

Designing for the Frontline Worker:

Strategies for Creating Effective Manufacturing Operations Platforms

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What app or software did you use in your personal life
in the past week that you **genuinely loved**?

What app or software did you use **in your professional life**
in the past week that you genuinely loved?

Enterprise users bring consumer expectations.

One hour a day of inefficiency x **200** operators
=
25 FTE's worth of work wasted every year



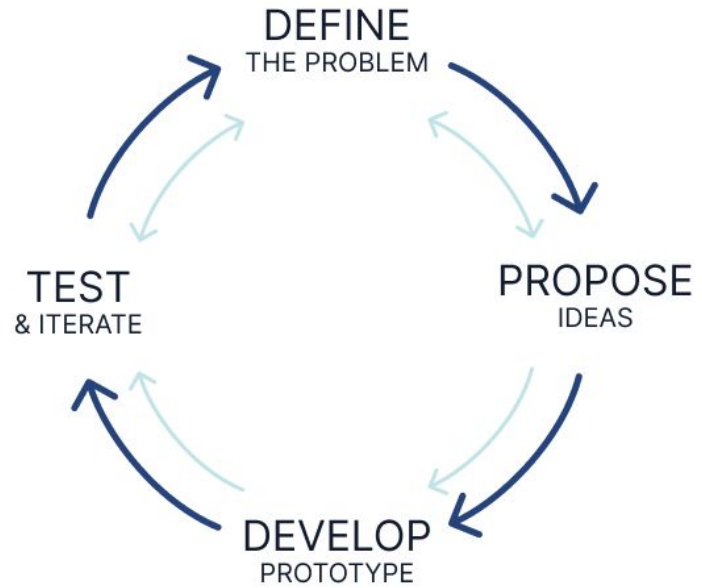
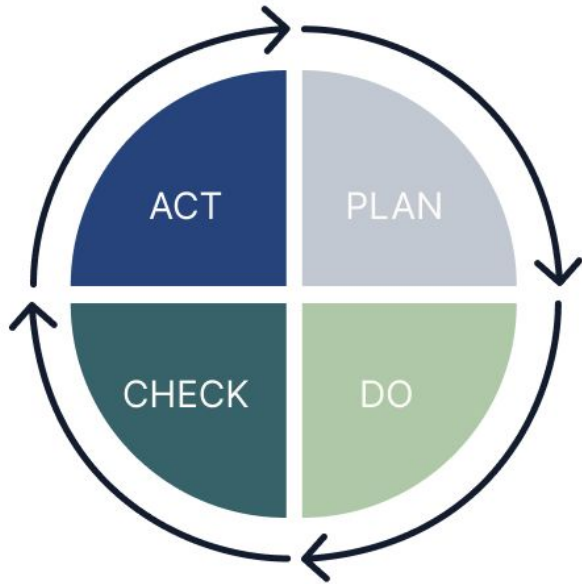
Why?

Why?

Why?

Why?

Why?





Plan

Defining opportunities for improvement

Design for UX; design for quality

Email or mobile phone number

Continue

BDLL	Borrower LIBOR Drawdown Prod	Drawdown
001BDLL201480094		001BDLL201480094
024462	REVLON CONSUMER PRODUCTS CORP	
Facility Name	REVLON TERM LOAN 2016	
GL Detail		
Component	Internal GL	Overwrite default settlement instruction
COLLAT		<input type="checkbox"/>
COMPINTSF		<input type="checkbox"/>
DEFAULT		<input type="checkbox"/>
DFLFTC		<input type="checkbox"/>
FRONT		<input type="checkbox"/>
FUND		<input type="checkbox"/>
INTEREST		<input type="checkbox"/>
PRINCIPAL	3003000023	<input checked="" type="checkbox"/>



Look for opportunities

Pauses

Repetitive tasks

Manually writing things down

Looking elsewhere for information

When another person needs to come into the task

When a different device is used

When the user's hands are full

When significant training is required

When a user has physical constraints

When the user's attention is focused elsewhere



Do

Experimenting with doing it differently

Map out their task flow

What decision points did the user face?

What inputs were required?

