QUARTERLY DART NEWS

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FEATURING

The DART Program Embodies *Growth Powered by People*!

Since its inception nearly two years ago, the DART Team has quickly gained credibility as a team that goes above and beyond to find solutions for departments that ask for help. As we've grown as a team, our reputation and responsibilities have grown with us—and people are starting to take notice.

When Ad-Hoc requests began stacking up, a team member joked that we were the silent heroes of the company—just like Batman is for Gotham. Soon after, Marshall Moses on the Marketing Team shared the DART symbol (seen above) to showcase that whenever the company needs us, we'll always be there. This team was molded by DART and will continue rising from the abyss of help requests—the DART Team Rises!

Coming Soon: DART Hub 2.0 in Tigard

The DART Team is going places! We're outgrowing our Hub space in the Home Office, so we're heading north to the Driveway Innovation Center in Tigard to enjoy a DART Hub 2.0. This exciting expansion provides a special space for team building, networking, and developing professional skills. It also broadens our reach to attract a larger pool of candidates to our growing program. Stay tuned for more details in future newsletters.

The DART Team embraced several *Have fun* moments this past holiday season and wanted to share some What's Happening highlights.

Celebrating Personal Milestones

The DART Team came together to celebrate a special birthday for Claire Field (center, wearing scarf), a DART Data Analyst who is part of the Enterprise Data Warehouse Team. Everyone was excited about her engagement the week before and decided to enjoy a festive evening of friends, food, and fun cornhole games at the Common Block restaurant.

May the Force Be with DART!

The DART Team enjoyed a surprise visit from Lithia & Driveway's CEO Bryan DeBoer (aka Jedi Knight) who congratulated everyone on their hard work and successes. Diego Rojas, DART Program Manager, said one of the team members noted that having the CEO express his appreciation and support for the program motivates the DART Team to continue its drive to support the company's 2025 Plan to achieve $50 billion in revenues and greater than $50 earnings per share.

Holiday Team Building

During the holiday season, the DART Team met at the Lava Lanes bowling alley in Medford to celebrate its 2021 successes and *Have fun* exchanging white elephant gifts. The DART Team had a great year of *Growth powered by people!*
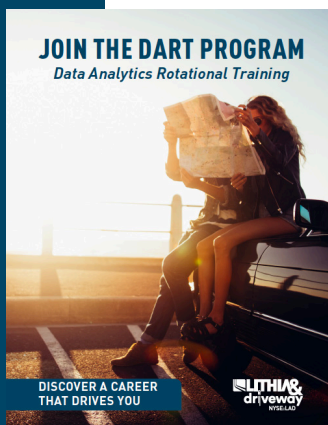
DART Careers Booklet

To attract talented college graduates to our innovative DART Program, we created a 12-page DART Careers booklet as an engaging and informative recruiting tool. The booklet presents an overview of the DART Program and its unique routes to exciting careers in data analytics at Lithia & Driveway. We also showcase our company's culture, resources, and omni-channel growth strategy to those interested in a roadmap to starting a career with us.
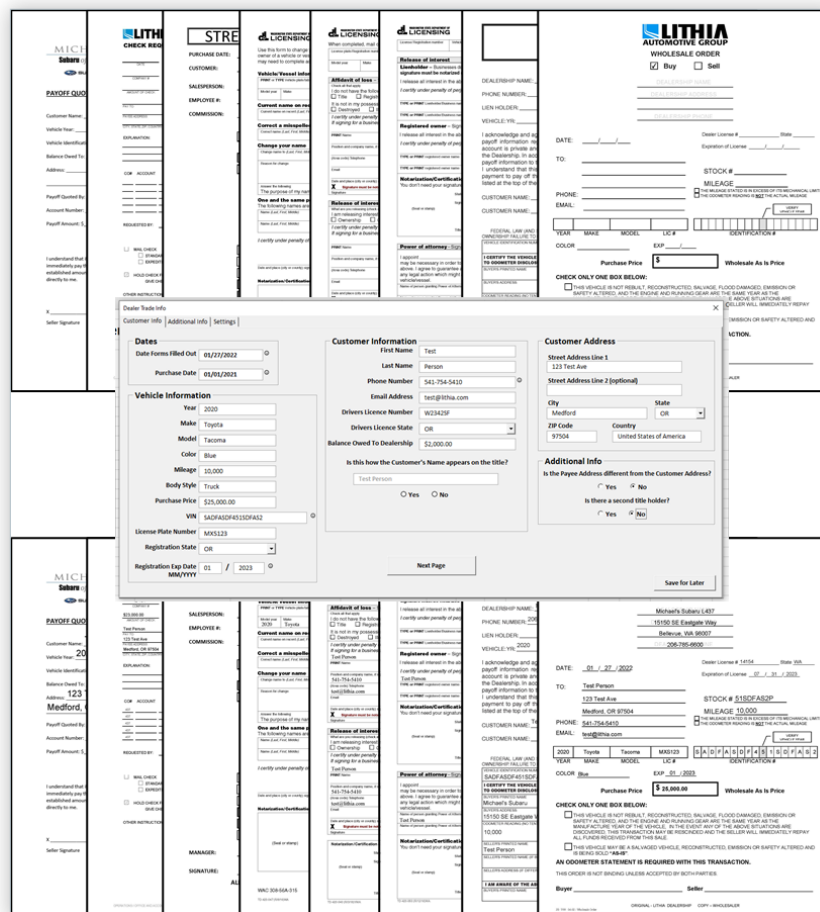
Dealer Trade Forms Automation
By Quinn Tolson

