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Customizing Salesforce services at Renewable Energy Group

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Creative Component

Customizing Salesforce Services at Renewable Energy Group

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Mina Taheri Spring 2019



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Introduction of Renewable Energy Group

Following is how Renewable Energy Group introduces itself on its website: "Renewable Energy Group, Inc. (Nasdaq: REGI) is a leading provider of cleaner, lower carbon intensity products and services. We are an international producer of biomass-based diesel, a developer of renewable chemicals and North America's largest producer of advanced biofuel. REG utilizes an integrated procurement, distribution, and logistics network to convert natural fats, oils, greases, and sugars into lower carbon intensity products. With 14 active biorefineries, a feedstock processing facility, research and development capabilities and a diverse and growing intellectual property portfolio, REG is committed to being a long-term leader in bio-based fuel and chemicals."*

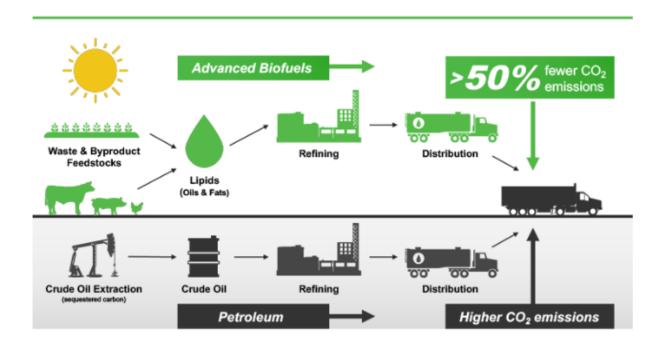


Figure 1 Biofuel

^{*} https://regi.com/



REG started its business around two decades ago under the umbrella of West Central Cooperative in Ralston. REG sells the products through an international distribution and logistics system. REG is active in the biodiesel, energy, and agriculture sectors. REG started from a single biodiesel production facility in 1996 into a biomass-based and renewable chemicals company.



Figure 2 REG History

REG articulates its mission on its website as: "Worldwide energy consumption continues to increase rapidly. At the same time, efforts to decarbonize our environment are growing and sustainability is now a priority for many corporations, government agencies, and consumers around the globe."



The line of Products

REG-900 Biodiesel

There is a wide range of benefits that come with REG-900 Biodiesel including economic advantages, energy security and diversity, cooler and quieter engines, and reduced lifecycle greenhouse gas emission.

REG-9000 Distilled Biodiesel

Distilled Biodiesel is the purest type of biodiesel with advanced cold-flow properties which makes it a superior choice for reliable performance even in cooler temperatures.

Therefore, Distilled Biodiesel eliminates the need to switch to lower cloud point biodiesel even in cold weather, could be easily blended with petroleum, and reduce the potential for filter plugging.

REG Renewable Hydrocarbon Diesel (RHD)

Hydrocarbon Diesel is an advanced biofuel that reduces greenhouse gas emissions and can be added to the existing pipeline system. This is a 100 percent hydrocarbon and like petroleum diesel is compatible with any diesel engine without modifications. This product allows for easier starting and smoother engines so that operation will be more reliable. Also, this fuel is qualified for several states and federal biofuel tax incentives.

Biodiesel Blended Fuel:

REG blends fuels from B2 to B20 and offers it from terminals around the country.



Bioheat ® Blended Fuel

Bioheat is a reliable, superior-quality fuel that offers a clean, efficient alternative to traditional heating oil. It burns more completely and efficiently, enhances and extends heating equipment life so that reduces maintenance requirements.

REG Glycerin

REG produces an advanced purification process to ensure impurities removal and careful product testing. Automated process controls glycerin quality and several sales options are available for customers.

Additional REG products are Bimesters, Renewable naphtha, Renewable LPG, Methyl Esters, and Oleo lipids.



Salesforce

Salesforce is the number one customer relationship management platform. Salesforce helps companies to manage the information better and also interact with customers more effectively. Salesforce makes the data available from a desktop or other devices. Therefore, Salesforce is an industry standard for CRM solutions while many believe it's the best CRM software overall. Salesforce has nearly 20 percent of market share in industry and in general is speedy, powerful, and highly customizable.