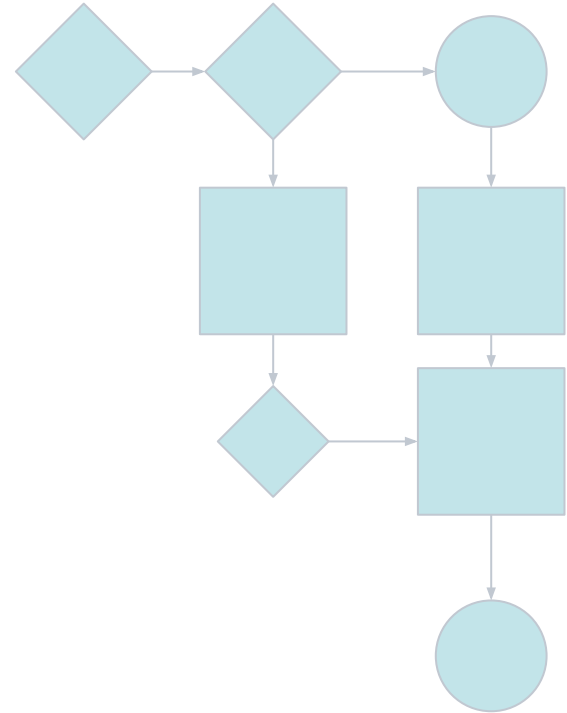
Can any of these steps be combined?

Can any steps be automated?

Were any steps unnecessary?

Where did the user face friction? (Where *should* the user face friction?)

Did any steps require specialized training?



Understand the physical environment





Check

Testing usability in the real world



Go to gemba.

Ask unbiased questions

Ask about past behavior, not future potential.

Get specific. (~~How frequently do you do this task?~~ How many times in the past few weeks have you had to do this task?)

Ask neutral questions. (~~Do you think this button gets you there?~~ What did you expect would happen when you hit that button?)

Don't assume. (~~What was frustrating there?~~ What was easy or difficult about completing that task?)

Don't name interface elements. (~~The related videos...~~ This area on the side of the screen — what is that?)

Match your language to your participant's language. (~~Sounds like the picture was helpful — why?~~ You mentioned the picture...?)

Stay open-ended. (~~Do you find this experience more useful?~~ How would you normally perform this task, without this tool?)

Follow up. Tell me more. Can you show me what that's like?

Close your eyes for 5 seconds.

Process Overview

1. Weight Inspection

2. Wire Contact Length

3. Sticker Check

4. Assembly Photo

5. Coil Resistance

View Report



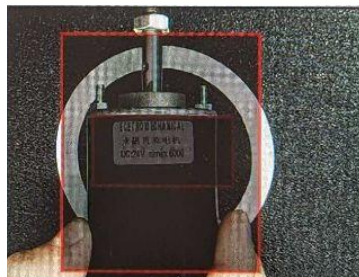
Procedure Instructions

*Take a picture of the label to confirm proper voltage using the **small capture region**:*

Detail



Camera



Analyze Photo

Assembly Information

ORDER 10006

Results

Process Overview

1. Weight Inspection

2. Wire Contact Length

3. Sticker Check

4. Assembly Photo

5. Coil Resistance

View Report



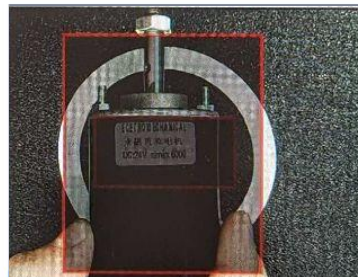
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Analyze Photo

