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X-CONNECT

 Case Study

What

We are a global company with strong roots in the energy sector and an open strategy geared towards digitalisation, sustainability and innovation.

We use smart, simple and fast technologies to help our customers discover a new way of using energy, all over the world.

For

 businesses (B2B)

 cities (B2G)

 individuals (B2C)

Why

Our goal is to help customers transform energy into New Power to enable the creation of New Value for everyone.

We have a clear ambition: build the leading global energy as a service business.



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Main Pain Points

- ▶ Our customers need a reliable tool to connect data points accross multiple domains from financial and purchasing to cost and usage reporting.
- ▶ It is not easy for the customers to find the information they need.
- ▶ The current interface is cumbersome and difficult to use because:
 - Dated visual design
 - Heavy loading time for most pages
 - Non-intuitive page layout
 - Small font size (hard to read)
 - No help desk page
- ▶ Incomplete user flow. Overall customers can achieve their tasks on our interface but not without a third party tools (ex. Microsoft BI).
- ▶ Lacking the ability to generate custom data reports and comparison.

Goals

Design a seamless experience (modern & easy to use) that presents real-time data accross all domains of interest.



Minimal design & data per page for less cognitive load to retain focus



Fast loading experience



Intuitive navigation



Ability to self-service custom data



Improve communication & file sharing accross organization



Dynamic help area

Problems

The current system is split in two: UBM (Utility Bill Management) and Exchange (Energy Procurement). To access data, the customer needs to login on both platforms using separate logins.

The reporting tool is very heavy to load and is not showing up to date information so it can be used effectively.

In order to see more granular data and visualization, customer uses third party tools.

The customer needs to contact support team in order to build custom reports. The process is cumbersome and can take up to a week.

Customers are asking for a way to share information and reporting data across the organization.

Solutions

- Create a single sign-on / login page.

- Build a robust interface in collaboration with Engineering team that loads fast and presents real-time data.

- Allow data visualization by designing specific the features that the customer needs.

- Build a custom reporting tool that allows customers to create their own reports in minutes and not days.

- Design a live sharing capability that presents real-time data and not just exported data.

Personas & User Journey

In order to better understand our users and their day to day tasks we created a personas document.



Daily Tasks

- Contracts and supply side management
- Budget analysis & reporting
- Identifying missing bills and data.
Finding opportunities and cost effective energy procurement

Issues

- Reporting and analyzing data is difficult
- Budgets analysis is time consuming and difficult without proactive reporting
- Data discrepancies between utility bills and performance data. Matching up different data sources to compare them is a tedious process.

Team Collaboration & Constrains



Collaboration between stakeholders and product team was bumpy at times due to micro-management expectations.



Design team - Engineering collaboration was difficult at times due to different time zones. Engineers are spread on 3 continents (North America, Italy & India)



Hiring a Design agency to oversee UX was an impediment and pushed the project back several months.

Design team

The design team working on this project had 4 members.