Salesforce was built to meet the needs of enterprises and large businesses at first but then expanded its scope with streamlined options that were easier and more affordable to run. Scalability of Salesforce makes it an excellent choice for companies that quickly are expanding. Salesforce offers industry-specific add-ons with a separate section for small business specific add-ons. These small business add-ons are free in most cases.

Salesforce offers excellent admin controls, various permission setup, and different displays and workflows.

Salesforce Strengths

Salesforce offers many optional features like a comprehensive business ecosystem, easy impact process, popular integrations, and trailblazer community. Businesses can grow along with Salesforce and adopt new features when it is needed. Importing data is one of the other things that is very easy in salesforce. Popular integration of salesforce comes from its widespread use which translates to lots of easy integration.



In addition to above advantages, Salesforce trailblazer community is a valuable asset including step by step guideline on almost everything. Finally, one of the greatest strengths of salesforce is its user-friendly features. Salesforce provides management features in an easy way to everyone so that any user without programming background could manage the system and prepare analytical reports and charts. This user-friendly capability alongside with trailblazer community makes it possible for everyone to use Salesforce. Number of experts who are using Salesforce makes a massive community of experts and evangelists available to help customer organizations.





The project at REG:

The project had different phases including:

1) importing the chemicals data into the salesforce,

me a general understanding of Salesforce capabilities.

- 2) implementing the chemicals process into the salesforce,
- 3) analyzing data and making dashboards/reports/charts for managers and traders

 I was not familiar with salesforce beforehand, so the preparation phase was self-training
 on the salesforce and participating in some courses on Trailhead. These courses gave

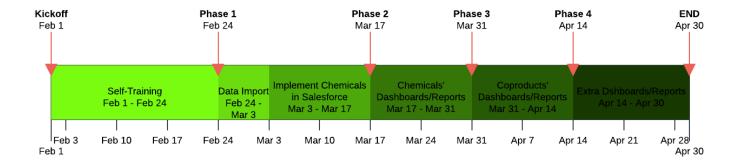


Figure 4 Timeline





- Self-training
- Understanding the Chemicals' process

- Importing data to salesforce
- Creating a new record type for Chemicals
- Adjusting the page layout and fields
- Revising Price Formula to include Chemicals' productus
- Setting new workflow for sending email alerts

Implemetation

- Playing with reports and dashboard to learn about their capabilities
- Playing with REG data on salesforce to learn about REG specific fields
- Data analysis and pulling out related reports for managers
- Making dashboards for managers

Data Analysis



Preparation:

I started self-training with sign up on the Trailhead. As I mentioned before in introduction to Salesforce, Trailhead is a platform for Salesforce customers to learn about software and ask their questions. Numbers of experts around the world share their experiences there or take online courses. The following table shows the online courses I took on Trailhead.

1	Learn CRM Fundamentals for Lightning Experience
2	Learn Admin Essentials in Lightning Experience
3	Get Started with Lightning Experience
4	Admin Beginner
5	Build Platform Apps in Lightning Experience
6	Automate Your Business Processes With Lightning Flow
7	Admin Advanced
8	Manage your Salesforce Data and External Data
9	Admin Intermediate

Figure 5Trailhead Courses

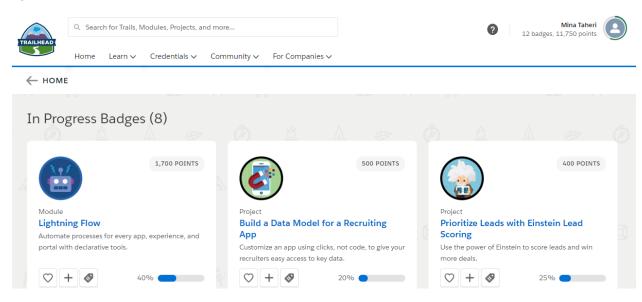


Figure 6Trailhead



Chemicals Implementation

One of the major goals of the project was getting Chemicals' processes into salesforce.

REG wanted to use Salesforce for managing the purchase of Chemicals. At the time,

REG used Excel to manage Chemicals' purchases.

