COVID-19 DESIGN CHALLENGE

#WORK RESUMPTION
1. THE CONTEXT
All manufacturing activities are at halt all across the globe due to the COVID-19 pandemic. Reliance on infrastructure rules out working from home possibilities. Blue collar, contract based workforce is most affected due to wage cuts and job insecurity.

"How might we help factories/plants resume operation during the COVID-19 pandemic to help sustain employee lives?"

2. EXISTING SOLUTIONS
Government allows special permission to plants/factories to operate even during a lockdown if they meet "Plant Opening Protocols".

What are Plant Opening Protocols? (roughly)
- Premise Disinfecting
- Social distancing measures
- Incidence Management Rules
- Health Screening
- Quarantine Protocols

3. PRIMARY USER(S)
Employer/Stakeholders
Medical Inspector
Employee

4. PAIN POINTS
1. Lack of accountability, standardization
2. Implementation + maintenance negligences //First time for everyone.
3. Lack of actionable feedback

5. SOLUTION OVERVIEW
The solution is that of a digital platform to help resume functioning of plants/factories even during the lockdown and immediately after.
6. USER NEEDS MAPPING

1. FOLLOWING RE-OPENING PROTOCOLS
   NEED TO KNOW HOW TO COMPLY TO PLANT RE-OPENING PROTOCOLS
   NEED TO DOCUMENT THE MEASURES TAKEN TO DEMONSTRATE COMPLIANCE OF RE-OPENING PROTOCOLS
   NEED TO GET THE MEASURES REVIEWED BY A MEDICAL INSPECTOR FOR RE-OPENING PERMIT
   NEED TO MAINTAIN COMPLIANCE TO RE-OPENING PROTOCOL TO RENEW THE PERMIT

2. EMPLOYEE TRACKING + INCIDENCE MANAGEMENT
   NEED TO KNOW THE STEPS TO CONFIRM WHEN AN EMPLOYEE IS SUSPECTED TO BE INFECTED
   NEED TO TAG + TRACK THE INFECTED EMPLOYEE AND POSSIBLE PEOPLE IN CONTACT TO PREVENT THE SPREAD THE OUTBREAK

3. MONITORING THE RISK OF OPERATION AND OUTBREAK
   NEED TO KNOW OF ANY INCIDENCES REGARDING INFECTED/AT-RISK EMPLOYEES
   NEED TO HELP PROVIDE ACCESS TO TESTING CENTRES, HOSPITALS, ETC. DURING AN INCIDENT
   NEED TO KNOW WHETHER THE WORKPLACE IS SAFE TO OPERATE IN
   NEED TO EVALUATE THE RISK INVOLVED IN CONTINUING TO OPERATE
   NEED TO EVALUATE THE RISK INVOLVED IN CONTINUING TO OPERATE
1. FOLLOWING PLANT RE-OPENING PROTOCOLS + GETTING PERMIT

**EMPLOYER/STAKEHOLDERS**

**STEP-I**

The employer or business stakeholder can start documenting their compliance measures for plant re-opening protocols. The platform guides them through simple check-lists and photo documentation for each protocol to create a case.

**STEP-II**

Once the checklist is completed and submitted, an aggregate score is generated based on the compliance measures taken. The score must meet a minimum value to schedule an on-site medical inspection to validate claims and get a re-opening permit.

**ONSITE INSPECTION + CROSS VERIFICATION BY MEDICAL INSPECTOR**

**STEP-III**

If the on-site inspection is successful, claims are verified and all protocols are met—the plant is given a operation permit that enables them to restart working as long as protocols are met. The validity is limited, and needs to be renewed with inspections periodically.

7. PROPOSED SOLUTION

**PLANT OPERATIONS RESUMED**
2.1 Employee Tracking + Self Screening

Work Permit Request
All employees who will resume work once the plant is operational will have to:
- Request for a work permit
- By providing additional medical and travel-related history about themselves.
- Agreeing to comply with the protocols.

Daily Self Examination/Screening Before Work
All employees must self-screen themselves for any symptoms as well as feed body temperature to the platform. If suspected to have any symptoms, they must avoid going to work till cleared by a doctor.

2.2 Incidence Management

Incidence Management
In case of an incident or suspected incident of employee positive detection, the manager must immediately mark the employee based on a pre-defined system (under investigation/infected/high risk of contact/low risk of contact). And based on the situation the platform will provide guidance on the immediate steps to be taken, nearest test centres, hospitals.

Daily Employee Check-Up + Background Diagnosis + Emp Data
Emergency Incidence Management + Playbook
Tracking + Spread Management
3. MONITORING THE RISK OF OPERATING + OUTBREAK

If all the employees and their health status are tracked, a dashboard can be populated with data that might enable employer, the medical examiner as well as the employees itself to be aware of the overall health of operations and take calls on continuing to run, or anticipate an outbreak and quit.

WHAT’S NEXT?
> Get hands on live user data to validate the needs.
> Determine the scope of the platform.
> Detail/develop out the digital platform for possible production.