INTRODUCTION

• AstraZeneca (AZ) is a global pharmaceutical company focusing on creating innovative medicines used by patients all around the world.
• The Lean Digital team at AZ’s Mount Vernon location has a program called the LEAN Card Program, which allows employees to submit ideas regarding work efficiency.
• They wanted a place where they could see analytics regarding idea process time, number of ideas submitted, and other metrics all in one place.
• The LEAN card program allows AZ to improve work efficiency and develop a better work environment for employees to be as productive as possible.

METHODOLOGY

• Tulip is an advanced information visualization framework designed specifically for analyzing and visualizing relational data.
• Tulip can work with very large datasets and different databases.
• The 5 key tools in Tulip are: drag and drop interface, toolbar, context plane, step and record pane and the tables.
• Implementing Tulip as the platform for managing lean card ideas offers AstraZeneca a comprehensive solution to limitations encountered with SharePoint.
• Its user-friendly interface ensures quick adoption and increased productivity among employees, without the need for extensive training.
• Main benefits of Tulip are:
  - No-code
  - Cloud-Native
  - Edge Connectivity
  - Enterprise-ready

PROGRESS

Auto-generated email notifications:
• Implement in-app triggers which automatically email the creator of an idea when the status of the Lean Card is updated in the database.

Implemented 10-day review requirement:
• Develop app trigger which will initialize a counter for mandatory review after 10 business days when a Lean Card idea is submitted.
• Implement trigger which sends a notification to the reviewer if a Lean Card goes past the review requirement deadline without being reviewed.

Created database to hold values:
• Developed a table to hold values whenever a form is submitted.
• Table values are accessed for sending emails, getting user information, submitting forms, etc.

PLANs FOR THE FUTURE

Finalize Search/Filter functionality:
• Redefine areas for filtering.
• Implement search functionality within app by Idea Number, Title, Creator, Idea Details, for all departments.
• Re-structure current application so it is responsive to user input to update table query results in-app via personalized triggers.

Develop Analytics Dashboard:
• Analyze current analytics functionality implemented for Lean Cards via Power BI and design a Tulip app which replicates current mechanisms using Tulip functionalities.
• Develop and implement a dashboard to display analytics and metrics.
• Design and implement interactive graphics to display visual analytics.

Determine and apply design theme to maintain aesthetic cohesiveness in solution.

CONCLUSION

• The final Tulip app contains forms that allow employees to submit LEAN cards with all the crucial fields and information.
• Idea creators and reviewers receive emails when ideas are submitted as well as when the status of an idea changes.
• The application contains different forms for different departments within AZ, which allows employees to fill in the necessary information for their fields.

ACKNOWLEDGEMENT

We’re especially grateful for the support of:
• AstraZeneca Team: Mindy Hostettler, Alex Goebel, Hunter Fox, Becky Ziga.
• Purdue: Nicholas Christian Lenfesty, Dr Mark Ward, The Data Mine, Atin Dewan, Yash Ashtekar.

REFERENCES