

AMAZON – FULLFILLMENT BY AMAZON

SURFACE INFORMATION TO LOWER COSTS AND INCREASE SATISFACTION

Student Team:

Panpan Huang – Master of Business Administration

Colin Tyrrell – Dual (Master of Business Administration and School of Information)

Ruqing Ye – EGL (BSE/MSE Industrial and Operations Engineering)

Project Sponsors:

Jiagen Eep – Senior Product Manager

Eddie Iglesias – Senior Product Manager

Joop Varophas – Senior Product Manager

Akira Wada – Senior Manager

Faculty Advisors:

Jason Habeger – College of Engineering

Yan Huang – Ross School of Business

Amazon, a \$107B company, strives to be Earth's most customer-centric organization where people can find and discover anything they want to buy online. Fulfillment By Amazon (FBA) is a service for third-party sellers on Amazon. With FBA, sellers store their products in Amazon's fulfillment centers, and Amazon picks, packs, ships, and provides customer service for these products. FBA helps sellers scale their business and reach more customers. FBA provides a unique set of services to sellers. At the same time, these services allow room for seller-caused errors along the supply chain that can result in inventory discrepancies. These discrepancies sometimes require that Amazon reimburse sellers for their loss. Sometimes, the existing reimbursement experience has a negative impact on seller satisfaction and results in increased contact costs.

The FBA Reimbursements team challenged the Tauber intern team with two goals: improve sellers' visibility into the reimbursement process and identify seller defects that lead to inventory discrepancies. The root causes and impact of defects are a complex space involving a diverse group of sellers, Amazon's physical fulfillment network, and myriad of backend data solutions that were built over many years. Defects have two major impacts: they increase costs and they erode seller trust in Amazon's operations. Seller trust is impacted because the current reimbursements experience sometimes conveys limited, confusing, or even conflicting information. In addition, it does not provide the information necessary to educate sellers who may share the blame for many of the defects.

The Tauber team focused on three methods for identifying and improving visibility into defects: backend data systems, information management, and information delivery. For backend data systems, the team built process maps to identify gaps in data sources or data flow that was not aligned with business goals. For information management, the team focused on the currently available reports—conducting usability studies and seller interviews, audits on customer service and online seller complaints, and distributing a Reimbursements survey—all to identify major pain points across multiple seller demographics. For information delivery, the team examined major trends in Amazon UI/UX development and third-party software offerings. For each category, the team performed several iterative design processes with product engineers to ensure all design features could be built and delivered to sellers in 2017.

Challenged to improve sellers' visibility into the reimbursement process and surface seller errors that lead to inventory discrepancies, the Tauber team designed two solutions: a new web portal (and all required backend processes) to convey inventory and reimbursements information, and a project to leverage an underutilized backend data source. The new web portal was designed to provide sellers with visibility into processes that help to lower contact costs and increase seller trust through greater transparency. In addition, the team embedded defect coaching for sellers into newly provided performance management metrics. To leverage the backend data source, they focused on utilizing comparative algorithms and machine learning to identify missing inbound inventory and identify defects that impact costs for FBA. In total, by providing increased visibility into the reimbursements process and identifying defects, the Tauber team's solutions will save a significant amount of money per year by reducing contact costs, will drive increased FBA growth, and will lower defect costs by a significant amount per year.