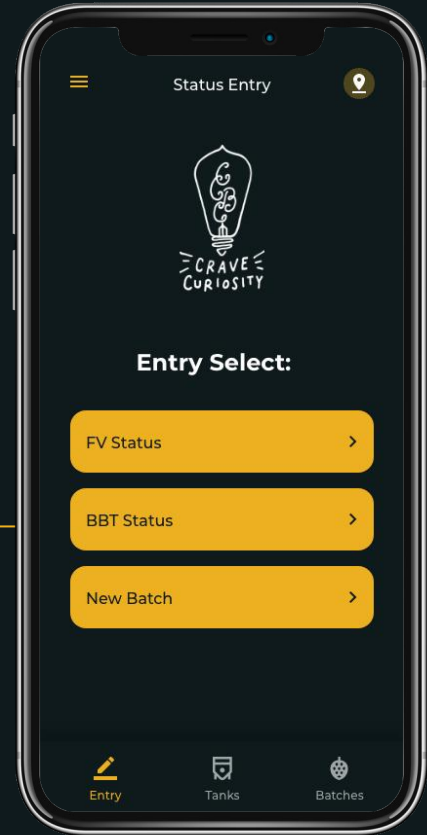


How MRX/UX Led the Way for Creature Comforts to Brew Its Own Production App



Presented By:

Jose Gil
UX Manager
Stable Kernel

Cole Nicholson
Director of Strategy
Creature Comforts

stable kernel





Jose Gil

UX Manager
Stable Kernel



Cole Nicholson

Director of Strategy
Creature Comforts

Key themes

Managing Complexities

Scaling Solutions

Small Scale Success

Key themes

Managing Complexities

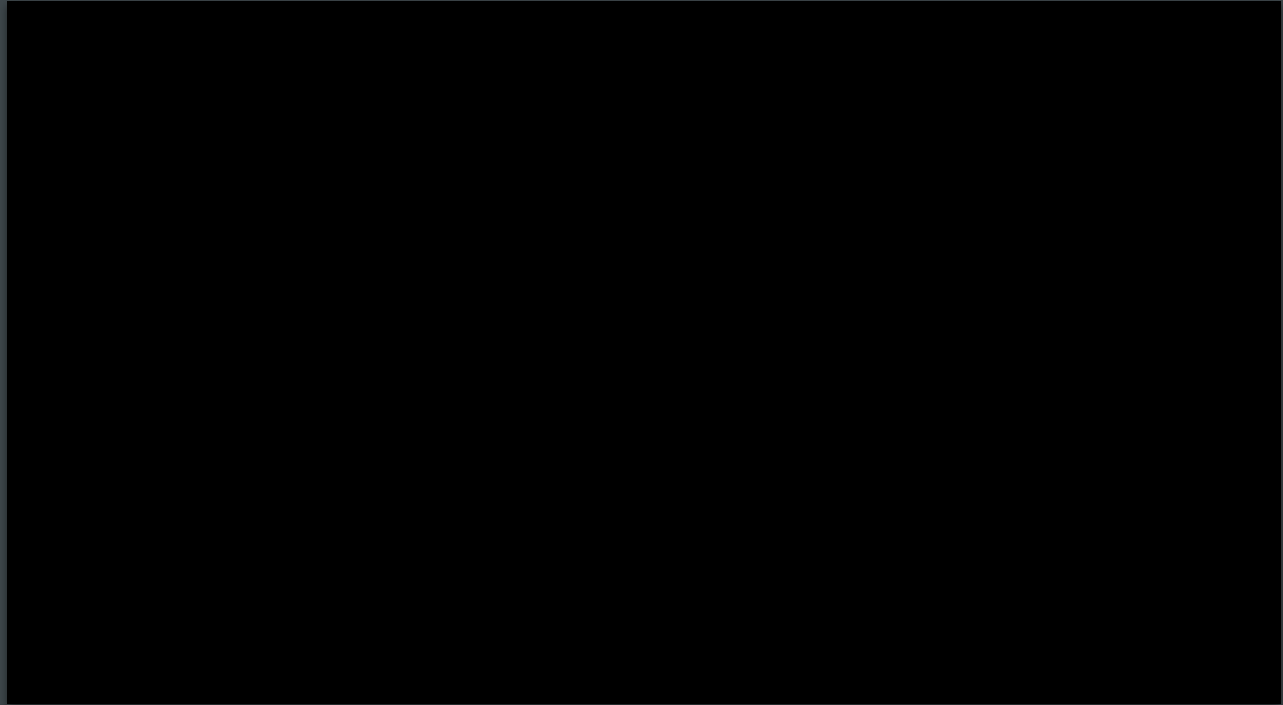
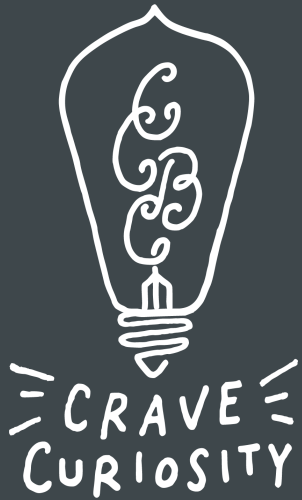
Scaling Solutions