First, I tried to understand the process of purchasing chemicals, then looked at the other business processes in Salesforce (Feedstock and Coproduct in particular) and then created a new "record type". The following picture shows Chemicals' Record Type that is now available when a user wants to create a new record type.

Select a record type 3rd Party Chemical Purchase1 Europe Purchases ITC Purchases Procurement Procurement Price Quote Cancel Next

Figure 7Added Chemicals Record Type





Figure 8 Chemicals Record Type-Setup

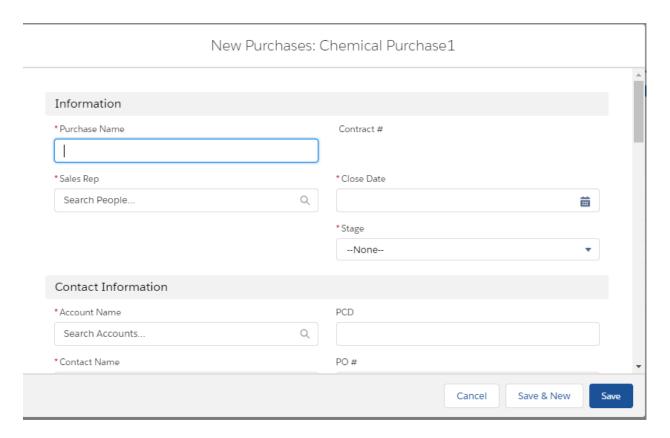


Figure 9 New Purchase Form



After creating a new record type for Chemicals, then I modified and changed a new layout to assign to my new record type.

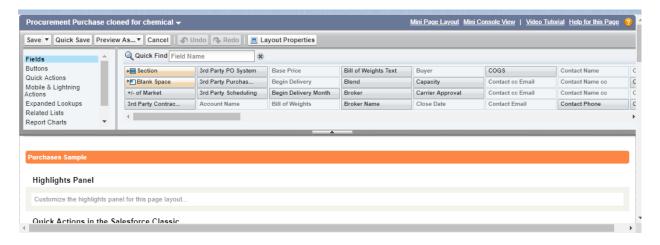


Figure 10 Chemicals layout

As part of creating a new layout, I tried to find out what and how many fields should be added as well as what fields should be modified. For example, the "product" field modified to include Chemicals' products. Also, "price" field updated with a new formula. Calculating new total price was a complicated process because was dependent on manager's inputs.



The following picture shows the "Total Delivered Price" field, but I deleted the formula because of confidentiality.

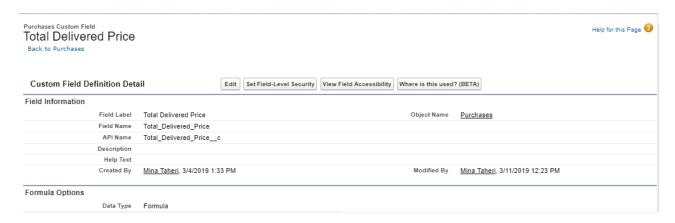


Figure 11 Total Delivered Price- A Field Example

In general, in Salesforce we can control user's inputs or relationship between fields using the validation rules. I used a couple of 'validation rules' on salesforce to force user to input necessary info. As an example, I didn't want to let a user keeps some specific fields empty since those fields were part of Price calculations. In this case, validation rules helped me to don't let user save a new purchase without filling necessary fields.

Following example shows a validation rule which doesn't let the user keep a specific field empty when the product is KM32.





Figure 12 Validation Rule

Next step was setting email alert for a new purchase in a way that when a user submits a new purchase, an automatic email sends to specific recipients.

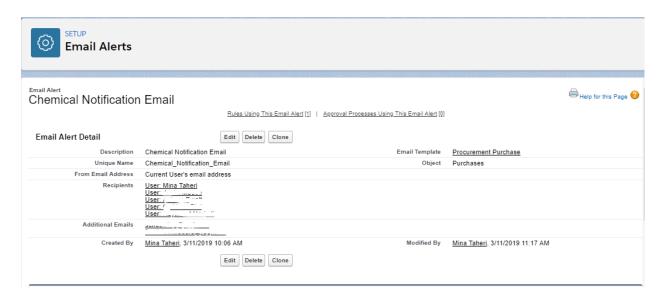


Figure 13 Email Alert



I designed an email template and assigned it to the email alert since we wanted a specific email template to be sent out. Then, a workflow rule was assigned to that email template. This workflow rule checked a few conditions before sending the email.

