



# Use Case

## ESG Monitoring

*With*

Digital Factory Operating System  
(DFOS™)





### **Limited visibility of trends or benchmarking**

*Organizations cannot readily access and examine trends and ESG goals, making it difficult to benchmark internally and against their peers.*



### **Uncertainty in Data correctness**

*Assurance to correctness of data captured through conventional systems is not evident.*



### **Scrambling for missing data every year**

*There's always a last-minute rush to track and trace the historical data.*



### **Constant changes in disclosure requirements**

*Issues encountered during manual ESG reporting system will keep repeating every time due to constantly update of disclosure requirements.*



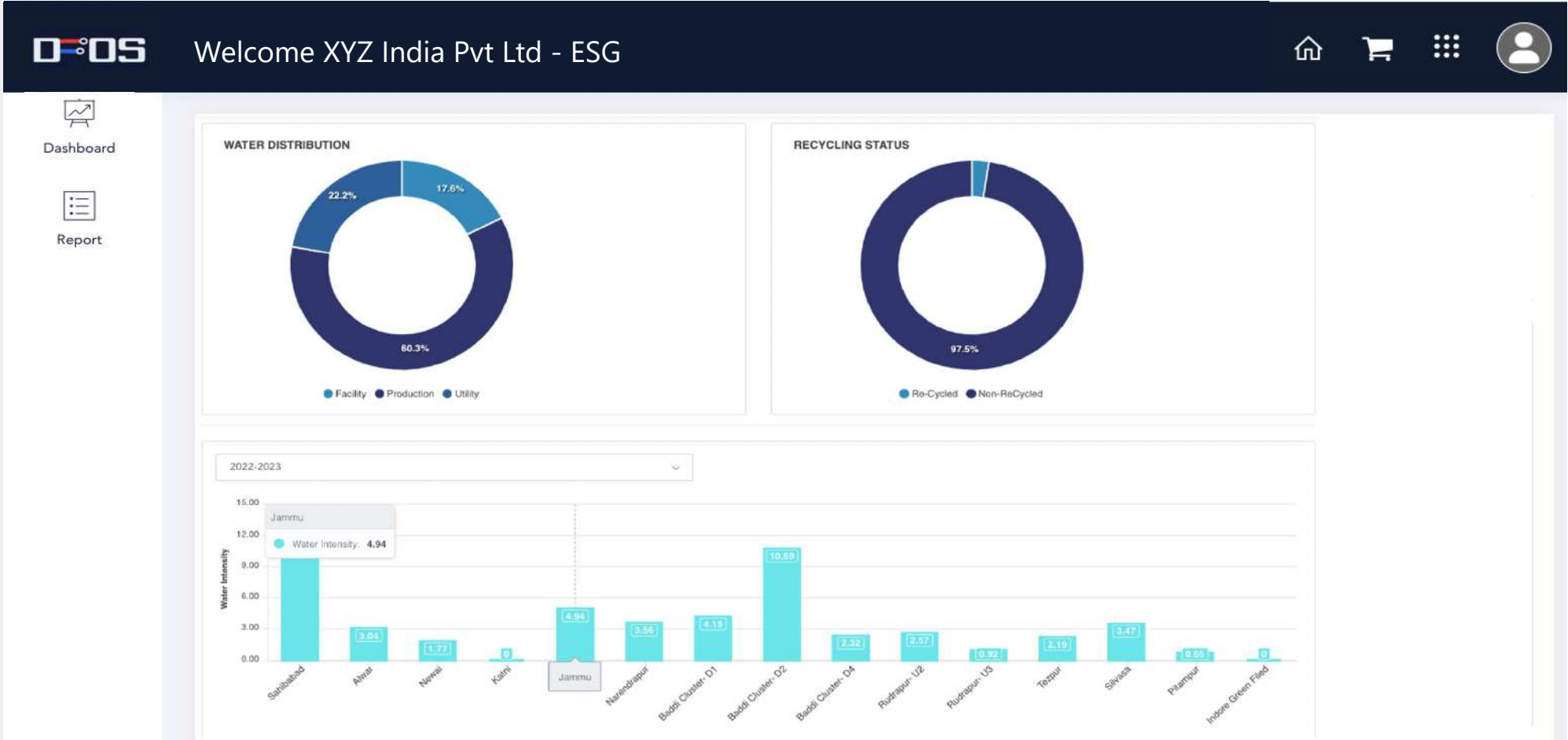
Challenge

## Digitize ESG data capturing and reporting process





Interactive dashboard for all Sustainability related KPIs like **Water, Energy, GHG, Waste Disposal, Safety, HR** Related with Trends.



