# IS447 MIDTERM PRESENTATION

Smart Healthcare in Asia

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# **OUR TEAM**

# **NADIYA**



Project Manager

# **SHERMIN**



Client/Product Manager

NICO





**SHAZARIFAH** 

TAX X

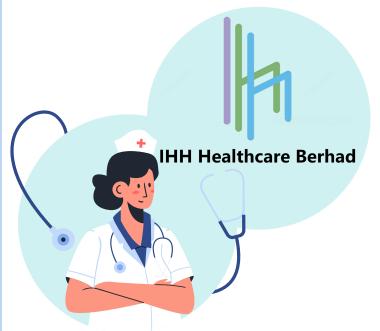
**ROYSTON** 

Product Developer

QA/Testing Manager



# INTRODUCTION



# Patient Experience (PX) Dept

## **Quality of Care and Patient Satisfaction**

Continuously reviews, monitors, reports hospital patient experience performance, and supports hospital improvement processes.

Critical aspects of the patient's journey from the time they arrive to when they exit the hospital.



Mount Elizabeth Hospital



Mount Elizabeth Novena Hospital



Gleneagles Hospital



Parkway East Hospital







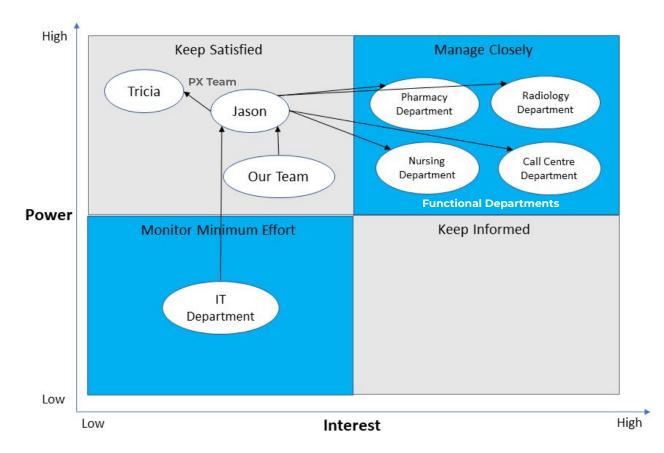
Services: outpatient, inpatient and emergency services, etc.

PROBLEM STATEMENT

Various functional departments within the 4 hospitals are experiencing manual, unproductive data consolidation and report generation without a **real time overview of their relative performance**.



# STAKEHOLDER MAPPING





# **USER JOURNEY - FUNCTIONAL DEPT**

Functional Dept / PX Team Moments

Patients interact with Functional Dept Unstructured data is recorded into Excel Sheet throughout patient's touchpoints

Extra columns are added into Excel Sheet unexpectedly

Patient submit satisfaction survey

Higher management request for Patient Satisfaction of past quarter

A survey form that collects results at one place that provides knowledge and wisdom based on

data collected

Goals

Feelings Jovial

**Desperate, Confused** 

Standardized format for recording of Patients' details

Unstandardised with previous records, unable to make comparison

A collection of raw data that does not present any wisdom

No sentiment analysis

Pain Points

**Opportunities** 

Hyper aware of areas of improvement

Standardize the header & format of records (monthly)

C central space surv

Create a centralised storage space to store the survey results



# **USER JOURNEY - FUNCTIONAL DEPT/PX TEAM**

Functional Dept / PX Team Moments

PX Team request for performance indicators

provide unstructured data and raw satisfaction survey results

PX Team request for higher patient satisfaction Attempt to pinpoint areas of improvement throughout patient's touchpoints

Goals

Develop an analytical tool

Meaningful information knowledge and wisdom from data collected

Feelings

Frustrating

Uncertainty

Pain Points

No analytical tools to generate KPI repository

Unclear sentiment analysis and team performance

Unable to find the weakest/problem areas from patient's touchpoints

**Opportunities** 

Provide structured data

EMPATHY MAP - Functional Department Think and feel No visibility to Data report is view messy performance Not sure where to put new data **Patients** interaction documentation Functional **Department** 