Assembly Information

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Results

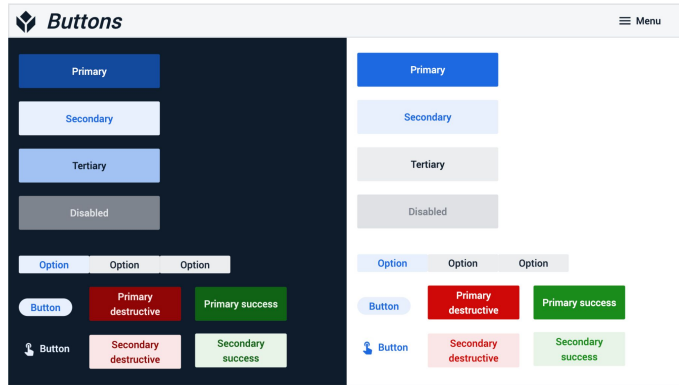


Act

Iterating, refining, and scaling over time

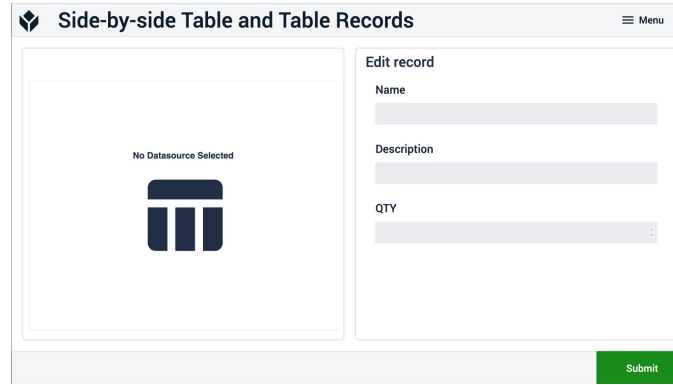
Build scalable systems

Buttons



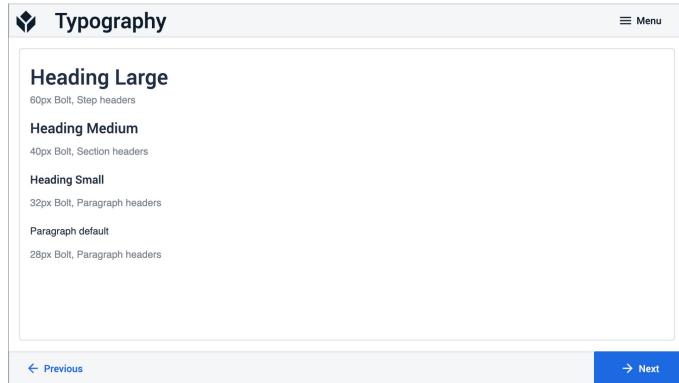
A collection of button styles and states. On the left, a dark background shows four primary buttons (Primary, Secondary, Tertiary, Disabled) and three options (Option, Option, Option). Below these are three sets of buttons: a blue 'Button', a red 'Primary destructive', and a green 'Primary success'; a blue 'Button', a red 'Secondary destructive', and a green 'Secondary success'; and a blue 'Button', a red 'Primary destructive', and a green 'Primary success'.

Side-by-side Table and Table Records



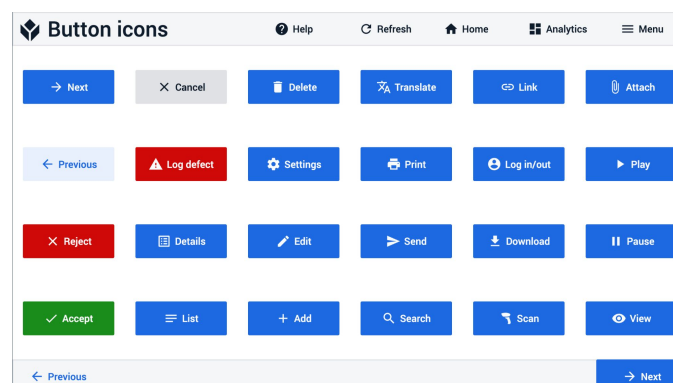
A side-by-side layout. The left panel shows a table with a 'No Datasource Selected' message and a table icon. The right panel is an 'Edit record' form with fields for 'Name', 'Description', and 'QTY'. A green 'Submit' button is at the bottom right.

Typography



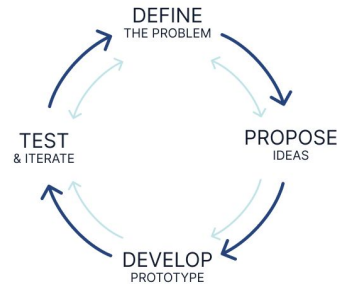
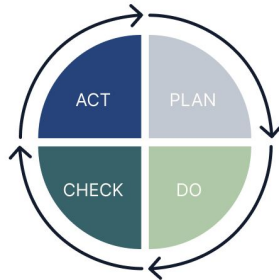
Examples of text sizes and weights. It shows 'Heading Large' (60px Bolt, Step headers), 'Heading Medium' (40px Bolt, Section headers), 'Heading Small' (32px Bolt, Paragraph headers), and 'Paragraph default' (28px Bolt, Paragraph headers). Navigation buttons for 'Previous' and 'Next' are at the bottom.

Button icons



A grid of buttons with various icons. The top navigation bar includes 'Help', 'Refresh', 'Home', 'Analytics', and 'Menu'. The grid contains buttons for: Next, Cancel, Delete, Translate, Link, Attach, Previous, Log defect, Settings, Print, Log in/out, Play, Reject, Details, Edit, Send, Download, Pause, Accept, List, Add, Search, Scan, View, and Previous/Next navigation buttons.

Processes change fast.



Design with
intention.



Questions?