Small Scale Success

Key themes

Managing Complexities
Scaling Solutions
Small Scale Success

What makes a great beer?



Our process of making beer



Brew



Ferment



Brite



Package

Fermentation (FV)



Brite

01

Current DO

02

Current Carb

03

QC Sensory

04

**Packaging
Run**

01 Background

The Centrifuge Story - Time to take the leap



The Problem Statement

Manual processes are unreliable and cumbersome ways to record blended data for brewing professionals because of inaccuracies in the exchange of data.

Creature Comforts & Stable Kernel



The Problem Statement

Manual processes are unreliable and cumbersome ways to record blended data for brewing professionals because of inaccuracies in the exchange of data.

Can we design an app that takes full advantage of Creature Comfort's IOT while also creating user value by increasing visibility, portability and scalability

Getting started

Have a Gymnast Mindset



Getting started

Strong
Principled
Adaptable
Creative
Teamwork



Basic design process



Basic design process



Basic design process



Dive into the data

**It's hard to know
what you don't know**

Dive into the data

Time: Filler Operator: Temperature: Foam Pulse:

Fill Heights				
Filler Head		Full can weight (g)		Fill Height (mL)
1		370.6		354.7
2		371.6		355.7
3		372.2		356.3
4		371.4		355.5
<i>Average</i>				355.6
Spec:	12oz/355mL	16oz/473.2mL	<i>StDev</i>	0.7
CCBC:	353.7 - 356.8mL	470.8-475.6mL	<i>%RSD</i>	0.2%
Legal:	348.0 - 362.0mL	463.9-482.7mL	<i>Min</i>	354.7
			<i>Max</i>	356.3

Seam Checks				
Check #	Seam (")	Pass/Fail	Seam (")	Pass/Fail
	<i>Thickness</i>		<i>Height</i>	
1				
2				

Thickness Spec: 0.041"-0.045"
 Height Spec: 0.090"-0.100"

Total Package Oxygen			
Filler Head #	Shaken DO (ug/L)	Temp. (°C)	TPO (ug/L)
1	36.6	10.0°C	74.4
2	26.3	10.0°C	51.5
3	43.7	10.0°C	83.7
4	36.4	10.0°C	71.9
<i>Average</i>			70.4
<i>Pickup/Loss</i>			55.9
<i>StDev</i>			13.6
<i>%RSD</i>			19.3%
<i>Min</i>			51.5
<i>Max</i>			83.7

Comments
 Rinse cans check. 1 and 2 before rinse, 3 and 4 during rinse. SGB.

Dive into the data

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			<i>Average</i>
			<i>Pickup/Loss</i>
			<i>StDev</i>
			<i>%RSD</i>
			<i>Min</i>
			<i>Max</i>

Comments

Fill Heights			
Filler Head		Full can weight (g)	Fill Height (mL)
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			<i>Max</i>
			356.3

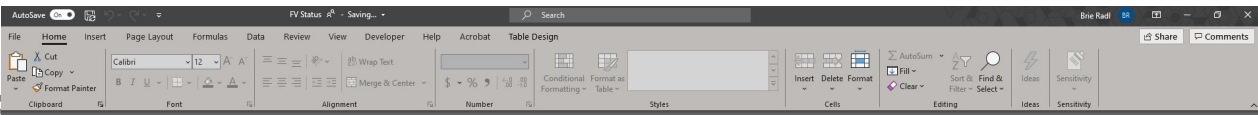
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Dive into the data



Time: Filler Operator: Temperature

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Filler Head #	Full can weight (g)	Fill Height (ml)
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2		
3		
4		
Average		

