# Statistical Machine Learning Approaches

## to Liver Disease Prediction

Early prediction of liver disease using classification algorithms to help the doctors to diagnose the disease within a short duration of time.

#### What are their key goals and needs?



### What do they struggle with most?

| Build<br>accurate<br>model | Trust of customer |
|----------------------------|-------------------|
| _                          |                   |

#### What tasks do they have?

| Pri | ed | icti | on  |
|-----|----|------|-----|
| of  | re | su   | lts |

Building model of prediction

| Phase of Journey                                                                               | <b>Discovery</b><br>Why do they even start the<br>journey? | Onboarding                                              | After Use<br>How can they feel successful? |
|------------------------------------------------------------------------------------------------|------------------------------------------------------------|---------------------------------------------------------|--------------------------------------------|
| Actions What does the customer do? What information do they look for? What is their context?   | Browse<br>the<br>website                                   | Enter the click on submit button                        | view the result                            |
| Touchpoint What part of the service do they interact with?                                     | Landing page                                               | Detail submit the filling input to the prediction model | Re-enter<br>the<br>output                  |
| Customer Thought<br>What is the customer<br>thinking?                                          | I can use the free test                                    | Why there ask so many get output?                       | Is the Do i have result to visit the true? |
| Customer Feeling What is the customer feeling? Tip: Use the emoji app to express more emotions |                                                            |                                                         | <u>()</u>                                  |
| Backstage                                                                                      |                                                            |                                                         |                                            |
| Opportunities What could we improve or introduce?                                              | Suggest addition test                                      | Make the training shorter                               | Give doctor recommandation                 |
| Process ownership<br>Who is in the lead on<br>this?                                            | Carl Carl                                                  |                                                         |                                            |