WATER

ENERGY

GHG

WASTE

SAFETY

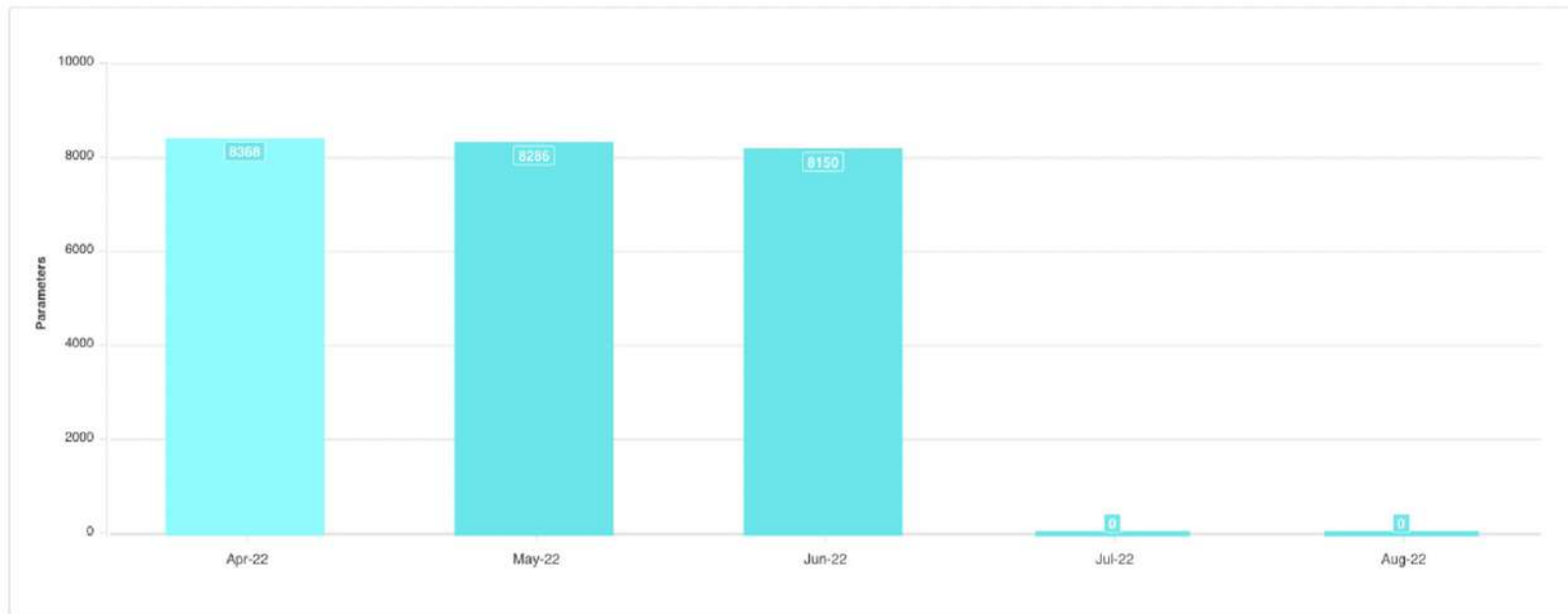
TRAINING

Year  
2022-2023

Area  
Sahibabad

Parameter  
X Total Raw water Withdrawl( Borewell+Municipality Supply) (KL)