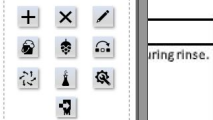
Spec:	12oz/355mL	16oz/473.2mL	StDev	
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			Max	

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Filler Head	Full can weight (g)	Fill Height (ml)
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3	372.2	35.3
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Average		35.6

Spec:	12oz/355mL	16oz/473.2mL	StDev	0.7
CCBC:	353.7 - 356.8mL	470.8-475.6mL	%RSD	0.2%
Legal:	348.0 - 362.0mL	463.9-482.7mL	Min	354.7
			Max	356.3

Task	Brand	Fill Date/Time	Batch Number	Yeast Code	Age of Batch (Days)	Volume (gallons)	Trib Status	Micro Status	VDK Analysis	Dry Hop Date	Crashed FV Analysis	Date Crashed	OG	%ABV	Ea	pH	Alcohol Date/Time	Notes/Comments	
FV08	CCL	1/3/20 28:05	CCL004	WLP833-7-2-CCL042	6	3977	Ready to Drop						10.29	4.45	1.67	4.24	1/9/20 7:48		
FV09	CCL	12/27/19 22:00	CCL043	WLP833-8-3-CCL041	13	3959	10 gal Dropped @: 12/28		Pass - 1/9/20				10.23	4.50	1.58	4.33	1/9/20 7:48		
FV10	GCJ	12/30/19 12:10	GC001	WY03787-1-1-LA8	10	1957	8 gal Dropped @: 12/31		Fail - 1/8/20				14.80	6.67	2.36	4.45	1/9/20 7:48	5 jugs (90L yeast added through FV manway during KO-JA/2A	
FV11	BBB	1/3/20 13:45	BBB036	WLP833-7-2-BBB035	6	4080	Ready to Drop			NA			11.50	5.14	1.84	4.34	1/9/20 7:48		
FV12	GCJ	1/8/20 14:50	GC002	WY03787-1-2-GB001	1	3902	Ready to Drop						14.80	3.77	9.57	4.42	1/9/20 7:48		
FV13	COS	1/8/20 18:00	COS007	WLP002-14-8-TRO213	1	1910	12 gal Dropped @: 1/9 12:54						16.99	1.81	13.68	4.48	1/9/20 7:48		
FV201																			
FV202																			
FV203																			
FV204																			
FV205																			
FV206	TRO	12/30/19 19:50	TRO212	WLP002-15-5-TRO212	10	5314	15 gal Dropped @: 1/2/21		Fail - 1/9/20				14.84	6.46	2.62	4.32	1/9/20 7:48		
FV207	APC	1/6/19 12:25	APC007	WLP002-15-5-TRO212	368	5710	10 gal Dropped						11.09	3.84	3.55	3.50	1/9/20 7:48	Length B was held in the kettle	
FV208																			
FV209																			
FV210																			
FV211	TRO	1/7/20 21:45	TRO214	WLP002-15-5-TRO212	2	5270	Ready to Drop						14.80	5.13	5.09	4.10	1/9/20 7:48		
FV212	TRO	12/27/19 15:15	TRO211	WLP002-14-6-TRO209	13	5319	10 gal Dropped @: 12/28 9:33		Pass - 1/5/20				14.68	6.40	2.88	4.31	1/6/20 7:20		
FV213	TRO	1/2/20 22:40	TRO213	WLP002-14-7-TRO211	7	10611	16 gal Dropped @: 1/3 19:15						14.70	6.17	3.19	4.32	1/9/20 7:48		
FV214	APC	12/31/19 21:05	APC006	WLP002-15-5-TRO210	9	5713	Ready to Drop			NA			11.21	4.13	2.85	3.91	1/9/20 7:48		

Date: 1/9/2020

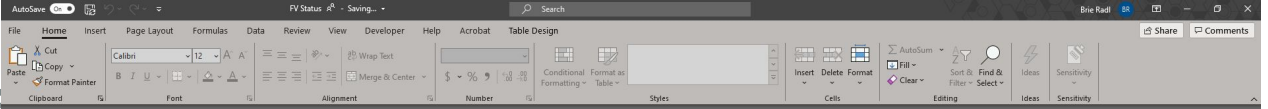


ring rinse.

