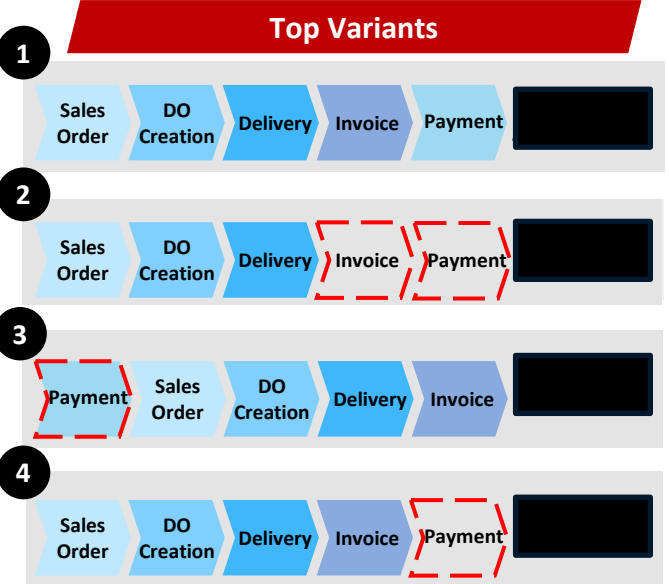


Problem Statement:

To identify potential deviations, hidden bottlenecks and opportunities for FairPrice Trading's order-to-cash (O2C) process through process mining algorithms



Key Deviations & Recommendations



High level of compliance with established SOPs, no further follow ups required

Missing invoices, identified data pipeline error within SAP system

Payment occurs first, identified that pre-payment is authorised for non-credit term customers

Generally high level of compliance with established SOPs, payment may not be captured in our dataset

Recommendations

- Majority of the cases investigated are in line with the actual SOP. Results are satisfactory
- Check with relevant teams / departments to ensure **data compliance / completeness** in SAP tables
- Consider documenting **pre-payment** in FP's SOP
- Explore other SAP tables for payment timestamps
- Regular monitoring of FP's **AR aging schedule** in conjunction with process mining tools

Group 1



Christopher



Reiko



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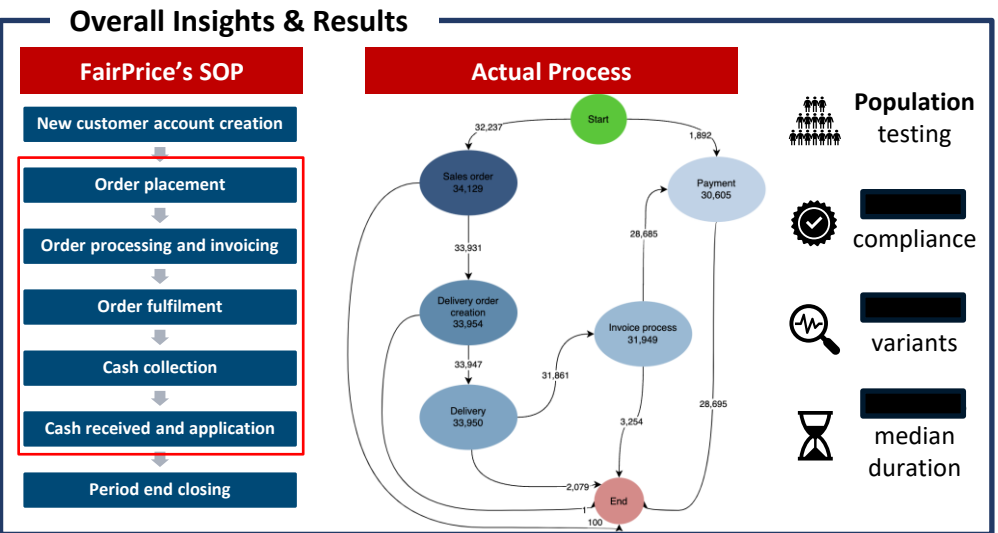


Sue Teng



Nicholas

Process Mining Procedure



Data Cleaning & Processing

BigQuery

SAP TABLE			
Sales	Billing	Delivery	Customer
Process	Table	Description	
Sales Documents	VBAK VBFA	Sales Document Header Sales Documents Flow	
Billing Documents	VBRK VBRP	Billing Document Header Billing Document item	
Delivery Documents	LIKP LIPS	Delivery Header Delivery Item	
Customer Movements	BKPF BSID BSAD	Accounting Documents Header Customer Open Items Customer Cleared Items	

- Created **unified data** which capture all events with appropriate timestamps
- Structured event log** for process mining

PM4PY

- Feed the **formatted event log** as an input into miner algorithms to create a **graphical representation** of the O2C process.

Alpha Miner

Inductive Miner

Heuristic Miner ✔
- Analyzed process variants using pm4py – identified set of cases that **share the same control-flow patterns** (variants) and generated **graphical representations** with heuristic miner.

Disco

Able to deal with **large event logs and complex models** and conversion & filtering are made easy. **Performance metrics** are shown in a direct and intuitive manner, and process history can be easily animated