

# Katarina Vorne

Design Portfolio 2022

# About Me

Context for my designs



**I point users to success**  
with intuitive interfaces that add  
value to products & brands.

**Hi, I'm Katarina,** and I am a **problem solver.**

I am constantly looking for ways to improve the world around me.

As a Junior at the University of Notre Dame studying Computer Science and Collaborative Innovation Design, I love learning new tools to create a better world through user-centered design.

I love to travel, hike, and go on adventures, drawing inspiration and creativity from my experiences.

I also love to make connections with people. I am constantly learning new things from others and love to hear different ideas and opinions. This is vital for my self-growth and developing empathy.

I am looking to work on a passionate, collaborative, multidisciplinary team that values quality products.

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Demonstration of my thoughtful and creative solutions to user needs

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Internal mock-ups used with permission from Vorne Industries.

# Milestones

Vorne Industries 2022

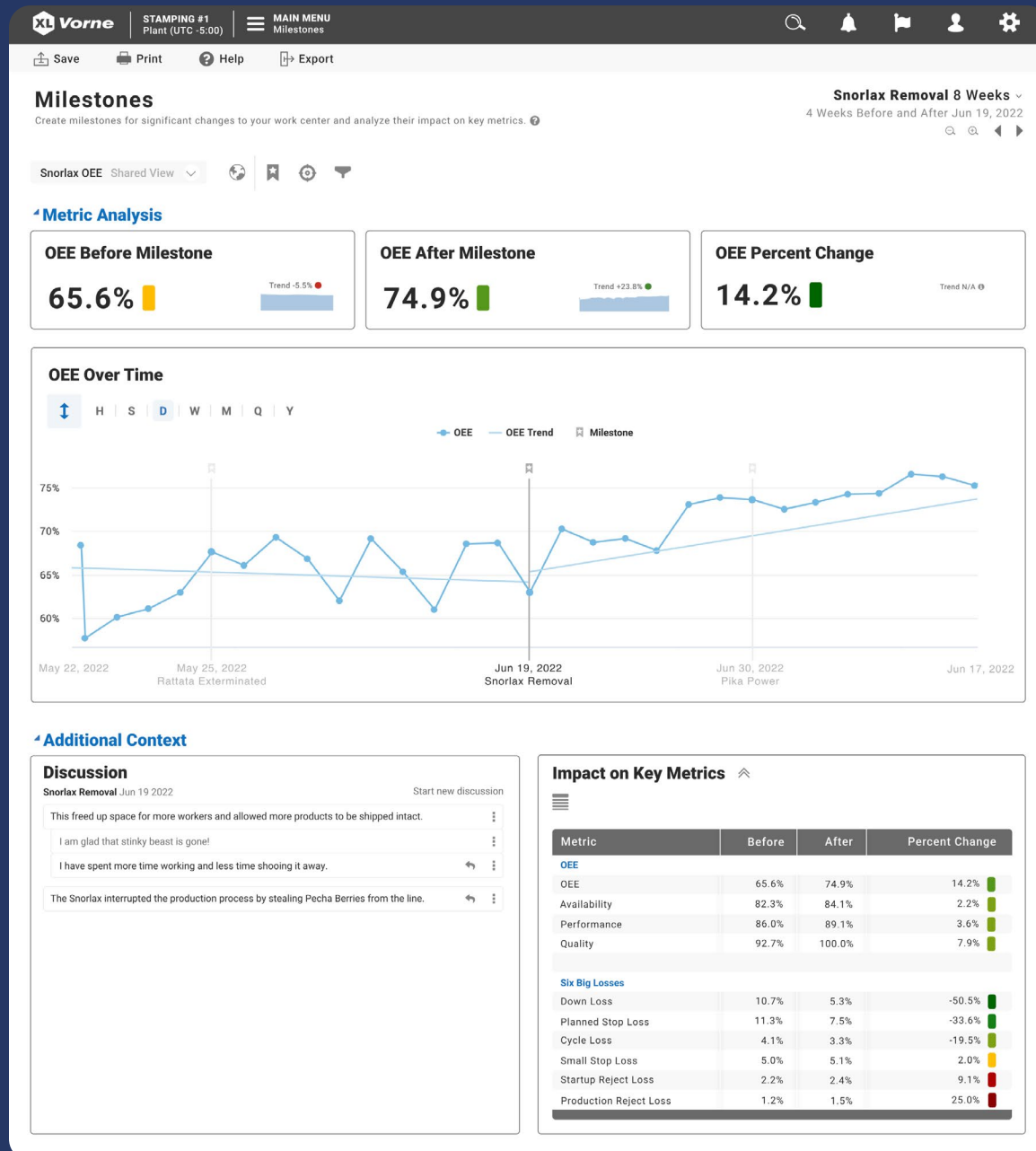
## Need

Plant managers and operators need a way to accurately measure and document the impact of changes made to their production process.