Input records to excel

Provide unstructured data to PX

No defined

structured

No analytical tool

Say and do

overall

performance

Collate

performance

indicator from

different

departments

No visibility of

Think and feel

No analytical tools

**Patient Experience** Team

**Request for** patient satisfaction Survey

**Pinpoint** areas/suggestion for area of improvement

**Messy data** 

(Different

formats/

**Additional** columns)

Different department / hospital different template

Data is recorded in excel

See

Central

repository to

gather data

Dashboard to

view overall

performance

Say and do

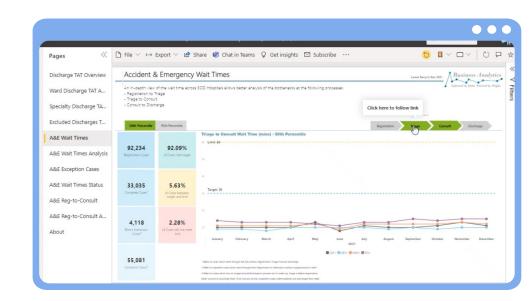


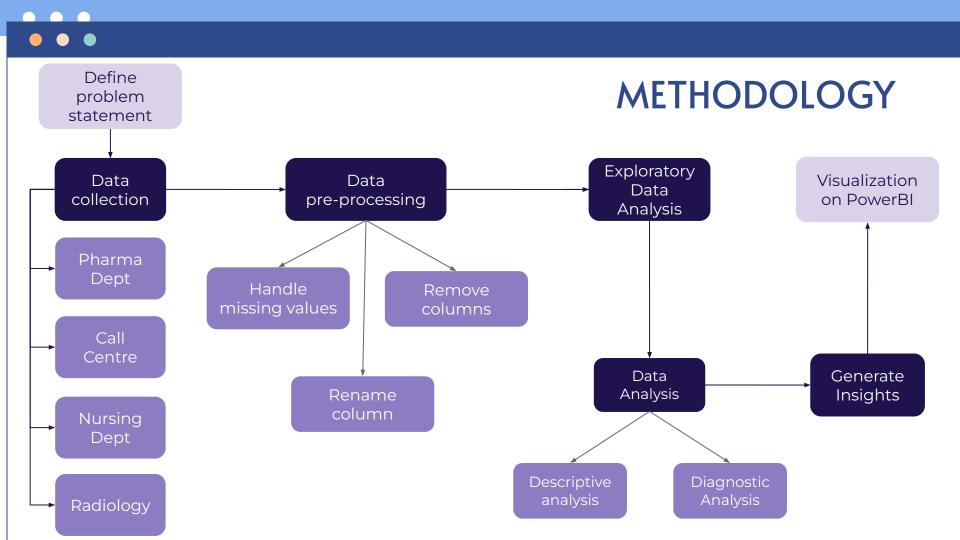
# **EXISTING SOLUTIONS**



# **Singapore Operation Division Dashboard**

- Departments and patient touchpoint:
  - A&E wait time analysis
  - Ward discharge analysis
  - A&E Reg-to-Consult analysis
- Consistent dashboard design and color scheme
- No existing analysis for KPI









# Dashboard

Consolidated data from multiple sources/data-sets, analyses and visualises the outputs meaningfully

User friendly, efficient, cost effective (low maintenance set up) prototype

# Reporting

Customizable analysis and automated reporting of performance overview for management



# DATA & ANALYSIS

# Dashboard

Consolidated data from multiple sources/data-sets, analyses and visualises the outputs meaningfully

# Pharmacy Dept Data

- Metrics related to time taken in each step of the process
- Time TTO verified, checked, dispensed

## Call Distribution Data

- KPIs: # of calls answered, abandonment rate, average speed of answer, average talk time
- Descriptive analysis and visualization on calls by month, days, functional groups

# Nursing Dept & Radiology Data

- Dataset TBC

# THE WAY FORWARD



Week 5-6

#### **IHH Introduction**

- Industry and
   Patient
   Experience Team
   introduction
- Project brief

#### **Pharmacy Department**

- Analyse patient walk through and user needs
- Clean raw data and ideate dashboard

# SPRINT 2

Week 7-8

#### **Midterm Presentation**

- Empathise
- Define
- Ideate

#### **Nursing Department**

 Analyse patient walk through and user needs

#### **Call Centre Department**

- Analyse patient walk through and user needs
- Clean raw data and ideate dashboard
- First prototype of dashboard

# THE WAY FORWARD

SPRINT 3

Week 9-10

#### **Pharmacy Department**

- First prototype of dashboard
- Refine/reiterate dashboard
- Report prototype

## Call Centre Department

- First prototype of dashboard
- Refine/reiterate
   dashboard

#### **Nursing Department**

- Clean raw data and ideate dashboard
- First prototype of dashboard

#### Radiology Department

- Analyse patient walk through and user needs
- Clean raw data and ideate dashboard

SPRINT 4

Week 11-12

#### Call Centre Department

Report prototype

## **Nursing Department**

- Refine/reiterate dashboard
- Report prototype

#### Radiology Department

- First prototype of dashboard
- Refine/reiterate dashboard
- Report Prototype

Week 13

#### **Final Presentation**

- Prototype
- Test

#### **IHH Closure**

Project handover

# **THANKS!**

Do you have any questions?