Filter



Monthwise wise Trend

Wireframes

Solution

Challenge

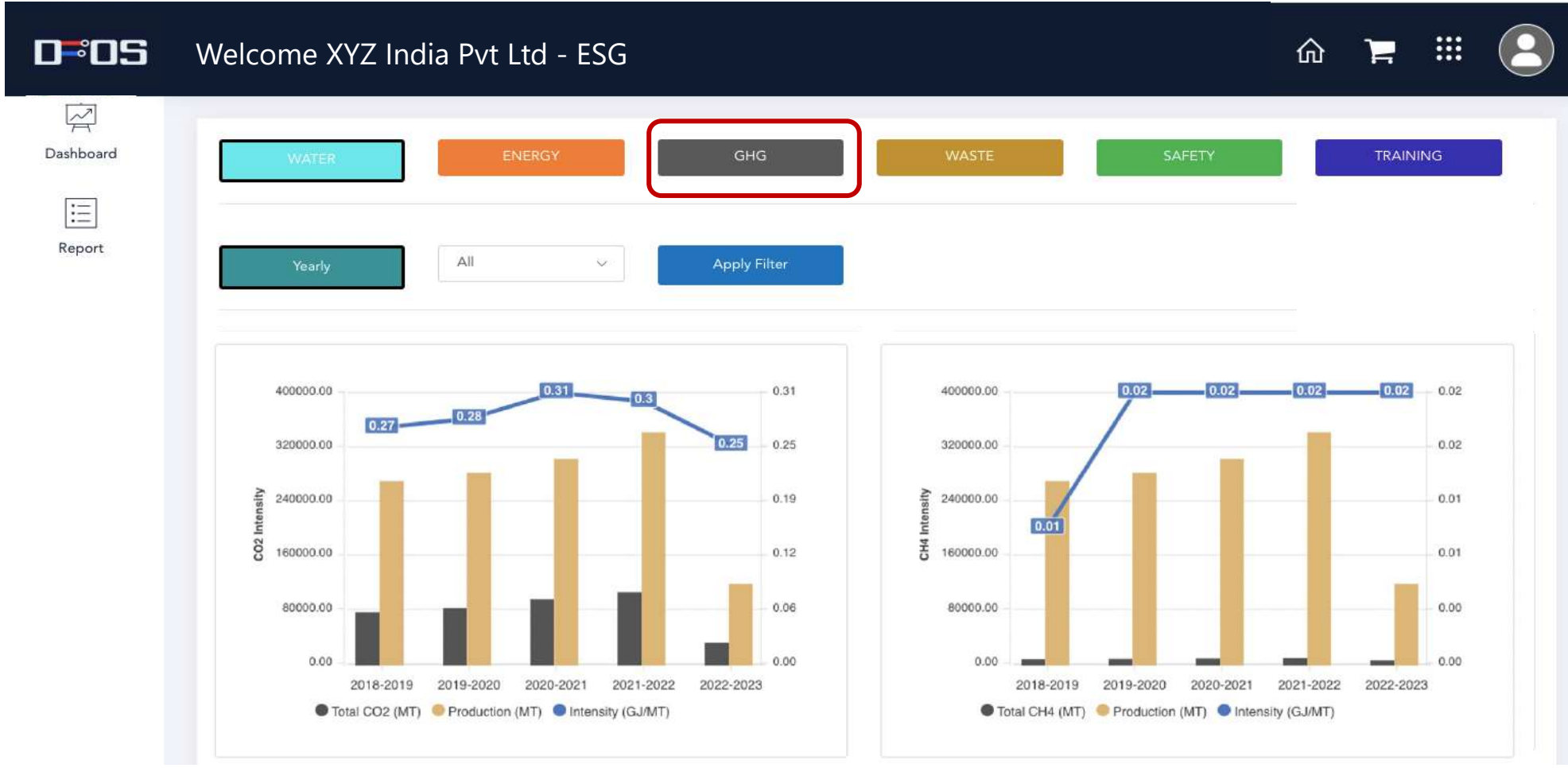


Energy Intensity, Generation