## Solution

Visualize and quantify key metrics before and after a central milestone with clear color indicators and peripheral context including other milestones in the time range, discussion about the milestone, and more metrics to explore.

# Milestones Page



## Design Challenges

- Design for broad range of global users, including those managing remotely and/or whose highest level of education is high school
- Implement a new feature consistent with functionality of the rest of the application
- Ensure data is clear, insightful, and cannot be manipulated or misleading
- Encourage exploration of different metrics
- Provide space for qualitative and contextual information about the milestone
- Balance simplicity with powerful customization

# Milestones Live Controls

The screenshot displays the 'Milestones Live Controls' interface, which is organized into several panels:

- Select Milestone:** A panel on the left with a search bar and a list of milestones. The list includes 'Mr. Mime Curse' (Jul 5, 2022), 'Pika Power' (Jun 30, 2022), 'Snorlax Removal' (May 25, 2022), 'Rattata Extermination' (May 8, 2022), 'Rattata Infestation' (Apr 15, 2022), and 'Psyduck Confusion' (Jan 8, 2022). A 'Recent History' section is also visible.
- Add Milestone:** A central panel for adding new milestones. It includes fields for 'Name' (with a placeholder 'Enter name...') and 'Date' (set to 'Jul 20, 2022'). An 'Apply' button is at the bottom.
- Edit Milestone:** A panel on the right for editing existing milestones. It shows the 'Name' as 'Snorlax Removal' and the 'Date' as 'May 25, 2022'. It includes 'Apply' and 'Delete Milestone' buttons.
- Focus Metric:** A panel on the bottom left for selecting metrics. It has a search bar and a list of metrics including 'Counts', 'Labor', 'OEE', 'Planning', 'Production Times', 'Six Big Losses', 'Rates', and 'TEEP'. A checkbox for 'Display as alphabetical list' is at the bottom.
- Filter:** A panel in the bottom center for creating filter expressions. It includes an 'Add Expression' button and a table for defining conditions. The table has columns for 'Field', 'Operator', and 'Value'. Two conditions are shown: 'Shift' = 'Select value...' and 'Part' = 'Select value...'. An 'Apply' button is at the bottom.
- Time Range:** A panel on the bottom right for setting time ranges. It shows 'Snorlax Removal 8 Weeks' and '4 Weeks Before and After Jun 19, 2022'. It includes an 'Apply' button.

## Design Challenges

- Follow conventions of existing live controls
- Design intuitive controls for both desktop and mobile
- Create default milestone “Recent History” for devices without much data or without configured milestones
- Highlight normalized metrics to ensure data is not misleading or confusing
- Make it easy to find specific milestones
- Enable precise, conditional analysis
- Clearly define the time range to be applied to the page