Conditions include if the purchased status is 'closed/won' and if the type of purchase is 'chemicals'. Also, this rule checked the "do not send email" condition to be false before sending an email.

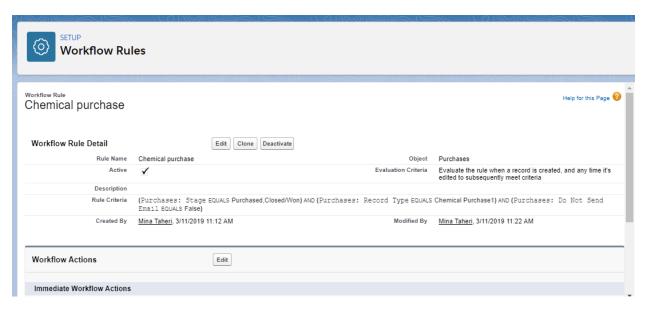


Figure 14 Workflow Rule

Analyzing Data

A big part of the project was analyzing the data and preparing related reports and dashboards for senior managers. I worked on preparing the dashboards and reports for two parts of the procurement department: Coproducts and Chemicals.

Salesforce provides various report types like tabular, summary, and matrix. Also, Salesforce provides various features to customize a report like 'summary formula', 'filters', 'review pan', and 'grouping data'.

The following picture shows a couple of reports that were made for the project. Each of these reports could be shown as a chart on a dashboard. Each chart could be in various formats like bar, line, and etc.



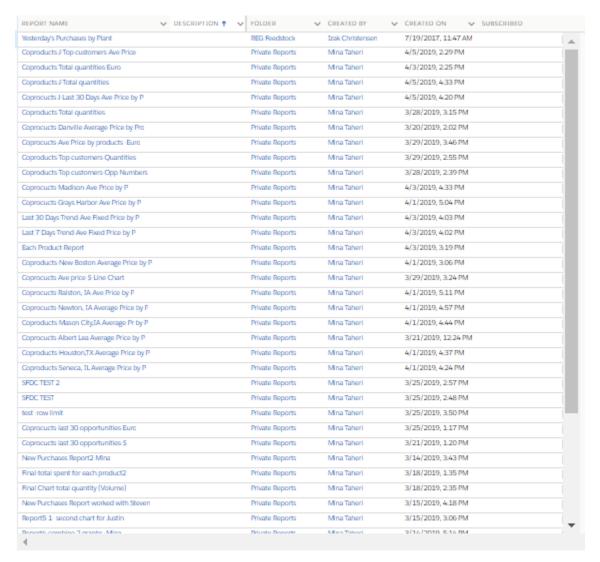


Figure 15 A Snapshot of My Reports on Salesforce

Since these charts and reports were made on sales data, I deleted numbers, titles, and categories in respect to confidentiality of REG data. In the following, I bring just a few charts as an example to show how I prepared charts and reports on sales and purchase data.

In the following picture, you can see the average amount of a specific field on various products. Salesforce gives the option of filtering date based on a relative date like



"LAST 30 DAYS". We also can filter the date based on specific predefined ranges like "Current fiscal year". Using custom dates are also available.

I created the following charts to show the average amount of specific fields by products started from Jan 2018.

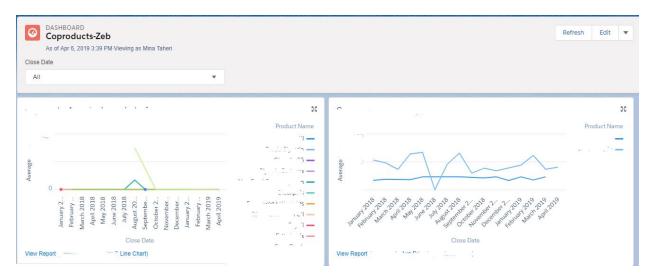


Figure 16 Chart-Average by Products

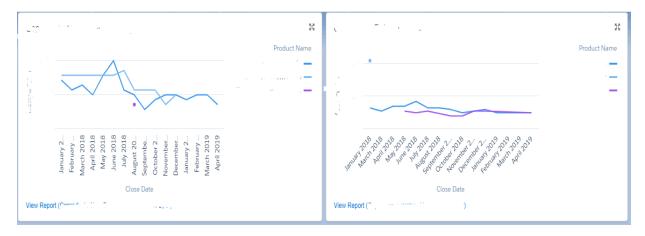


Figure 17vChart-Average by Products2



The following picture shows the filter option on a report. We can add several filters and then add a conditional rule for filters. For example, we can set a rule like 'Filter1 AND (Filter2 OR Filter3)'.