through **Renewable and non-renewable resources**

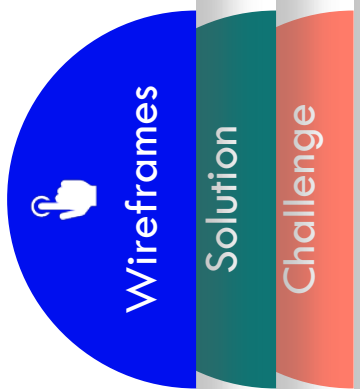
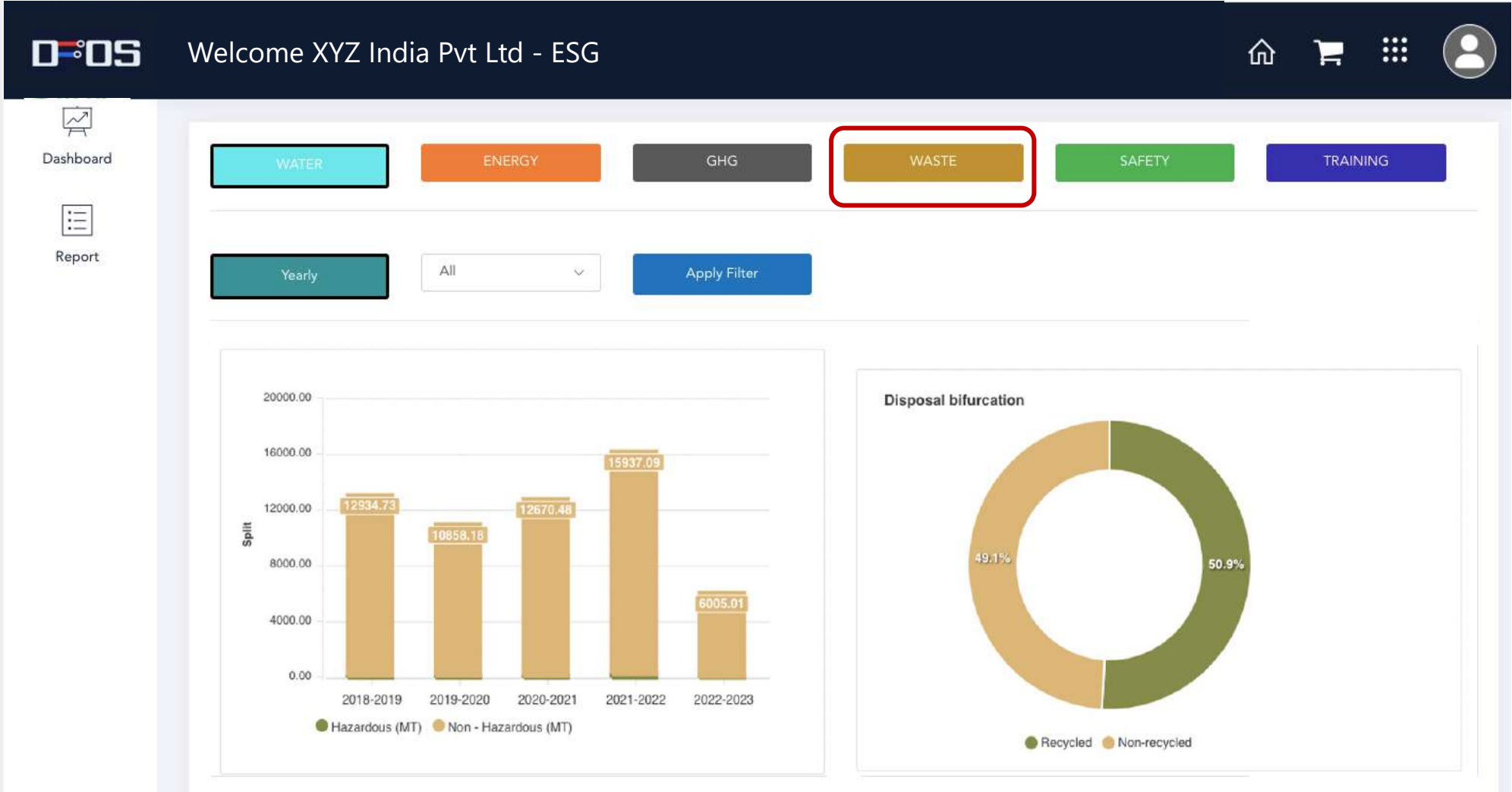
Wireframes

