AMAZON – GAMIFICATION
AMAZON NORTH AMERICA CUSTOMER
FULFILLMENT FC GAMES USE CASE EXPANSION

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Behind Amazon's peerless selection and ever-shortening delivery times are thousands of dedicated fulfillment center (FC) associates performing repetitive, physical tasks every day. They are the engine that drives Amazon's ability to consistently provide excellent customer experiences. The work of an associate can be dull and often requires minimal engagement to perform, leading to attrition and plateaued performance. As Amazon continues to steep its trajectory of year-on-year growth, its fulfillment network also continues to expand at an exponential rate. With such rapid expansion, the cost of controlling attrition and increasing productivity is of the utmost importance. To mitigate rising attrition costs and increase FC productivity, the Tauber team focused on exploring solutions targeted at increasing associate engagement. Increased employee engagement has been shown to increase performance and reduce turnover. Thus, Amazon can increase FC productivity and reduce FC attrition by implementing solutions that positively impact associate engagement.

The Tauber team collaborated with ACES (Amazon Customer Excellence System) Ops Integration, AFT (Amazon Fulfillment Technology), and FC Operations Managers to explore FC Games. FC Games is a user engagement platform that provides video game experiences for associates while they work, driven by FC labor activities. The goal of FC Games is to provide FC associates with an experience that makes work more fun, leading to increased engagement, motivation, and job satisfaction.

Initially, the team sought to understand the state of engagement in the entire fulfillment network. Through deep dive data analysis of FC types and processes, the team was able to discern engagement differences across the fulfillment network. A mathematical model was developed to holistically score processes and FC types on multiple dimensions of engagement. The results of this model indicated that the Stow, Pick, and Pack processes in AR (Amazon Robotics) Sortable FCs suffer the most from low engagement.

The team set out to test gamification of the Stow process to understand the effects gamification has on engagement. On the floor competitions and challenges at BFI4, an AR Sortable FC in Kent, WA, were used to initially test gamification; however, the team quickly realized that while associates found the games fun, their engagement was triggered by seeing their performance improve throughout the day. This prompted the team to change course and test the effects of increased performance awareness on associate productivity and satisfaction. The results from the performance awareness pilot showed a 4.91% increase in Stow productivity. A previous study in the Pick process showed increased performance awareness led to a 3.40% increase in Pick productivity and an 11.35% decrease in injected defects. Together, these studies show that increased performance awareness leads to improved associate performance. If implemented network-wide, potential annualized cost savings from increased productivity are projected at over $50M for the current network, with a three-year 2018–2020 NPV of more than $500M. While the FC Games platform shows promise as a long-term engagement solution and should continue to be built and expanded across the fulfillment network, increased performance awareness can be implemented immediately, allowing Amazon to realize significant labor cost savings.