Senior Designers

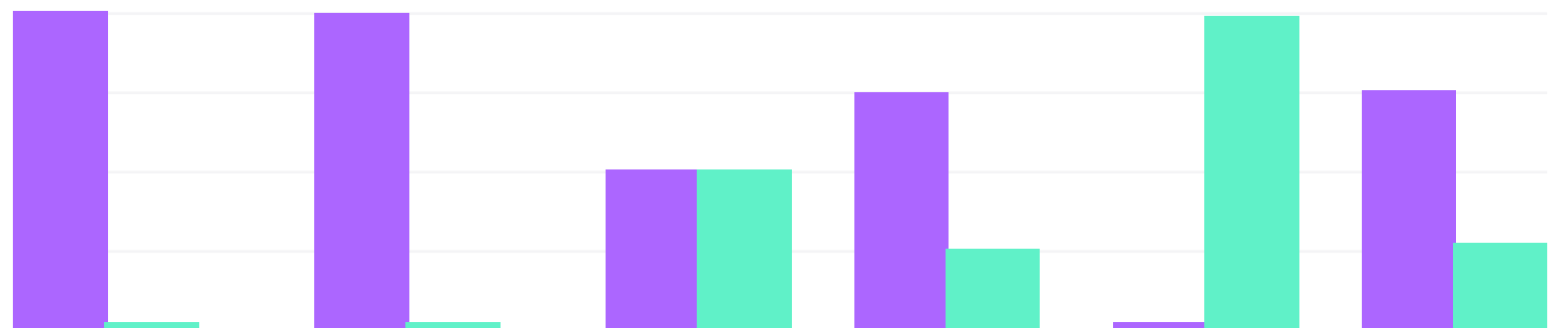
Tara
Adrian



Junior Designers

Isaac
Shelby
Kumar

Responsibilities



Heuristic analysis and competitive research

Create IA map in collaboration with PM

Personas creation

Style guide design

Icons design

Wireframes & Visual Design

Process & Outcome

The design team was charged to come up with an improved solution to the former EnerNoc interface.

document and evaluating the legacy system, the design team suggested designing a new tool that would be better suited to the customer needs.

After creating a competitive research

Adrian's work



When I first joined the project, my role was to research Enel competitors applications and also find ways to (temporary) improve the current interface for our clients.



Further work required close collaboration with PM for the creation of wireframes and prototypes to present to the stakeholders.



I was also charged to design the unique Enel NA style guide. On the style guide



While being part of the Advisory committee I worked closely with the stakeholders to achieve our product goals and on timeline. I proposed implementation of Zeplin for faster design hand-off and using Google material design as a guideline for our design system / iconography.

Project Outcome

X-Connect MVP was launched in mid 2020 and had a positive impact on our users receiving appraisals from most of our customers.

Achieved Goals

- Intuitive design with minimal cognitive load. Customers find it easy to navigate and find the information they are looking for effortlessly.
- Positive feedback on custom reporting tool and data visualization (self-service).
- An easy way to find and search help articles by implementing Intercom.

Lessons Learned

- Having regular contextual interviews with the customers helped us better understand their needs
- Involving stakeholders in the design review gave us high-level clarity of project goals

Not Achieved Goals (SD)

- Pages loading times are not as expected
- A custom in-house solution for reporting
- Improve communication & file sharing across client's organization
- Launching X-Connect on time

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Welcome, Emily ▾
☰

My Dashboard

EDIT DASHBOARD
SHARE

580 kW ▾

total enrollment target across participating sites

\$90,000 ▾

total earnings for 100 Main St. in the past 12 months

68% ▾

DR curtailment target met for 230 Cypress St.

This data is red because the associated goal has not been met.

[Manage goals](#)


SHOW ALL

Active Dispatch ⋮

The active dispatch is performing as expected at:

95.6% !