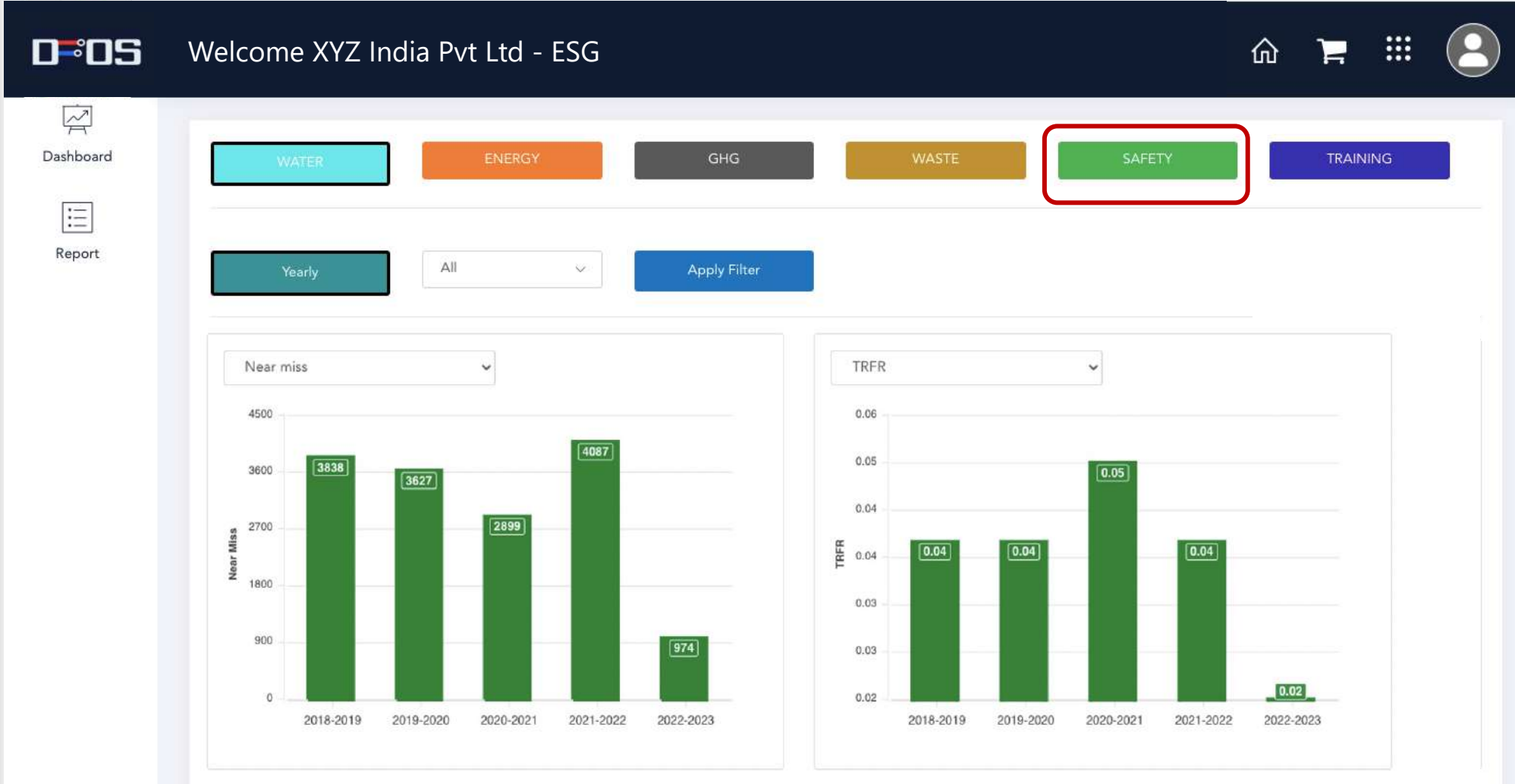
Solution

Challenge









WATER

ENERGY

GHG

WASTE

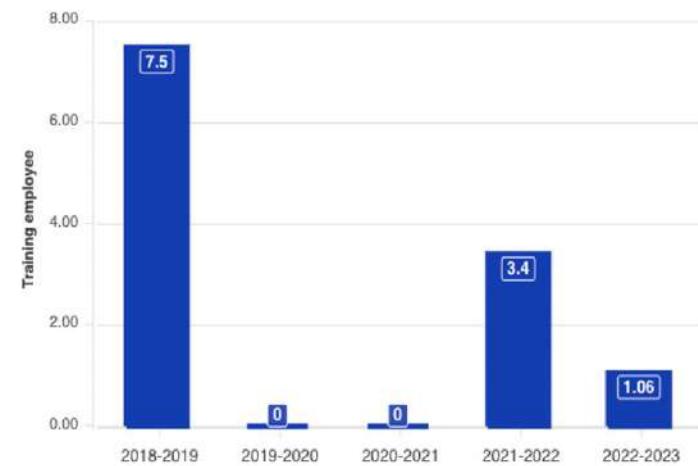
SAFETY

TRAINING

Yearly

All

Apply Filter



Wireframes

Solution

Challenge

List of the all the heads for which data must be filled.