# Software Updates

Vorne Industries 2022

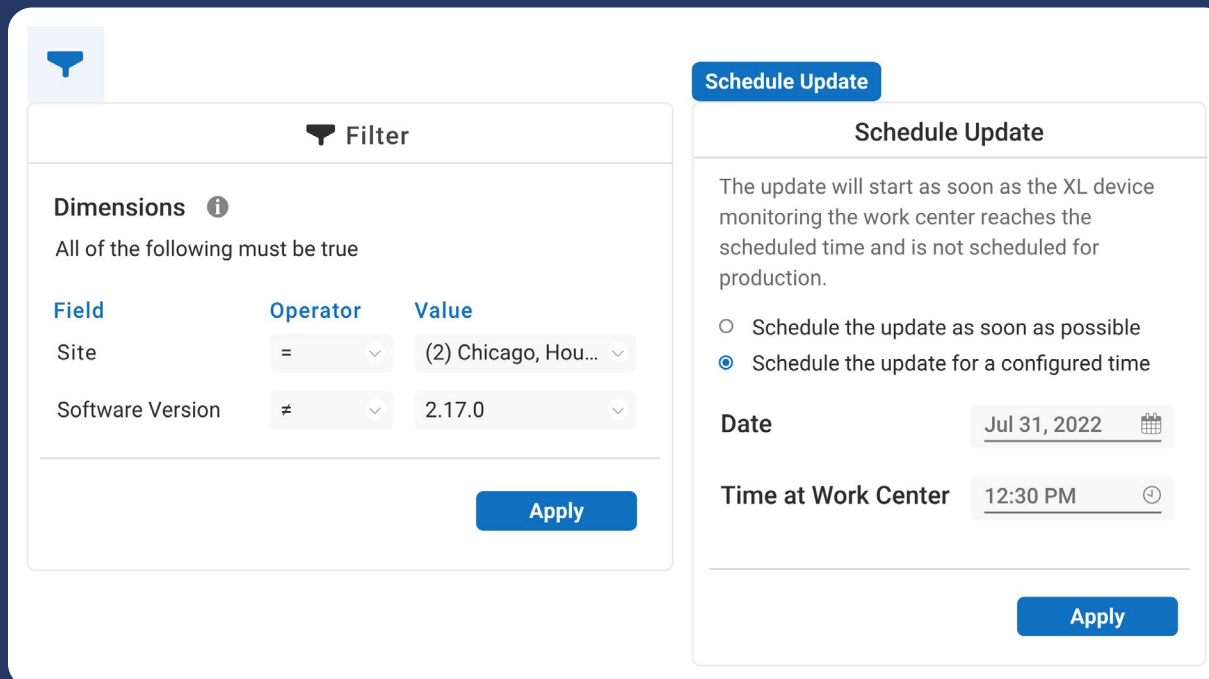
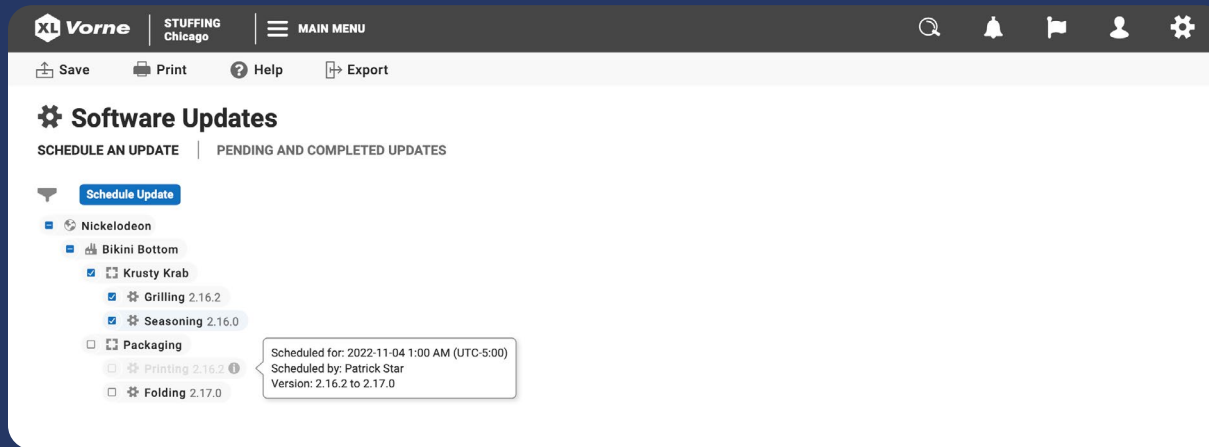
## Need

Industrial plant managers need a way to schedule software updates across many remote devices.

## Solution

Create separate pages for scheduling and managing updates with visual indication of device status and update history of each device.

# Scheduling Updates



## Design Challenges

- Allow quick, custom selection of many devices grouped by enterprise hierarchy
- Disable already scheduled or up-to-date devices
- Clarify & standardize the update time for updates scheduled across time zones
- Make it easy to filter and find work centers to update



# Managing Updates

The screenshot shows the 'Software Updates' section of the Vorne application. It includes a top navigation bar with 'Vorne', 'STUFFING Chicago', and a 'MAIN MENU'. Below the navigation bar are links for 'Save', 'Print', 'Help', and 'Export'. The main content area is titled 'Software Updates' and has two tabs: 'SCHEDULE AN UPDATE' and 'PENDING AND COMPLETED UPDATES'. The 'PENDING AND COMPLETED UPDATES' tab is active, showing two sections: 'Pending Updates' and 'Completed Updates'. Each section contains a table with columns: Status, Update Time, Work Center, Area, Site, Prior Version, New Version, and Scheduled By. The 'Pending Updates' table has three rows: 'Pending', 'In Progress', and 'Failed'. The 'Completed Updates' table has three rows: 'Failed and Canceled', 'Successful', and 'Canceled'. Each row in the 'Failed' and 'Failed and Canceled' rows has a gear icon for actions.