Thickness Spec:	0.041"-0.045"
Height Spec:	0.090"-0.100"

3	43.7	10.0°C	83.7
4	36.4	10.0°C	71.9
Average			70.4
Pickup/Loss			55.9
StDev			13.6
%RSD			19.3%
Min			51.5
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Dive into the data

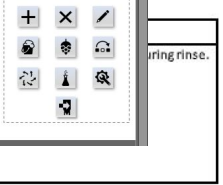


Time:	Filler Operator:	Temperatu
Fill Heights		
Filler Head #	Full can weight (g)	Fill Height (g)
1		
2		
3		
4		
Spec:	12oz/355m	
CCBC:	353.7 - 356	
Legal:	348.0 - 362	
Filler Head		
1		
2		
3		
4		
Spec:	12oz/355m	
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Legal:	348.0 - 362	

Task	Brand	Fill Date/Time	Batch Number	Yeast Code	Age of Batch (Days)	Volume (gallons)	Trib Status	Micro Status	VDK Analysis	Dry Hop Date	Crashed FV Analysis	Date Crashed	OG	% ABV	Ea	pH	Alcohol Date/Time	Notes/Comments
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FV09	CCL	12/27/19 22:00	CCL043	WLP833-8-3-CCL041	13	3939	10 gal Dropped @ 12/28		Pass - 1/9/20				10.23	4.50	1.58	4.33	1/9/20 7:48	
FV10	OG	12/20/19 12:10	6C001	WV012-2-1-1-048	10	1957	8 gal Dropped		Fail - 1/8/20				14.80	6.67	2.36	4.45	1/9/20 7:48	5 jugs (90L yeast added through FV manway during KO-JA/ZA
													11.50	5.14	1.84	4.34	1/9/20 7:48	
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													11.09	3.84	3.55	3.50	1/9/20 7:48	Length B was held in the kettle
													14.80	5.13	5.09	4.10	1/9/20 7:48	
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													14.70	6.17	5.19	4.32	1/9/20 7:48	
													11.21	4.13	2.85	3.91	1/9/20 7:48	

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	W
Tank	Brand	Fill Date/Time	Batch Number	Time Since Fill (hrs)	Contributing FV	Initial Vol. (gals)	Current Vol. (gals)	Quality Status	QC Sensory	Current Carb (v/v)	Packaging Status	Initial DO (ppb)	Current DO (ppb)	Notes	
2	BB04	BIB	1/2/20 16:55	BIB035	166.8	FV08	2191.7	2191.7	Hold			22.0	22.0	-- heat x clogged at the end of KO, had to back flush with warm water in order to finish KO-ZA -- Cent	
3	BB05						0.0	0.0							
4	BB201						0.0	0.0							
5	BB202	TRO	1/2/20 13:22	TRO209	170.4	FV207	9699.9	5707.6	Released	Pass	2.58	Keg Spec	16.0	12.5	
6	BB203						0.0	0.0							
7	BB204						0.0	0.0							
8	BB205						0.0	0.0							
9	BB206						0.0	0.0							
Date:	1/4/2020														
BBT Overwrite	<ul style="list-style-type: none"> Adam B. Chris H. Daniel L. David S. Jaime H. 														

