# SNOWBALL PROJECT

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## MY ROLE AT AIRBUS

***Airbus*** *is a leading multinational aerospace corporation renowned for designing, manufacturing, and selling a diverse range of commercial and military aircraft, along with space systems and services.*
*My team* ***OMAO*** *is the* ***Technical Authority*** *supervising all questions related to our POA (Production Organization Approval) in front of EASA.*
*As a* ***Data Analyst apprentice****, I provide analysis of production data to help my colleagues make advised decisions.*

## BACKGROUND CONTEXT

*In the* ***FALs*** *(Final Assembly Line) and* ***plants****, a single* ***Non Conformity*** *at Section Handover can be the* ***root cause of missing the FOT*** *(FAL Operational Test Meeting) date and several hours of* ***Out Standing Work****.*

## MISSING GAP AND AIM

*On the shop floor, workers couldn't* ***anticipate*** *and* ***reduce*** *the so-called* ***Snowball Effect*** *of certain tasks leading to lost hours in production.*
*The aim of the project is to* ***provide a decision tool*** *that orders tasks to performed influenced by Non Conformities.*

## METHODOLOGY AND RESULTS

*To make a decision, we model the impact of an NC by a score:*

***Snowball Score*** *= (V + H) * B*
***V*** *=* ***Predicted Vertical Lead Time*** *(Time to close the NC)*
***H*** *=* ***Horizontal Theoretical Blocking Hours*** *(Expected impact of the NC down the value chain)*
***B*** *=* ***Business Rules*** *(additional features based on shop floor and user expertise*

*To predict the current Snowball Score of an NC, we compute the previous existent Snowball Scores and use* ***Machine Learning****.*

## CONCLUSION

*This Project has helped the workers* ***prioritize the most time efficient tasks****. A tool is now available to monitor the real time Snowball Score fluctuations.*

## NEXT STEPS

***Missing parts*** *are also slowing production down and sometimes stopping it. The next step of this project will aim at computing with Machine Learning the effects of missing parts to* ***prioritize orders in Procurement****.*