370kW
Current Reduction
400kW
Reduction Target



VIEW DISPATCH

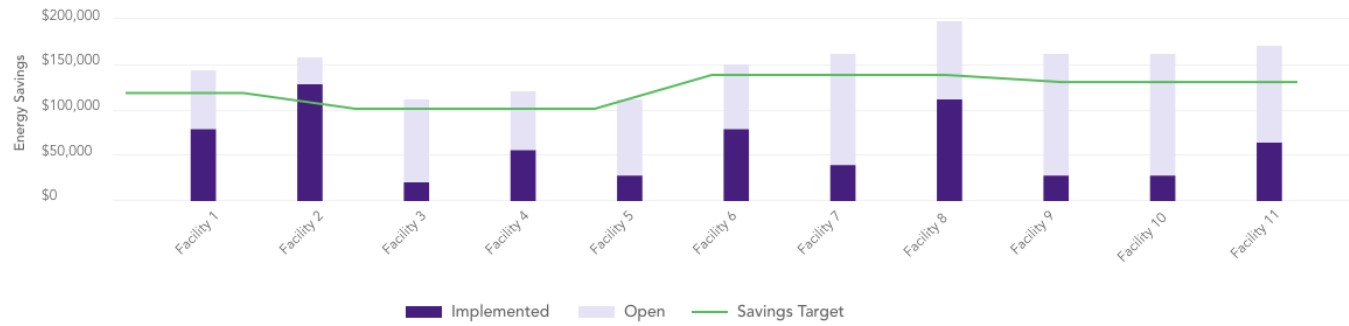
Activity Current ▾ ⋮

Demand Response
Measures
Alerts

Performance	Program Name ↓	Site	Date
28% 305 kW curtailed	Program Name 1	100 Main Street	October 1, 2018
42% 320 kW curtailed	Program Name 2	1200 Main Street	October 7, 2018
88% 320 kW curtailed	Program Name 3	500 Arbordale Street	October 19, 2018
95% 340 kW curtailed	Program Name 4	230 Cypress Street	October 28, 2018