Status	Update Time	Work Center	Area	Site	Prior Version	New Version	Scheduled By
Pending	2022-11-04 1:00 PM (UTC+12:00)	Grilling	Krusty Krab	Bikini Bottom	2.16.2	2.17.0	SpongeBob SquarePants
In Progress	2022-08-09 1:00 PM (UTC+12:00)	Printing	Packaging	Bikini Bottom	2.16.2	2.17.0	Patrick Star
Failed	—	Seasoning	Krusty Krab	Bikini Bottom	2.16.0	—	SpongeBob SquarePants

Status	Update Time	Work Center	Area	Site	Prior Version	New Version	Scheduled By
Failed and Canceled	—	Printing	Packaging	Bikini Bottom	2.16.2	—	Patrick Star
Successful	2022-07-04 1:00 PM (UTC+12:00)	Folding	Packaging	Bikini Bottom	2.14.0	2.17.0	Patrick Star
Canceled	—	Seasoning	Krusty Krab	Bikini Bottom	2.16.0	—	SpongeBob SquarePants

A modal dialog box with a gear icon in the top left corner. It contains two buttons: 'Cancel' and 'Reschedule'.

## Design Challenges

- Separate actionable updates (pending) and historic updates (completed)
- Display vital information and indicate supplemental information with a tooltip
- Indicate who is scheduling & managing updates
- Draw attention to failed updates and cause of failure
- Create actions to modify pending updates
- Keep consistent formatting between pending and completed updates

# Configuration Views

Vorne Industries 2022

## Need

Plant managers of both small businesses and global corporations need a clear and easy way to view and apply configuration to their enterprise hierarchy.

## Solution

Design three different interactive and scalable views: Collections, Default Collections, and Work Center to make it easy to identify and change configuration in context.

# Collections & Defaults

**Vorne** | STAMPING #1 Plant (UTC -5:00) | MAIN MENU

Save Print Help Export

## Collections

This page shows where collections are manually applied. To view inherited collections, look at the [Default Collections](#) page.

Filter by collection name... <All Entities> +

Collection Name	Entity	Where Applied
<a href="#">Core Reasons</a>	Reason	Vienna Beef
<a href="#">Stamping Reasons</a>	Reason	RV-0720, EV-1005, SV-1108, KV-0531
<a href="#">Cans</a>	Part	Not used.
<a href="#">Bottles</a>	Part	Chicago - Bottling, Bottler

Areas: Chicago - Bottling  
Equipment Types: Bottler

**Vorne** | STAMPING #1 Plant (UTC -5:00) | MAIN MENU

Save Print Help

## Default Collections

ENTERPRISE | EQUIPMENT

Reason Select a site...

ACME  
Core Reasons

Boston  
No Collection

Houston  
No Collection

Stamping  
Stamping Reasons

Labelling  
No Collection

## Design Challenges

- Design view of all collections with paths to add or edit
- Categorize collections by entity for easy search and suggested application
- Filter collections by entity to compare similar applications or quickly identify collections
- Preview where collections are applied with detailed, formatted tooltip
- Create visual hierarchical model for users of how collections are being applied
- Focus user on one enterprise site at a time to emphasize inheritance and conserve vertical space
- Filter by entity or search for site

# Work Center

The screenshot shows the Vorne Work Center interface. At the top, there's a header with the Vorne logo, 'STAMPING #1 Plant (UTC -5:00)', and a 'MAIN MENU' button. Below the header is a toolbar with 'Save', 'Print', 'Help', and 'Export' buttons. The main content area is titled 'Work Center' with a subtitle 'Select the collection you would like to apply to the Work Center.' Below this is a dropdown menu for 'Labelling 1'. A table with two columns, 'Entity Name' and 'Collection', is displayed. The 'Entity Name' column has rows for 'Metric Alerts' and 'Reason'. The 'Collection' column has rows for 'Standard Alerts' and 'Line 1 Reasons'. A search dropdown is open for 'Line 1 Reasons', showing a search bar and two sections: 'Suggested Collections' (with 'Line 1 Reasons (Labelling 1)', 'Stamping reasons (Chicago - Stamping)', and 'Core Reasons (ACME)') and 'All Collections' (with 'BO-0310 Reasons', 'Bottling Reasons', and 'Press Reasons'). An 'Apply' button is at the bottom right of the dropdown.

Entity Name	Collection
Metric Alerts	Standard Alerts
Reason	Line 1 Reasons

Search dropdown for 'Line 1 Reasons':

- Type to search...
- Suggested Collections
  - Line 1 Reasons (Labelling 1)
  - Stamping reasons (Chicago - Stamping)
  - Core Reasons (ACME)
- All Collections
  - BO-0310 Reasons
  - Bottling Reasons
  - Press Reasons

Apply

## Design Challenges

- Manage configuration at the most local level of enterprise hierarchy
- Break down collection application by entity
- Suggest collections based on those applied to higher levels of the enterprise hierarchy or similar equipment
- Make it easy to search for configured collections

# Date and Time Selection

Vorne Industries 2022

## Need

Users need a great experience selecting date and time ranges.