This project began after a General Manager contacted the DART Team to help find a solution to having to re-enter customer information throughout the dealer trade process. Originally, managers would need to manually enter the same customer information across 8 different PDF forms.

Quinn found a solution to build a new form that automatically carries the information over after the first form is filled out. He also ensured the new PDFs prevent common user errors, such as date formatting and mistyped characters in the VIN.

New Trade Forms

The Data Warehouse (DWH) Dashboard
By Claire Field

Claire connected with the various project managers within EDS and crafted an interactive Power BI Dashboard to allow the leads to monitor the work happening in their team. To do this, she used a variety of techniques, such as connecting Power BI directly to Azure DevOps, creating a Python script that runs daily to pull information from a REST API, and inserting OData queries into Power Query Editor within Power BI. Below is the first completed DWH Dashboard.

To aid the rather large Enterprise Data Warehouse (EDW) Team in work-item monitoring, Claire created Power Automate flows that use a query from Azure DevOps and send email reminders to all team members.

The Data Warehouse Dashboard

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FinCo Business Requirements Project

By Devin Bunch

As part of the FinCo Team & Project, Devin has built two Business Requirements Documents (BRDs) that have served to walk Lithia & Driveway data engineers through the complex data integration of nested .XML files into the FinCo DataMart.

The FinCo Project's primary objective is to expand DFC with full-spectrum lender capabilities by providing the DFC Data Science Team with datasets from our Data Warehouse and various external vendors. This integration allows the DFC Team to use FinCo as its primary source of all data. The FinCo Team has been working to structure Pfaff's data into columnar format and have it residing in the FinCo environment.

Examples of Business Requirements Documents (BRDs)

BUSINESS REQUIREMENTS

In-Scope
- Obtain all historical 77,171 copies of Defi's **.XML** files from DFC. DFC will put the files into a SFTP server.
- DFC will create a mapping between the historical .XML files and current defi schema.
- Create tables in a new historical defi schema called **hist_defi** in the FinCo environment with the attributes from the MVP list provided by DFC.
- Create a matching historical schema and table set in Snowflake that mirrors the new **hist_defi** schema and table set in the SQL FinCo environment.
- Create a process to parse the .XML files into the new historical defi schema **hist_defi** in the FinCo DataMart and Snowflake.
- Update the **ReportSecure.Defi_FactApplicationCurrent** view in the FinCo DataMart to also include **hist_defi** schema tables. The view should have the latest values for unique applications.
- Create an identical view in the Snowflake environment to **ReportSecure.Defi_FactApplicationCurrent** for DFC users to access Defi's historical data for reporting and analytics.
- The following personas should be granted access: **DFC Power Users**
- Implement the same parsing logic that is currently in place for the nested credit bureau data.

Out-of-Scope
- Data Governance around data received from Defi.
- Automation pipeline to pull additional historical Defi data into the FinCo environment.
- Modifications to the existing incremental Defi loads. This is an ongoing effort.