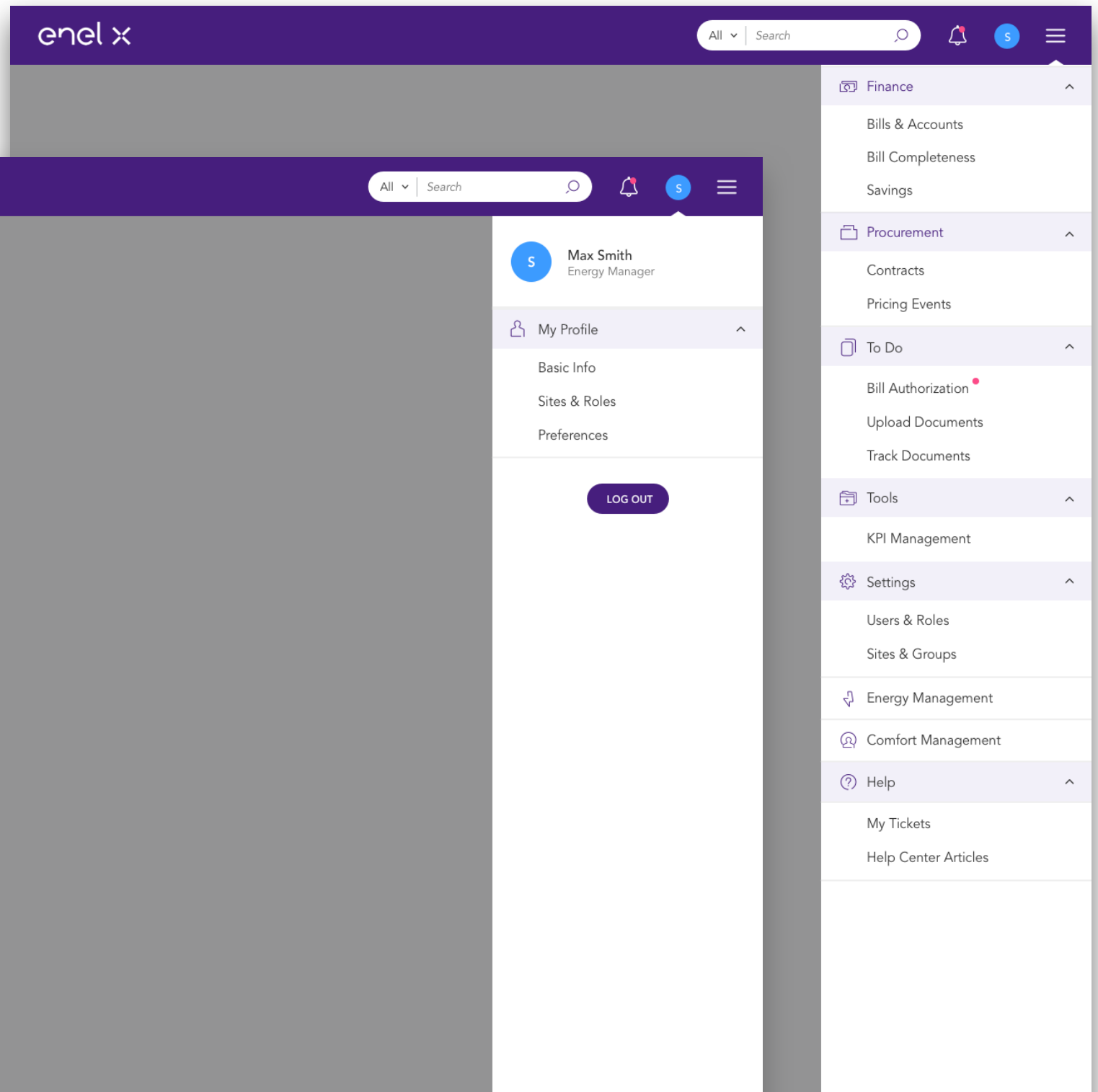
VIEW ALL ● ● ●

Compare Measures Savings Group Name 1 ▾ Past 12 Months ▾ ⋮



Implemented
 Open
 Savings Target

Navigation & User



Report Creation Steps

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All ▾ | Search 🔍

Create Report STEP 5 / 6

- ✓ Type
- ✓ Participants
- ✓ Service
- ✓ Date Range
- Metrics >

Visualization

Metrics

Currency: US Dollar - \$

Units: kW

Data columns: All

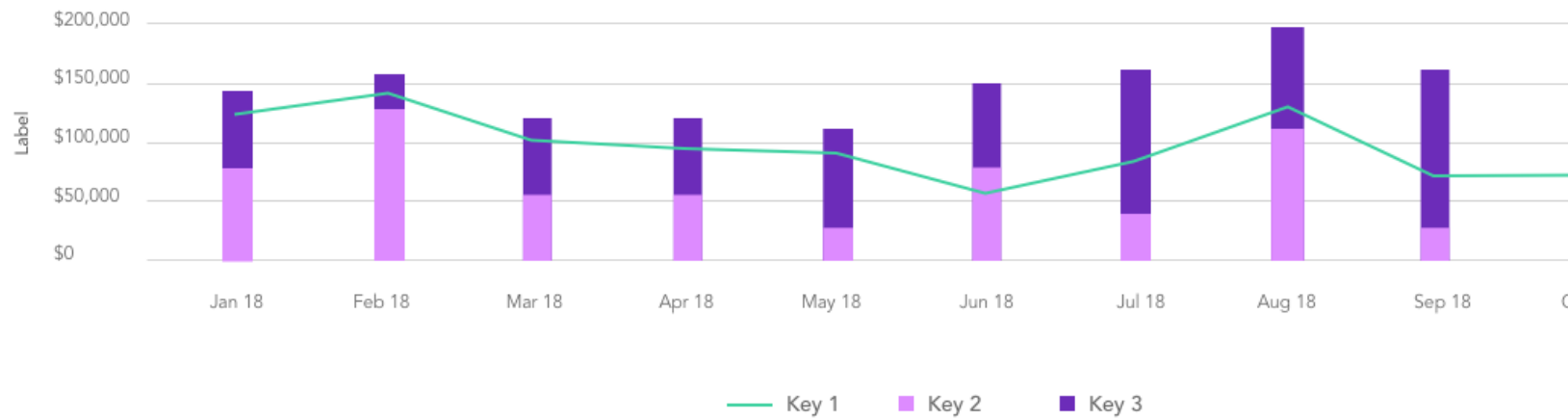
- Site Code =
- Site Name =
- Site Type =
- Site Address =
- Notes =
- Show Taxes & Fees =
- Vendor =

NEXT

Site Type	Notes
Office	-
Office	-

✓ Your report **Cost & Usage 2020** was saved to the **Main Reports** folder.

Cost & Usage 2020



<input type="checkbox"/> Site Code	Site Name	Site Type	Notes
<input type="checkbox"/> 000174	Sykesville - 228 Martz R...	Office	-
<input type="checkbox"/> 080022	Hillcrest Mall	Office	-

Report Scheduling

The screenshot shows the Enel X web interface for scheduling a report. A sidebar on the left lists report configuration steps: Type, Service, Date Range, Participants, Metrics, and Visualization. The 'Visualization' step is currently active. A 'Schedule Report' dialog box is open in the center, allowing users to add recipients, set frequency, and schedule the report.