Welcome XYZ India Pvt Ltd - ESG



Dashboard

My Forms

Schedules

Activity

To Do

Task To Me

Approvals

Report

Section List

Safety

EHS

Water

Production

Hazardous waste


Non-Hazardous Waste for recycling 3rd party





Non-Hazardous Waste for non-recycling 3rd party


Fuel/Energy





# User screen for Data Submission


Welcome XYZ India Pvt Ltd - ESG





Dashboard


My Forms


Schedules

Activity

To Do

Task To Me

Approvals

Report

✓ Alwar

Newai

Data for the Month of

dd/mm/yyyy

Safety

1: Total Employees/ Others

2: First Aid (FAC)

3: Minor Incident (RWC/MTC)

4: Near Miss Captured

5: Major Incident (LTA)

In case of multiple locations  
select the location for which  
data to be entered

Wireframes

Solution

Challenge

<https://www.designx.in>

## User screen for Data Submission

Dashboard

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OS

Welcome XYZ India Pvt Ltd - ESG

Home

Shopping Cart

Grid

User Profile

Alwar

Newai

Data for the Month of

dd/mm/yyyy

Safety

1: Total Employees/ Others

2: First Aid (FAC)

3: Minor Incident (RWC/MTC)

4: Near Miss Captured

5: Major Incident (LTA)

Question Info

Question : First Aid (FAC)

Info : First aid interventions can be used in a variety of conditions, from cuts and muscle sprains to heat stress and hypothermia.

Info 2:

Info 3:

Last Audits

Date	Answer
17-August-2022	0
16-August-2022	0
16-August-2022	0

User can click on 'i' button to view the information related to that data point and can see the details of last three submission


Wireframes





Solution


Challenge


<https://www.designx.in>


## User screen for Data Submission


 Welcome XYZ India Pvt Ltd - ESG





 Dashboard


 My Forms


 Schedules

 Activity

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 Approvals

















 Report

My audits

My Draft

Export to Excel

Search:

ID	Audit Date	Proxy Date	Main Form Name	Audited By	Answer	Answer Image	QRcode	Clone
16205	16/08/2022 12:43:43	01/07/2022	ESG Data Sheet					
15988	09/08/2022 14:48:05	01/07/2022	ESG Data Sheet					
15384	21/07/2022 19:44:16	01/06/2022	ESG Data Sheet					
15383	21/07/2022 19:39:51	01/05/2022	ESG Data Sheet					
15382	21/07/2022 19:33:59	01/04/2022	ESG Data Sheet					
15089	19/07/2022 11:33:25	01/06/2022	ESG Data Sheet					
15087	19/07/2022 11:28:07	01/05/2022	ESG Data Sheet					
15074	19/07/2022 10:25:49	01/04/2022	ESG Data Sheet					

Submission list recorded & available for view along with the user details & month of submission



User screen for Data Editing post submission

Dashboard

My Forms

Schedules

Activity

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Approvals

Report

OS

Welcome XYZ India Pvt Ltd - ESG

Home

Shopping Cart

Grid

User Profile

Section : Safety

Question : Man-hours worked -Total Employee and Others (Hrs)

Ans : 47632

Remark :

Number Value : 0

Edit

Section : Safety

Question : Man Days Lost (LTA)

Ans : 0

Remark :

Number Value : 0

Edit

Section : EHS

Question : Total Environment Training Number

Ans : 2

Remark :

Number Value : 0

Edit

Section : EHS

Question : Total Safety and Health Training Number

Ans : 2

Remark :

Number Value : 0

Edit

Section : EHS

Question : Total number of Employee in EHS Training

Ans : 38

Remark :

Number Value : 0

Edit

Audit Edit

Question : Man-hours worked -Total Employee and Others (Hrs)

Answer : 47632

New Answer :

Submit

Users can view the details of every submission and can edit the data if required.





# Approval Mapping



Welcome XYZ India Pvt Ltd - ESG



Dashboard



My Forms



Schedules



Activity



To Do



Task To Me



Approvals



Report

Audited By : Anurag Pathak | Date : 01 Aug, 2022 02:45 PM

Audit Details

Approval Details

Status : Pending

Approval Date :

Approver Name :

Approver Remark :

Unit Heads or managers review the submission and approve or reject the submission.