HAND OVER PLAN

1. DFC Data analytics team will extract the 77,171 .XML files from Defi's online server
2. Devin Bunch (Lithia IT) will write the historical defi data dictionary
3. Lithia BAs will work with DFC's BA to finalize the attribute list. Lithia BAs will then provide DE with final attribute and table mapping after reviewing the MVP attributes sent over by DFC.
4. DFC will map the .XML attributes to the current Defi schema
   a. This will only include the **Minimum Viable Product (MVP)** attributes
   b. These attributes will map exactly to the current Defi prod schema
5. Lithia IT will create a historical schema **hist_defi** in the SQL DataMart that mimics the Defi structure in prod.
6. Lithia IT will update the **ReportSecure.Defi_FactApplicationCurrent** to include applications received in the Historical data.
7. Note: In future, if there is a new requirement to parse a new attribute, use the same raw file. We do not want to re-extract ~77K files.

Network Development Forecasting Dashboard
By Andrew Pope

Andrew developed the PowerBI Dashboard to streamline the process of accurately and efficiently forecasting acquisition targets. The dashboard is linked directly to each Lithia & Driveway store's SPS and allows the user to see the company's key performance metrics by state, manufacturer, acquisition date, and collection of stores.

For example, if the company was looking to acquire a Stellantis store in Texas, the user can now see our company's key metrics for those stores in just two clicks!

**Network Development Forecasting Dashboard**
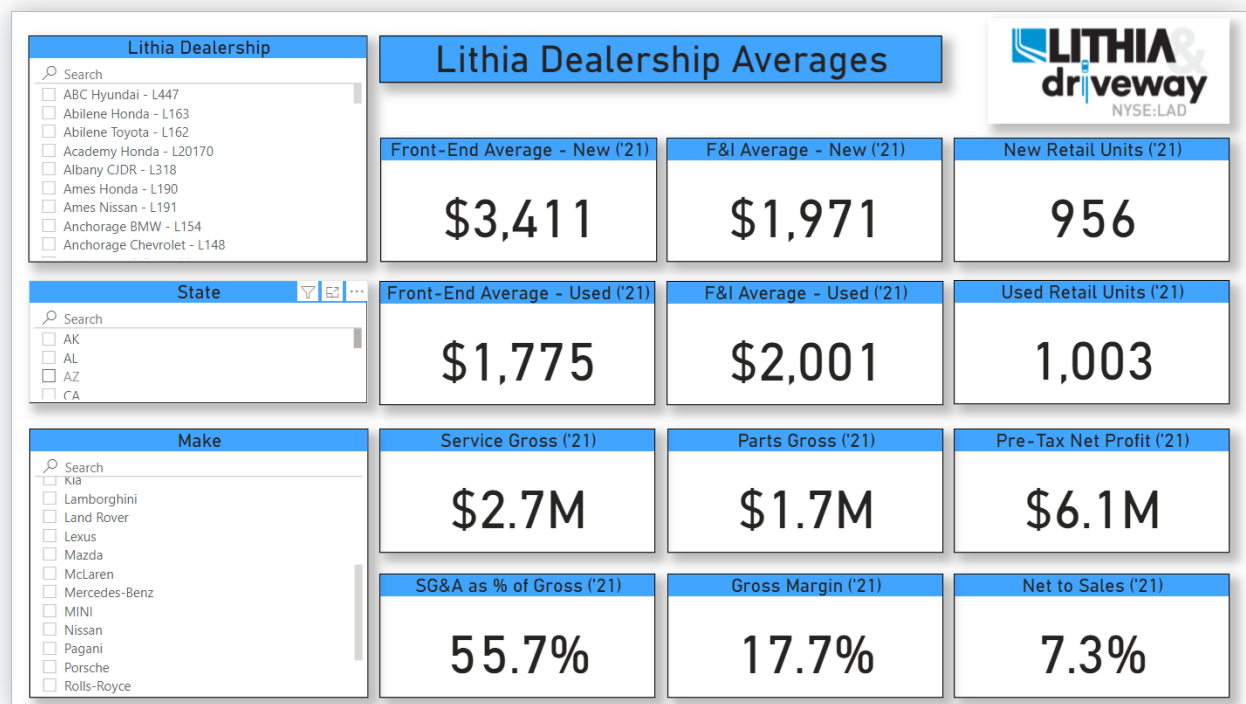
Sales Force Marketing Cloud (SFMC) Leaderboard Model
By Gary Hyland

While working with the Personalized Marketing Team and the Customer Insights Team, Gary has developed a reporting dashboard that improves reporting time efficiency by more than 50%. The dashboard is a summary of a recent journey campaign at a quick glance, as well as comparing campaign metrics to industry and company benchmarks.