83.7
71.9
70.4
55.9
13.6
19.3%
51.5
83.7



Discovery / Analysis

Be a tenant of your users

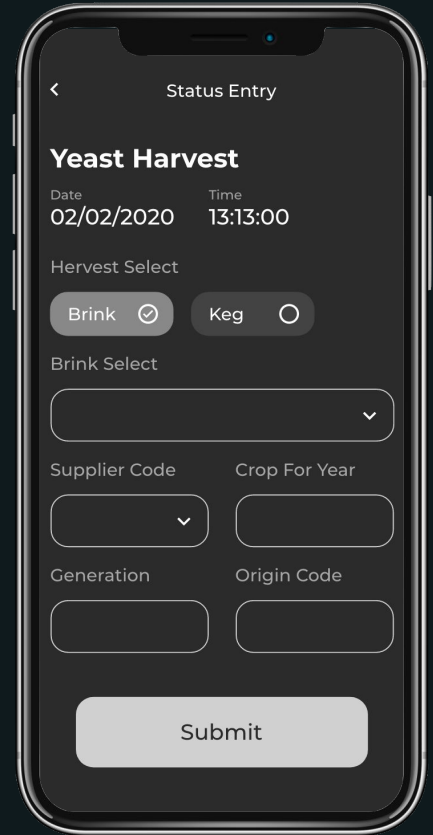
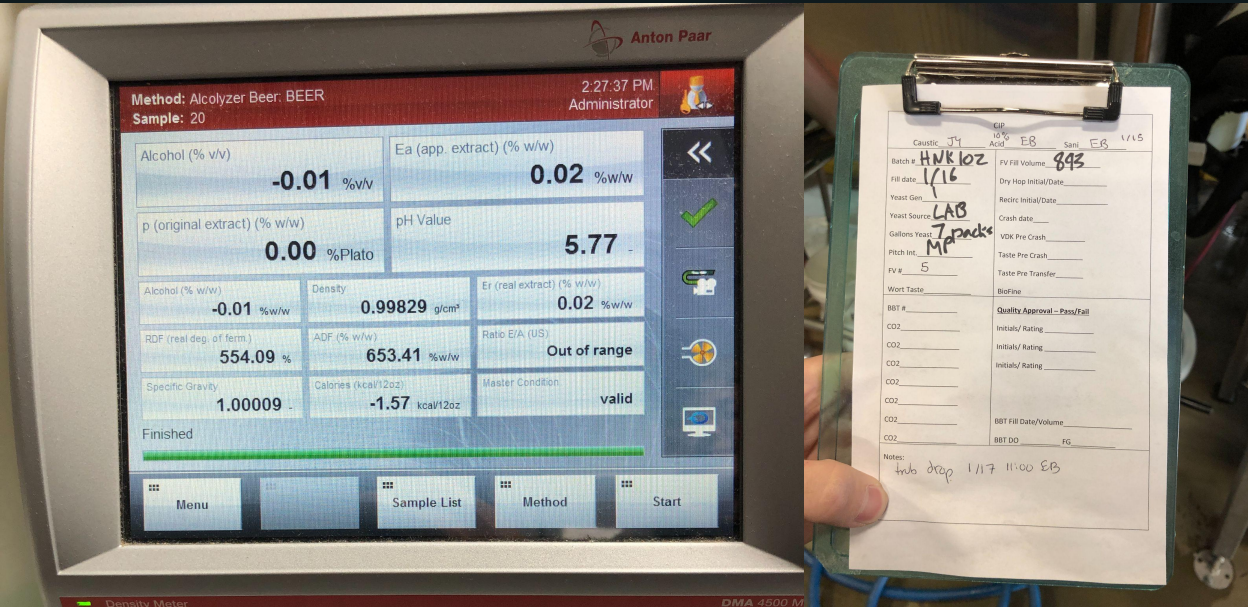
Discovery / Analysis