Remark

Approve

Reject

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Email Notifications on submission/approval/status change

## ESG Data Sheet Audit Approval

Dear

Udayveer Singh has submitted ESG Data Sheet audit for your approval.

Form name : **ESG Data Sheet**

Audit Date : 2022-08-16 16:31:53



Wireframes

Solution

Challenge

<https://www.designx.in>

# Reports



Welcome XYZ India Pvt Ltd - ESG



Dashboard



My Forms



Schedules



Activity



To Do



Task To Me



Approvals



Report

Areas

Alwar

Year

2021-2022

Apply

YTD

YOY

Export to Excel

Search:

Report	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Aggregate
Safety													
Total Employees/ Others	185	205	242	230	241	243	255	247	251	246	223	224	232.67
First Aid (FAC)	0	0	0	0	0	0	1	0	0	0	0	1	2
Minor Incident (RWC/MTC)	0	0	0	0	0	0	0	0	0	0	0	0	0
Near Miss Captured	0	0	0	0	0	0	0	0	0	0	0	0	0
Major Incident (LTA)	0	0	0	1	0	0	0	0	0	0	0	0	1
Fire Minor	0	0	0	0	0	0	0	0	0	0	0	0	0
Fire Major	0	0	0	0	0	0	0	0	0	0	0	0	0
Man-hours worked -Total Employee and Others (Hrs)	38536	42648	50268	49616	48100	50592	49012	47448	54215	49268	42876	46628	569207
Man Days Lost (LTA)	0	0	0	12	31	30	0	0	0	0	0	0	73
All Injury Rate (AIR) $\frac{((\text{First Aid} + \text{RWC} + \text{MTC} + \text{LTA}) \times 100000)}{\text{Man Hours Worked}}$	0	0	0	2.02	0	0	2.04	0	0	0	0	2.14	0.53
TRFR or FR $\frac{((\text{MTC} + \text{RWC} + \text{LTA}) \times 100000)}{\text{Man Hours Worked}}$	0	0	0	2.02	0	0	0	0	0	0	0	0	0.18
Severity Rate $\frac{(\text{Mandays Lost} \times 100000)}{\text{Man Hours Worked}}$	0	0	0	24.19	64.45	59.30	0	0	0	0	0	0	12.82



Wireframes

Solution

Challenge

<https://www.designx.in>

Reports

-  Dashboard
-  My Forms
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-  To Do
-  Task To Me
-  Approvals
-  Report

Areas

All

Apply

YTD

YOY

Export to Excel

Search:

Report	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023
Safety					
Total Employees/ Others	319.33	335.41	357.91	375.50	362.50
First Aid (FAC)	0	0	0	5	0
Minor Incident (RWC/MTC)	0	0	0	1	0
Near Miss Captured	257	339	166	4	55
Major Incident (LTA)	0	0	1	1	0
Fire Minor	0	0	0	0	1
Fire Major	0	0	0	0	0
Man-hours worked -Total Employee and Others (Hrs)	771216	820716	857653	918439	322264
Man Days Lost (LTA)	0	0	21	73	0
All Injury Rate (AIR) $\frac{((\text{First Aid} + \text{RWC} + \text{MTC} + \text{LTA}) \times 100000)}{\text{Man Hours Worked}}$	0	0	0.12	0.76	0
TRFR or FR $\frac{((\text{MTC} + \text{RWC} + \text{LTA}) \times 100000)}{\text{Man Hours Worked}}$	0	0	0.12	0.22	0
Severity Rate $\frac{(\text{Mandays Lost} \times 100000)}{\text{Man Hours Worked}}$	0	0	2.45	7.95	0



Wireframes

Solution

Challenge

# Results

## Tangible

100%

Paperless System

10X

Faster data  
collection

## In-tangible

1

Advanced reporting and  
dashboarding structure  
provides process owners in-  
depth inference for taking  
business decisions.

2

Flexibility to make amendments  
in reporting structure

## ROI

1<sup>st</sup> Y

Within 1<sup>st</sup> Year post  
implementation of  
digital system



Results

Wireframes

Solution

Challenge