This dashboard is the first in a series of dashboards for the Personalized Marketing Team that will help it provide actionable insights to develop better strategies and tactics for marketing campaigns at the store level.

The Sales Force Marketing Cloud Leaderboard
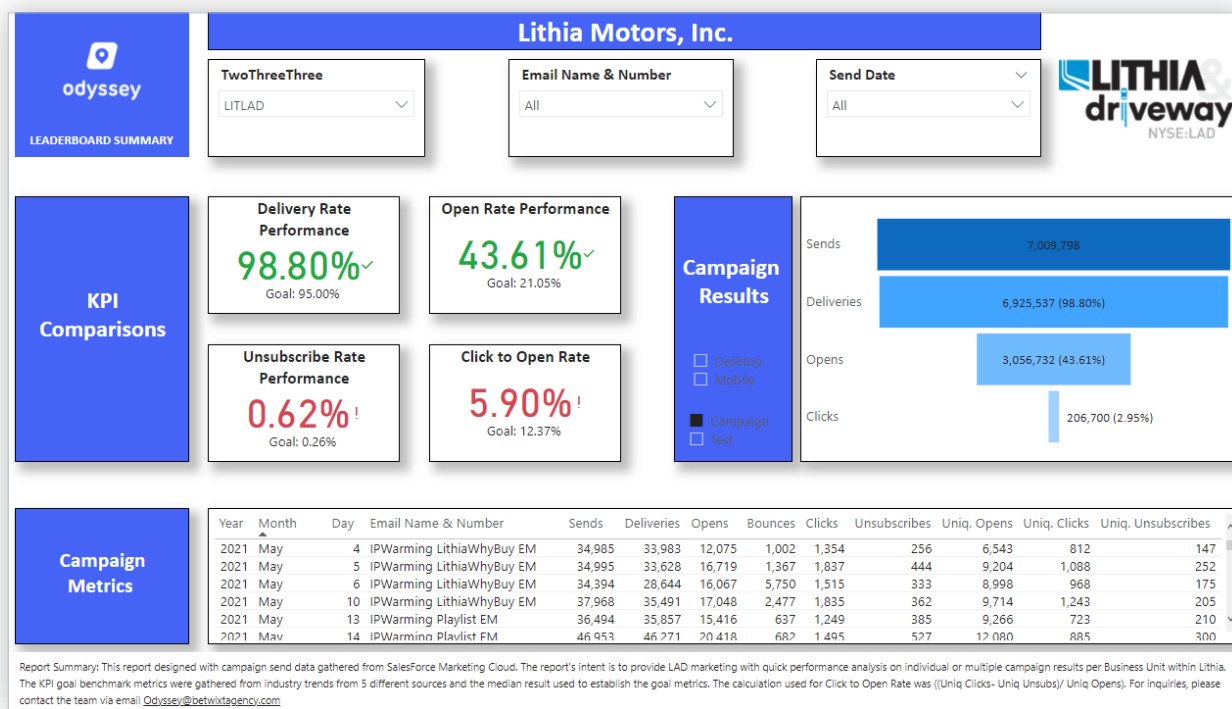
Snowflake Implementation Project
By Dominic Chiari

As a member of the Lithia Analytics Platform (LAP) Team, Dominic works closely with both business end users and representatives from various vendors, such as IHSMarkit and Blackbook. To streamline the onboarding process, Dominic created multiple guides and documents on how a business end user can gain access to the LAP environment, how to configure a Snowflake session, and finally, how to run Snow SQL queries and download data pulls as CSV files.

To date, Dominic has onboarded Blackbook data users and Legacy DWH users to our LAP environment. The list of teams will grow as we make our way through the year. This will result in more onboarding effort and communication between our business end users and our developers.

**Excerpt from New Snowflake Documents**

Accessing Legacy DWH Data in Snowflake Document

Overview

Snowflake is a new to us cloud computing-based data warehousing service that we will be using to aggregate data that previously lived in multiple data warehouses. This allows us to query data more easily from one central location. This document will cover how you can access data within the Lithia Analytics Platform from sign in, to running queries and downloading data pulls.