Stakeholder Interviews

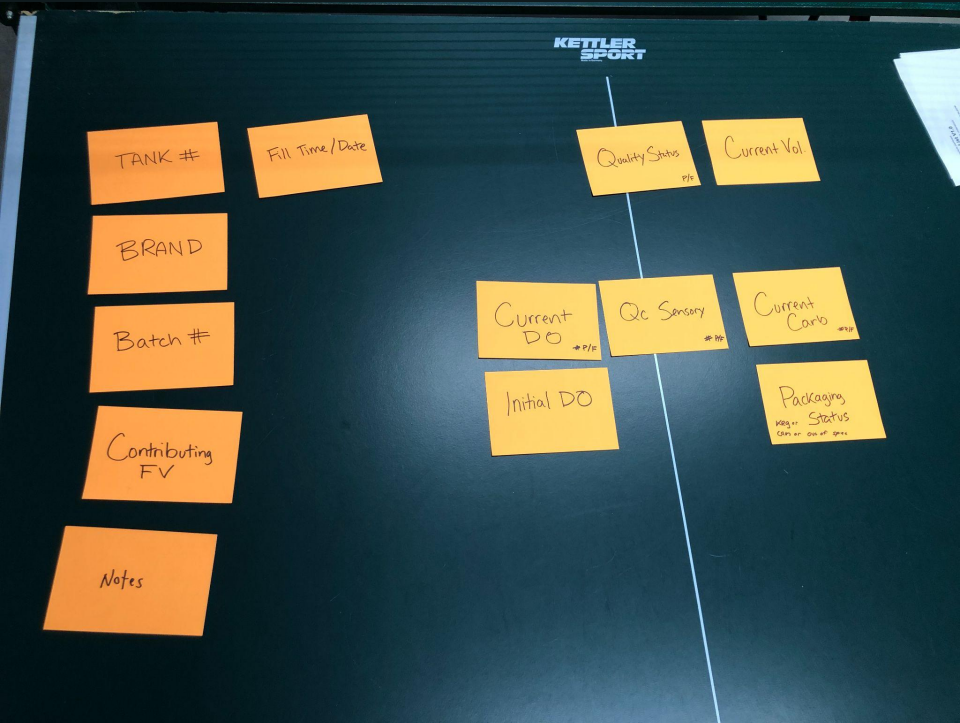
Site Visit / Contextual Inquiry

Card Sorting

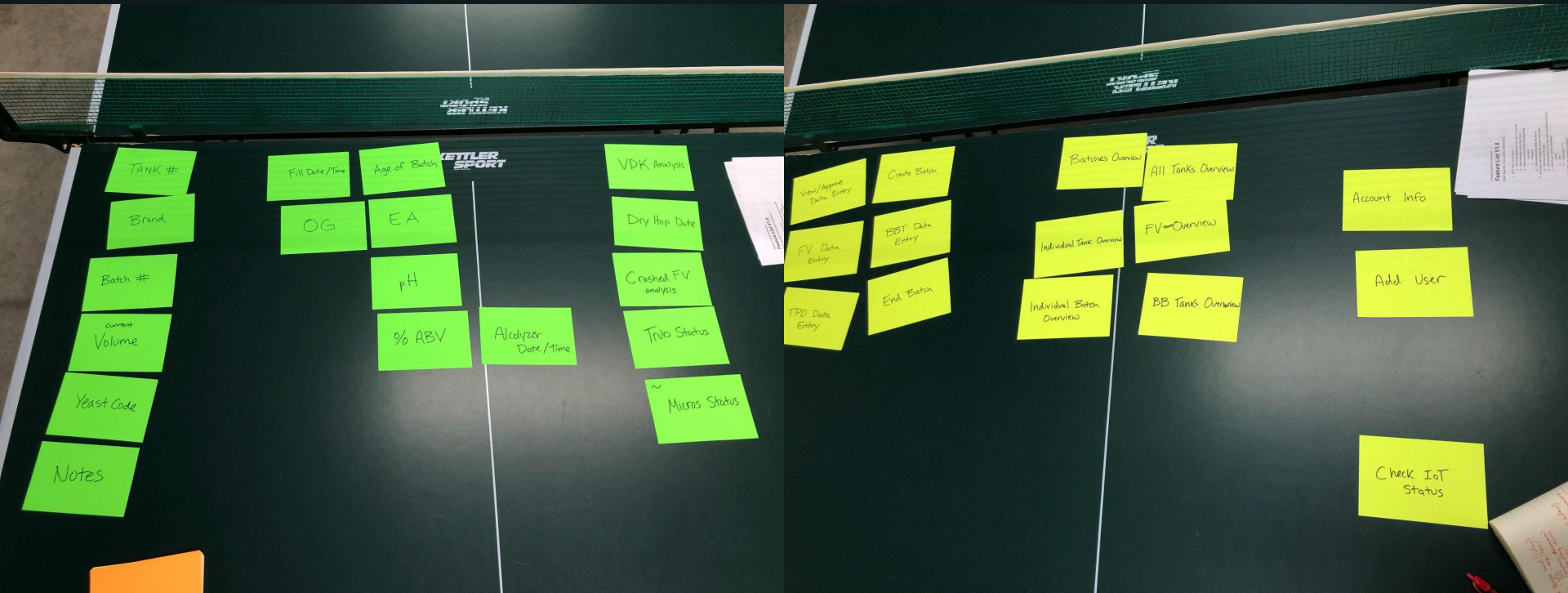
Site Visit



Card Sorting



Card Sorting



Other Processes

Information Architecture

Prototyping / Design System

