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Exception Handling Powered bySmart Analytics





Background

Sponsor: Damco

Damco offers freight forwarding and supply chain management services to its 10,000+ customers.

Near real-time tracking of shipment milestones is a pivotal component of freight forwarding services and data consistency, accuracy and veracity are paramount.

Types Types Missing Data Data Effects Immediate system errors Delayed: Customer dissatisfied

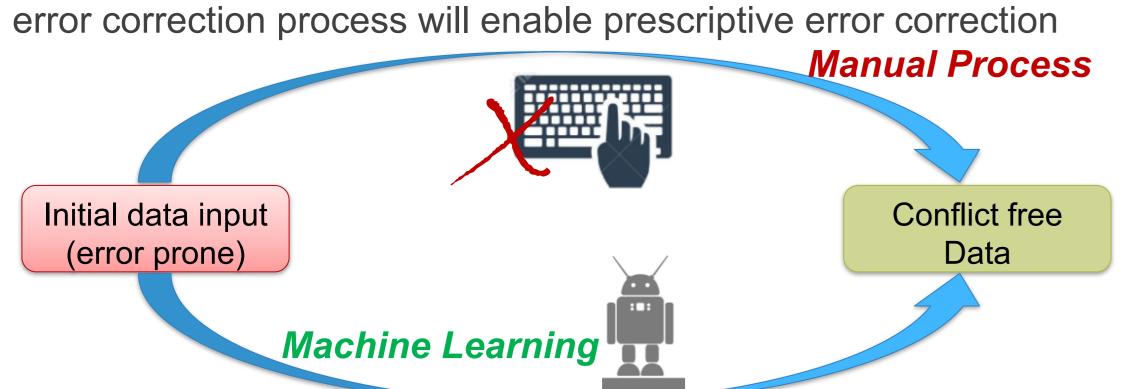
Key Question / Hypothesis

While working with multifarious data, how can Damco

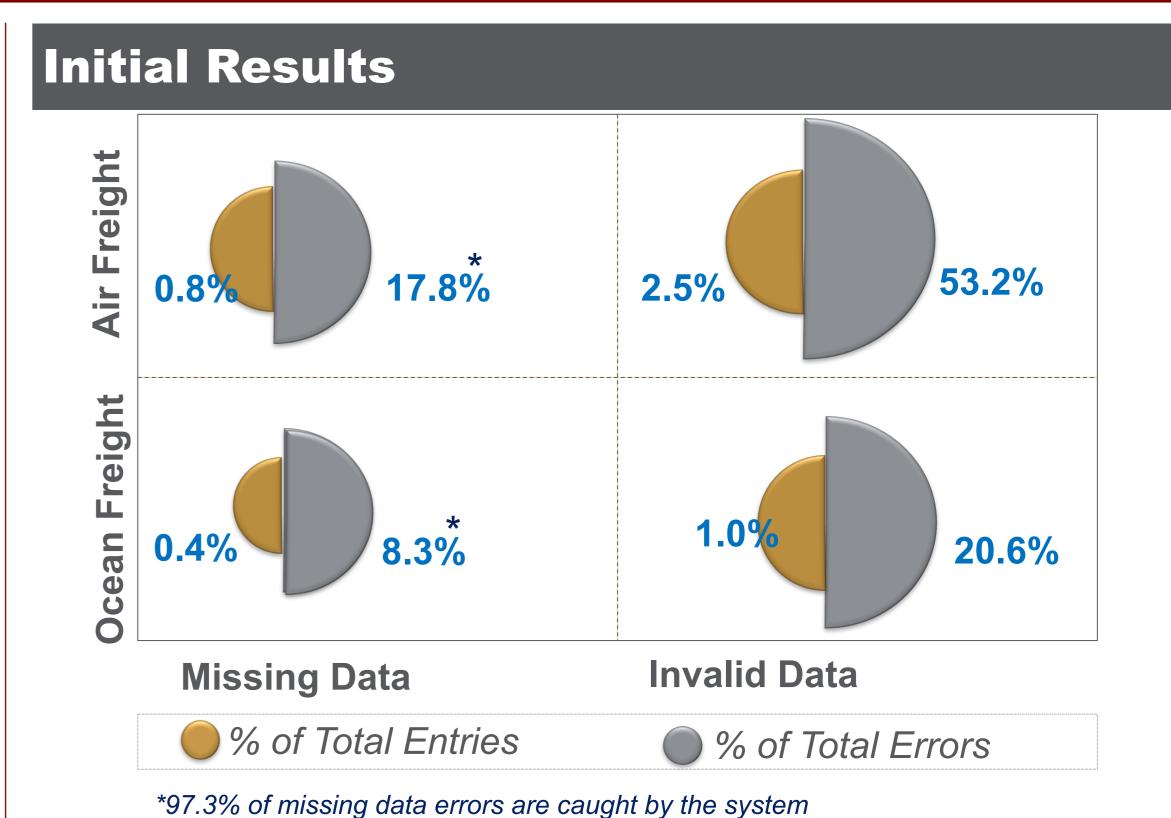
- i) Accelerate data entry correction,
- ii) Automate data entry correction wherever possible using a robust reusable algorithm

Hypothesis:

A learning algorithm mapping historical errors to existing manual error correction process will enable prescriptive error correction



Analytics Maturity Model How can we fix it? What will Prescriptive happen? Analytics When did it Predictive happen? Analytics What Diagnostic Analytics happened? Descriptive Analytics Insigh Difficulty Source- Gartner Methodology Data Gathering Design and Test Current state Analysis Build **Understand:** Formulate Isolate pertinent Test the algorithms to Current data source and algorithm(s) exceptions automate develop a against a Exception detection of data normalized, representative handling entries that integrated data test data set. could lead to an process model Root cause exception analysis Statistical Formulate mapping of false algorithms to entries to most suggest possible likely correct corrected data entries entries



Expected Contribution

To Damco:

- Significant insights on the nature and frequency of data errors which impede ability to meet customer SLAs.
- Proposed algorithm will accelerate and standardize resolution of a portion of these errors and provide time related saving.

Transferable Insights:

Algorithm can be extended to data entry correction for other industries

Future Extensions:

 Algorithm can be extended to include external data sources (news, weather) adding to the predictive power for operational exceptions

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Gerta Malaj