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Create Report DONE

- ✓ Type
- ✓ Service
- ✓ Date Range
- ✓ Participants
- ✓ Metrics
- ✓ Visualization

Schedule Report

Add Recipients
Add recipient's email from left panel to the right and click schedule.

Find email address

- andrew.johnson@lockheedmartin.com
- paul.davies@lockheedmartin.com
- vsprintf@me.com
- > uqmcolyv@optonline.net
- ahuillet@att.net
- smartfart@gmail.com

- smartfart@gmail.com
- mmccool@msn.com
- bebing@yahoo.ca
- gumpish@outlook.com
- crusader@msn.com
- cliffordj@verizon.net
- ghost@hotmail.com

Set Frequency

Run report on the at

From until

[IMPORT FROM XLS](#) [CANCEL](#) [SCHEDULE](#)

enel x🔔 99+
M
Max
☰

My Sites
✕

Clear

Sites by Region Options ^

Site Names

Site Codes

Closed Sites

Closed Accounts

← Northeast Sites All

Acme Corporation ★ 20 >

Acme Corporation ☆ 4 >

Ashland Sanders ☆ 1 >

Globex Corporation ☆ 3 >

Finance

SHARE
EXPORT

Bills & Accounts Bill Completeness Savings

Date ▾
Service ▾
Vendor ▾
AP / GL Status ▾
Bill Processing Status ▾
More Filters ▾

Show results by:
 Bill
 Account
 Site

☰

Bill Date: 1/1/2019 to 11/30/2019

New Bills Only
 Cost Graph

<input type="checkbox"/>	Bill Number	Bill Date ↓	Prior Balance	Taxes	Tax Total Net	Amount	Bill Image
	000001297 ELE ^						
<input type="checkbox"/>	000174822_12	ELE Apr 1, 19	\$980.00	\$18.00	\$98.00	\$1,003.44	
<input type="checkbox"/>	000174822_10	ELE Mar 21, 19	\$250.00	\$6.00	\$43.00	\$320.00	
	000001221 ELE ^						
<input type="checkbox"/>	000174822_01	ELE Apr 1, 19	\$980.00	\$18.00	\$98.00	\$1,003.44	
<input type="checkbox"/>	000174822_02	ELE Mar 21, 19	\$250.00	\$6.00	\$43.00	\$320.00	
<input type="checkbox"/>	000174822_03	ELE Apr 5, 19	\$980.00	\$18.00	\$98.00	\$1,003.44	
	000005484 MULTI ^						
<input type="checkbox"/>	000174822_27	NAT Mar 21, 19	\$980.00	\$18.00	\$98.00	\$1,003.44	
<input type="checkbox"/>	000174822_27	ELE Mar 21, 19	\$250.00	\$6.00	\$43.00	\$320.00	
	000011987 MULTI ^						
<input type="checkbox"/>	000174822_88	GAO Apr 1, 19	\$980.00	\$18.00	\$98.00	\$1,003.44	
<input type="checkbox"/>	000174822_15	ELE Mar 21, 19	\$250.00	\$6.00	\$43.00	\$320.00	
<input type="checkbox"/>	000174822_33	NAT Apr 5, 19	\$980.00	\$18.00	\$98.00	\$1,003.44	
<input type="checkbox"/>	000174822_33	WAT Apr 5, 19	\$980.00	\$18.00	\$98.00	\$1,003.44	
	000005484 MULTI ^						
<input type="checkbox"/>	000174811_10	NAT Apr 1, 19	\$980.00	\$18.00	\$98.00	\$1,003.44	
<input type="checkbox"/>	000174811_10	ELE Apr 1, 19	\$250.00	\$6.00	\$43.00	\$320.00	