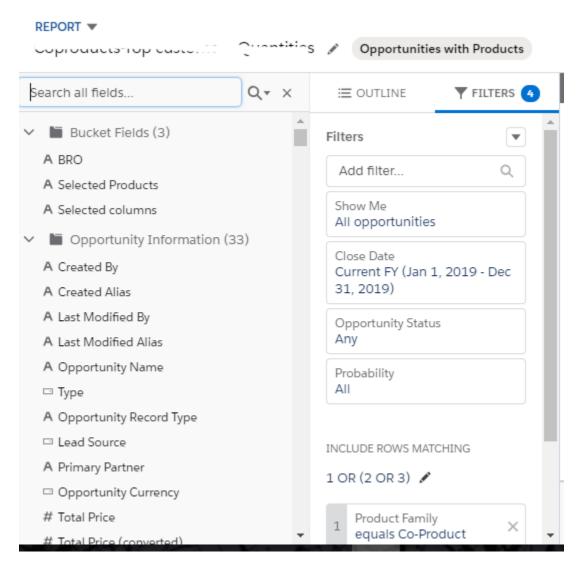


Figure 18 Filter Option on Reports



Following chart shows another type of chart that I used to show top customers. Account Name represents the customer and this chart shows total number of contracts with each customer.

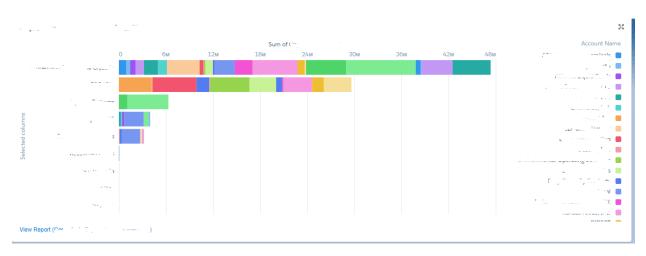


Figure 19 Chart- Total Number of Contracts with Each Customer

Salesforce provides different types of reports, so I played with data and categorized it in various ways to see which one gives me a better insight. Reports could be tabular, matrix or summary. I used different reports for different charts. For example, the next report is a matrix report which shows data in a matrix of customers and products. Each cell represents total quantities that were purchased from each customer.



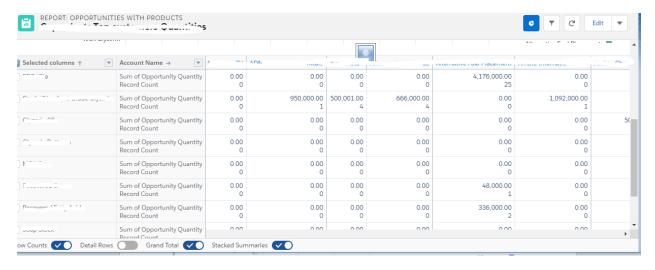


Figure 20 Matrix Report

The following chart was challenging since I wanted the sum and average of two different fields to be shown on just one chart. Salesforce is limited in terms of showing two different values just in one chart. I tried several different ways to be able to get this chart.

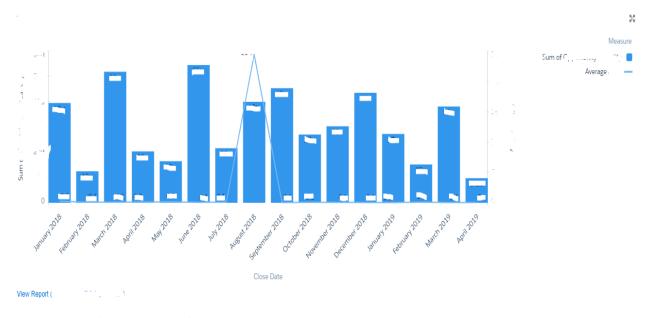


Figure 21 Sum and Average in One Chart



It took me a while to find out how to show a second value on a chart and plot it on a second Axis. Sum and average of two different values are plotted on the Y axis to get the above chart.