Constant Communication

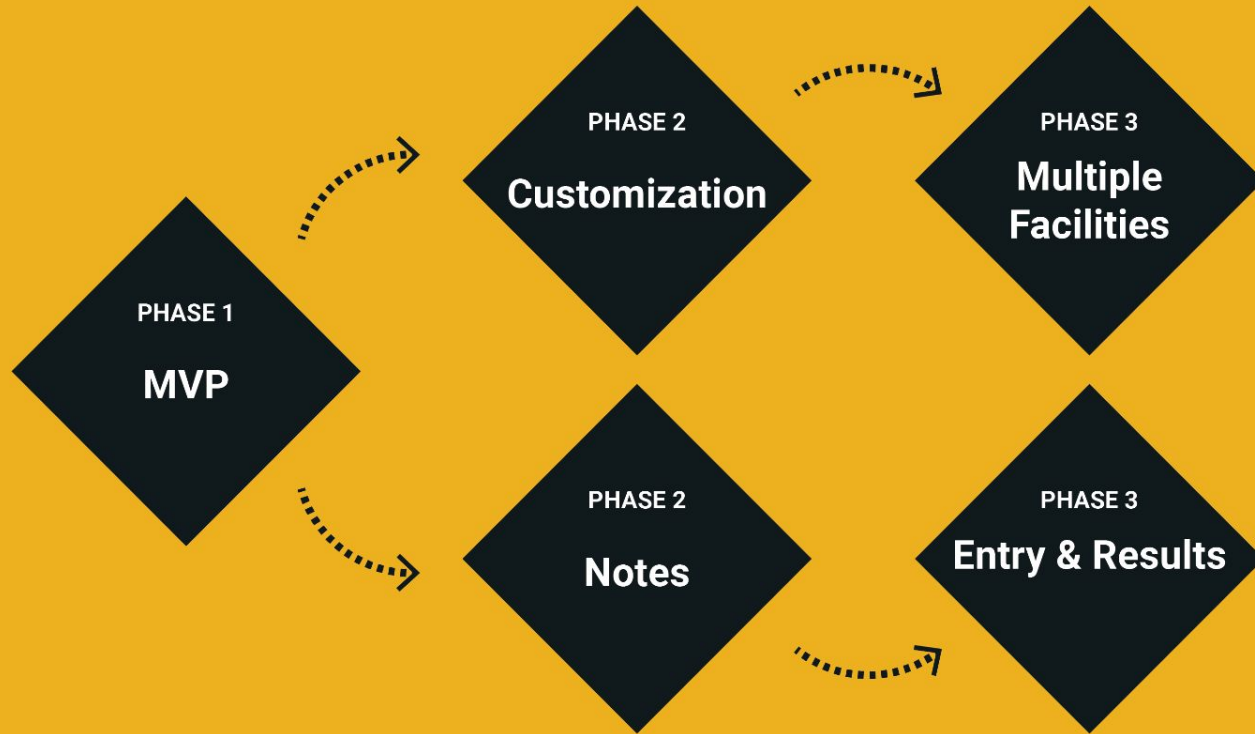
Takeaways

Make big impact through design at any scale

03 Summary



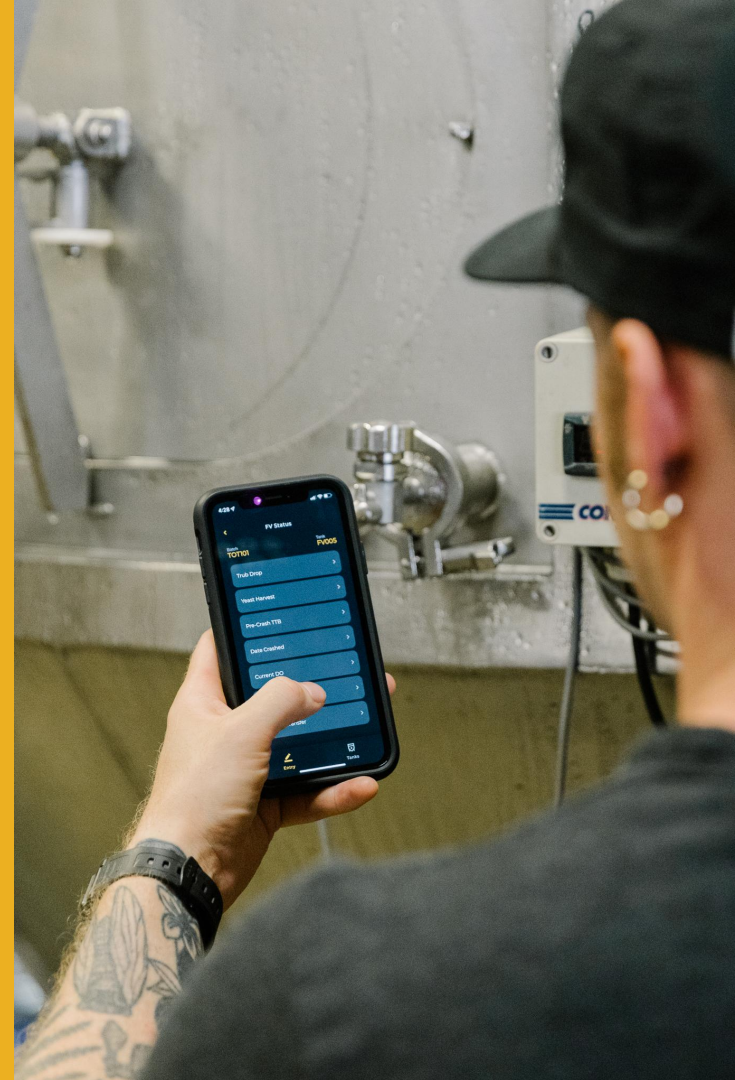
Scaling Solutions



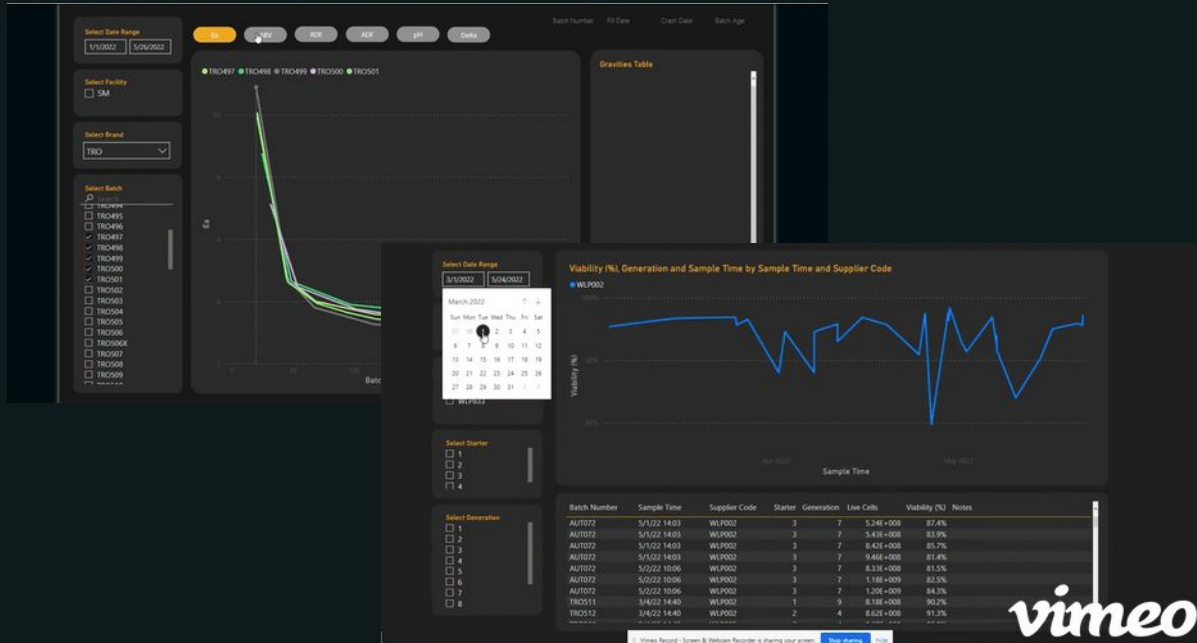
Takeaways

Modernizing the Brewing Process

03 Summary



The future of the app and Creature Comforts



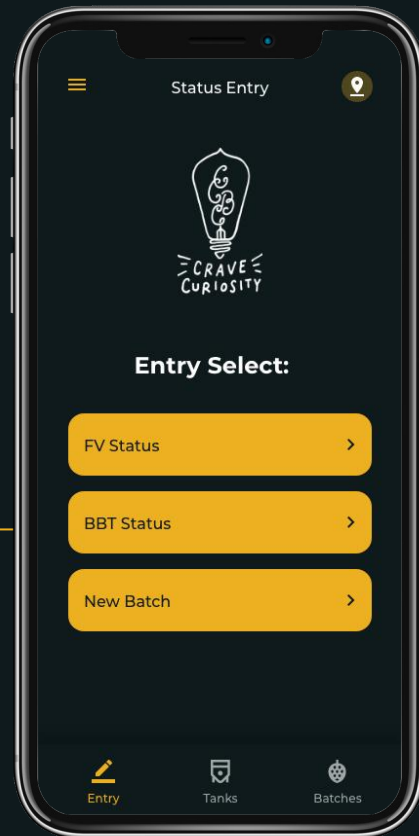
Takeaways

Small scale project success

03 Summary



Thank you!



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COMFORTS
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