## Solution

Use intuitive design, optimized to provide visual feedback and keep number of clicks limited.

# Date and Time Selectors

Select a date.

Wed, 10 Aug

August 2022 >

S	M	T	W	T	F	S
31	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	1	2	3	4

Select a date.

Aug, 2022

August 2022 v

May	2022
June	2020
July	2021
August	2022
September	2023
October	2024
November	2031

Select a time.

12:30 AM PM

H	M
9	27
10	28
11	29
12	30
	31
	32
	33

Select a start date.

10 Aug -

August 2022 >

S	M	T	W	T	F	S
31	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	1	2	3	4

Select an end date.

10 Aug - 24 Aug

August 2022 >

S	M	T	W	T	F	S
31	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	1	2	3	4

Select an end date.

10 Aug - 24 Aug

August 2022 >

S	M	T	W	T	F	S
31	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	1	2	3	4

## Design Challenges

- Create dropdown that is faster and easier to use than manually typing date & time information
- Optimize for recent dates, but make it easy to quickly choose distant past and future dates
- Make current selections clear to user
- Create design that can be adjusted for users with different formats for date and time (e.g remove AM/PM button and use 24 hr. time)
- Use hover or long press effects to indicate possible selections
- Distinguish designs between selecting a single date and a date range

# Typography Styles

Vorne Industries 2020

## Need

Users need a feeling of consistency throughout web application.

## Solution

Consolidated over 100 different typography styles into one typographic scale with 20 intentional, complementary, and versatile styles.

# Type Scale

VORNE INDUSTRIES  
WPI LOOKBOOK

1. TYPE SCALE    2. ICONOGRAPHY    3. COLOR    4. STATE    5. COMPONENT    6. PAGE

## 1. TYPE SCALE

The WPI Type Scale uses a modified major second (1:1.25) ratio. The font sizes are selected to present clear visual differences for larger sizes and functional differences for smaller sizes (12px is used for data and readable assist text, 11px is used for legend or secondary text, and 10px is used for in-line error/guide text).

The Roboto font is used throughout the WPI. An elegant sans serif font infused with clarity, geometry, and friendliness, its uniform stroke width conveys simplicity, modernity, and ease.

The WPI Type Scale provides a uniform matrix palette across sizes and styles. There are five styles in each type size. The most frequently used font sizes for each style are shown within a bordered box.

Heading and Subheading are used to organize content (when paired, the Subheading is usually one step smaller). Primary and Secondary are designed to work together with clear relational hierarchy even in the same size. Body text is used for paragraph text.

Styles are differentiated by weight, case, and color.

STYLE	WEIGHT	CASE	COLOR
Heading 1, 2, 3	Bold, 700px	Title	Emperor
Subheading 1, 2, 3	Bold, 700px	Title	Awesome
Heading 4, 5, 6	Medium, 500px	Title	Emperor
Subheading 4, 5, 6	Medium, 500px	Title	Awesome
Primary	Regular, 400px	Title	Emperor
Secondary	Regular, 400px	Title	Manatee
Body text	Regular, 400px	Sentence	Emperor

27px	Heading 1	Subheading 1	Primary 1	Secondary 1	Body text 1
21px	Heading 2	Subheading 2	Primary 2	Secondary 2	Body text 2
17px	Heading 3	Subheading 3	Primary 3	Secondary 3	Body text 3
14px	Heading 4	Subheading 4	Primary 4	Secondary 4	Body text 4
12px	Heading 5	Subheading 5	Primary 5	Secondary 5	Body text 5
11px	Heading 6	Subheading 6	Primary 6	Secondary 6	Body text 6
10px	Heading 7	Subheading 7	Primary 7	Secondary 7	Body text 7

## Design Challenges

- Follow existing branding
- Design a clear text hierarchy
- Identify complementary font families and colors for common textual pairings
- Clearly define use cases of different fonts to create feeling of consistency
- Make text styles meaningful by using colors and font styles to draw attention to patterns in app behavior
- Create enough variety in fonts and consider all use cases to reduce need for future addition of new styles



# Thank You

For taking the time to view my work.

## **Learn more:**

[kvorne.github.io](https://kvorne.github.io) | [linkedin.com/in/kvorne](https://linkedin.com/in/kvorne) | [github.com/kvorne](https://github.com/kvorne)

## **Contact me:**

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