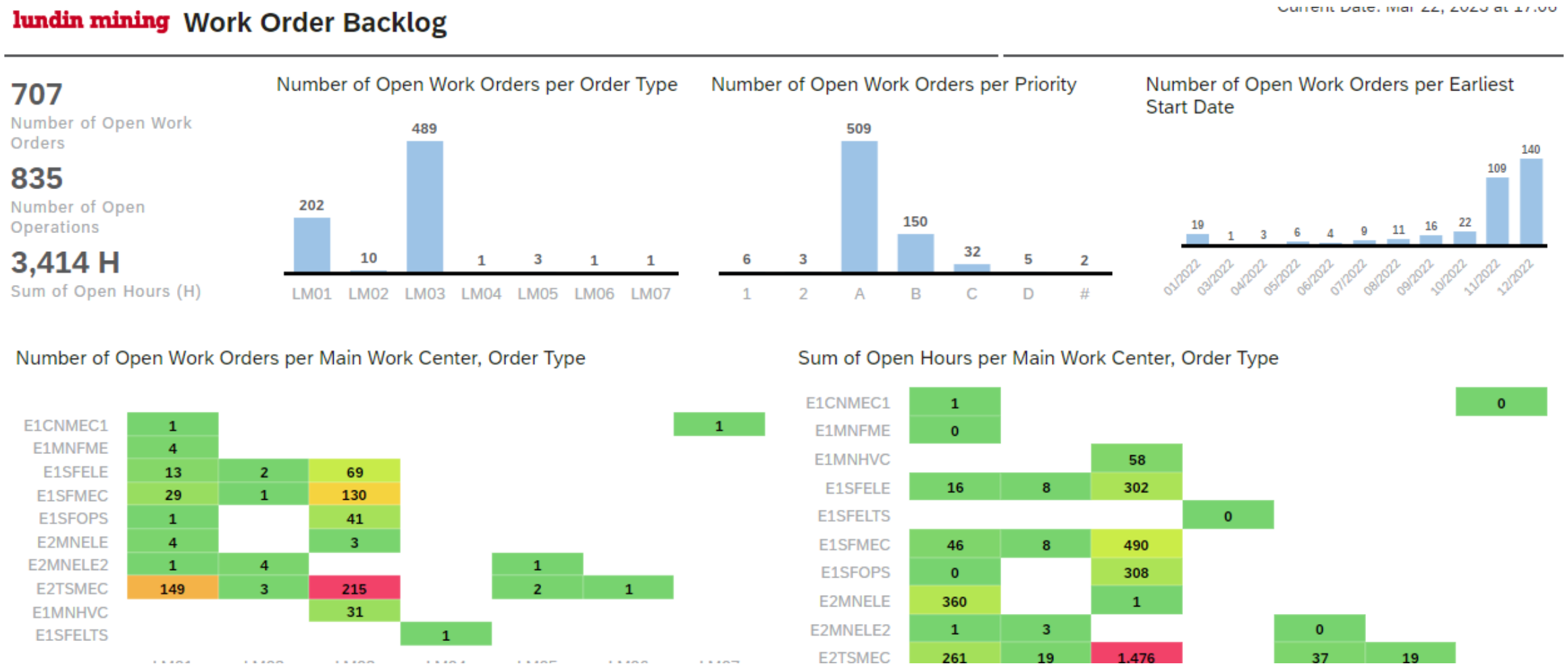
4
Number of Parts Assigned to FL BOM

9.09%
% of Parts Assigned to FL BOM

10 sorts applied

Material Number	Material Type	Plant	Assigned to any BOM	Assigned to Material BOM	Assigned to EQ BOM	Assigned to FL BOM	Last PO	Maint O
400000012 Solenoid, Pneumatic, 150 PSI, .5" NPT	ZMAT	1000	Yes	Yes	No	Yes	#	#
400000014 1000-Belt, V,Triple Band, 3" OD X 36" LG	ZMAT	1000	Yes	Yes	Yes	Yes	#	#
400000044 Capital Spare	ZMAT	1000	Yes	Yes	Yes	Yes	#	#
400000045 Shaft, Drive, Allison, 3" OD X 25' LG	ZMAT	1000	Yes	Yes	No	No	#	#
400000054 Bearing, Roller, 2" ID X 3.5" rockbolt	ZMAT	1000	Yes	Yes	Yes	Yes	#	#
400000057 Valve, Globe, 1500#, 2", Weld, Fig 2991	ZMAT	1000	No	No	No	No	#	#
400000059 Truck Engine	ZMAT	1000	Yes	Yes	Yes	No	#	#
400000064 Shaft, Drive, Allison, 3" OD X 25' LG	ZMAT	1000	No	No	No	No	#	#
400000086 Rotable Gearbox	ZMAT	1000	No	No	No	No	#	#
400000087 Rotable Gearbox	ZMAT	1000	Yes	No	Yes	No	#	#

Work Order Backlog (SAC Report)



Thank you.

Contact information:

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