UPS CAPITAL'S DAMAGE INVESTIGATION PROCESS

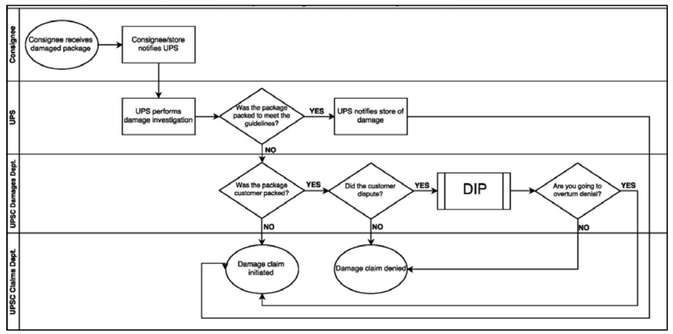
ABDUL HAMDAN, JOSÉ IBAÑEZ
ERICK MARTINEZ, ZAIN SHERALI
IE 4350: SENIOR CAPSTONE DESIGN

ABSTRACT

UPS Capital has assigned us the task to improve their Damage Investigation Process for the UPS Store. The goal of this project is to take measurements, identify bottlenecks, and suggest improvements. Implementing these changes will reduce cycle time therefore increasing production.

INTRODUCTION

UPS Capital is a subsidiary of UPS that handles the claims for lost and damaged packages. We will be improving their Damage Investigation Process.

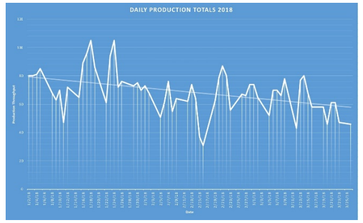


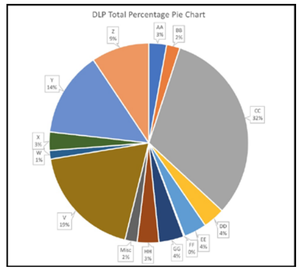
The current average daily production of the process is 68 notifications. Our team will suggest implementations to reduce the cycle time of the process and increase this daily production.

METHODOLOGY

Define

Within UPS Capital, there is a need for process improvement in their Damage Investigation Process (DIP). Currently, there is a lack of control, high variability, and loose lead times within the DIP.



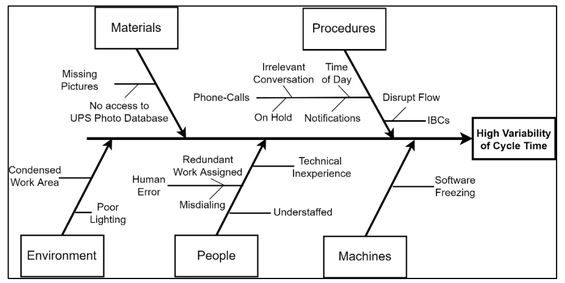


Measure

- Cycle times for the damage process, notifications, and damage disputes
- Frequency of each DLP (Desk Level Procedure) occurrence
- Relative Percentage of time spent on each DLP
- Daily completed Damages

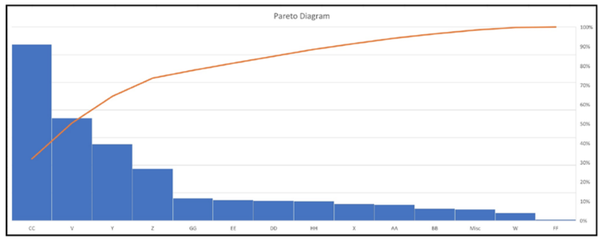
Analyze

- Pareto Chart on DLP frequencies
- Control Charts on system control
- Fishbone Model for root cause

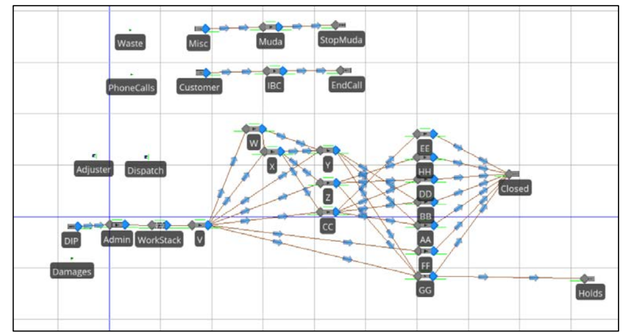


Improve & Control

- Simio simulation software used to replicate current model
- Potential changes tested and validated through Simio software
- Continue measurements of production and cycle times
- Suggest changes for continuous improvement



RESULTS



Recommendations

- Eliminate outbound calls for damage notifications
- Automate work assignment
- Train technologically inexperienced workers
- Improve software for clarity and ease of use

CONCLUSION

Focusing on reducing the amount of phone calls in the DIP will reduce variability and cycle time which will lead to a more controlled process. As shown in our simulation model, eliminating outbound calls will result in a 30% reduction of cycle time.

FUTURE WORK

More simulations can be performed to continuously improve the Damage Investigation Process.

REFERENCES

IE 3343 Methods & Standards, IE 4322 Enterprise Simulation, IE 4308 Quality Systems