Figure 22 Chart Setting on Reports

Following chart again is another example of showing two different values at the same time on one chart while values are in different types (Line and Bar).

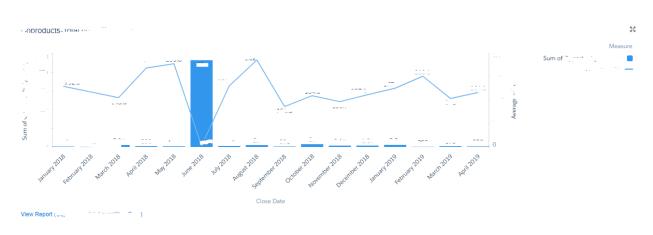


Figure 23 Chart- Line and Bar Charts Together



The next chart shows the average of a specific field for different products while having a 30 last days filter on data.



Figure 24 Chart- Average by Products-30 Last Days Filter

The next one is another example as a bar chart type.



Figure 25 Chart- Bar Type



One of the other interesting features of Salesforce report is Bucketing! As you can see in the following picture, I bucketed two different products BRO and Ole and then got the report on them as one category. This feature lets to merge different items and then get the report on new categories.



Figure 26Chart- Bucketing Example

Following picture shows how we can bucket different values in a report.

Field	* Bucket Name		
Created By X			
All Values ()	Search Values		Q
Unbucketed Values ()	VALUE	BUCKET	
		: :	
Bucket remaining values as Other			,
Add Bucket	Move To ▼ Enter Value	s	

Figure 27Bucketing Option

In many reports, I used 'add summary formula' feature to apply my formula on the data and get a new value in my reports. For example, I added the weighted average formula in reports to get the average. The following picture shows how 'add summary formula' feature works.



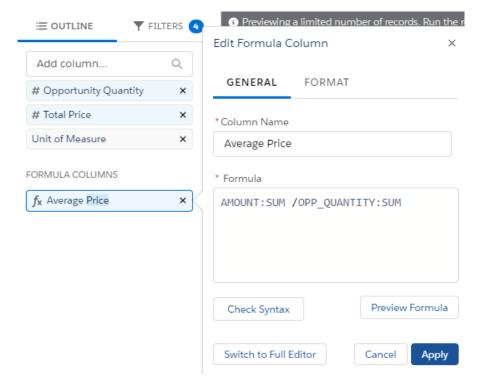


Figure 28 Summary Formula Feature

In fact, this 'summary formula' adds a new column to the report holding our intended value. Then, we can use this new column in our reports and charts.

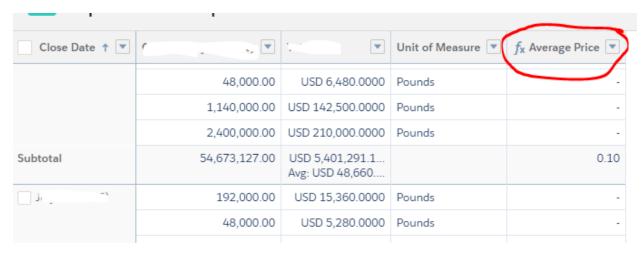


Figure 29 Example of Added Column by Summary Formula



Summary

This project was a great opportunity to learn about REG business as well as Salesforce Software. As I mentioned before, Salesforce provides a wide range of features and capabilities to businesses so that many recognize it as the most powerful CRM.

In Addition, the data analysis of the project was a unique opportunity to play with real data, get reports/charts, and customize the data visualization based on daily needs of managers. Before starting to get reports and dashboard, I met with managers to find out what is their day to day needs and then started to think about needed reports and charts. The process of translating business needs to reports and dashboards was a great and unique opportunity.



References

In this report, introduction to the REG and Salesforce has been based on their websites.

https://regi.com/

https://Salesforce.com