Note: Snowflake does not require users to download/install a new application, it runs completely in your browser

1. The first step in accessing Snowflake is navigating to our Snowflake environment through this URL: https://lithia.west-us-2.azure.snowflakecomputing.com/console/login#/?returnUrl=internal%2Fworksheet

2. After navigating to the link above you will be presented with two sign-in options, either signing in using AzureAD, or with a Username and Password. We will be using the AzureAD sign-in option.
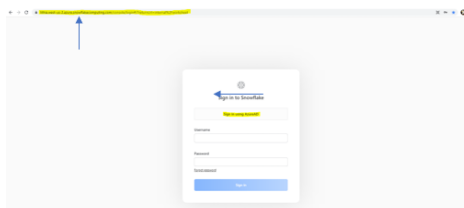
3. When signing in, it will prompt you to use your Lithia email address and password. This is the same password used to sign into your computer when you are logged out. It will most likely ask for a Two Factor Authentication code when it is your first time signing into the Snowflake Environment.

Devin Bunch

Hometown: Eugene, OR

College: University of Oregon

Why DART? DART offered the tools to expand my data analytics and coding knowledge, while gaining real-work experience. While working alongside the FinCo Team in the Digital Innovation rotation, I've gained experiencee with SQL, Microsoft SQL Server Management Studio, FileZilla, Visual Studio Code, Notepad ++, JumpBoxes, and Azure Data Factory. It's rewarding to contribute to team projects with new ideas and perspectives.

The DART Program supports my career goals with the bonus of a welcoming culture. I still remember my first day at the Home Office—when I walked in, the front desk already knew my name!

Interests: Crocheting, knitting, snowboarding, basketball, soccer, painting, web design, cats, beaches, and warm weather.
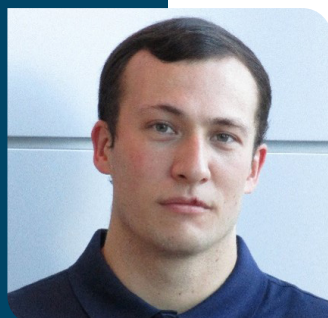
Cole Compeau

Hometown: Ashland, OR

College: Southern Oregon University

Why DART? After graduating from SOU, I knew I wanted a job that would help me build a career—plus my love of cars made Lithia & Driveway my first choice. After I was offered a DART Analyst position, I was thrilled to learn about all the opportunities I would have in the rotational training program.

I am now three months in and know without a doubt that I learn something new every day. Everyone on the DART Team is incredibly supportive and cheers on one another's success. Every day at work, I add another skillset under my belt.

Interests: Cooking, cars, weightlifting, driving, exploring, hiking, and gaming.

Adam Finger

Hometown: Portland, OR

College: Portland State University

Why DART? The DART Program is a great opportunity to work with different Lithia & Driveway departments and gain insights to various company operations. In addition, it's motivating and rewarding to have the chance to find where I fit in the best. I'm looking forward to continuing to develop my data analyst skills.

Interests: Snowboarding, skiing, playing piano, investing, health, and fitness.

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Natalie Guardado

Hometown: Costa Mesa, CA

College: Oregon State University

Why DART? I was excited to join the DART Program because of the opportunity to work with several departments and discover how my skillset can be further developed. The DART Program encourages a community of learning from one another while also *Taking personal ownership* of your work. As a recent graduate and someone just beginning their career, I find it a very valuable way to collaborate!

Interests: Photography, collecting vintage cameras, local breweries and wineries, and baseball—go Giants!

Patrick Kriener

Hometown: Chattanooga, TN

College: University of Tennessee at Chattanooga

Why DART? The DART Program offered value and opportunities that I couldn't find elsewhere. After years of experience in data and finance, I saw DART as the perfect chance to branch out and accelerate my career as an analyst.

Interests: Reading and writing, playing tennis, listening to music, and exercising.
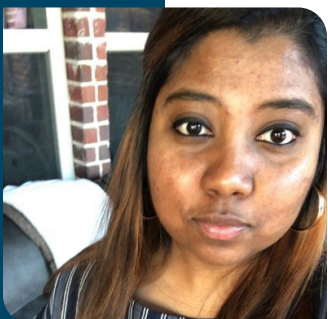
Sanggari Morgandus

Hometown: Kuala Lumpur, Malaysia

College: University of North Texas

Why DART? I recognized DART as a chance to grow my skillset and provide insight into the automotive retail industry as a whole. After graduation, I saw the DART Program as an opportunity to showcase my skills and still be challenged.

Interests: Traveling and exploring new places, cooking, and spending time with family and friends.

Casey Ray

Hometown: Hillsboro, OR

College: Oregon State University

Why DART? I gravitated towards the DART Program because of the range of experience it offered. I think learning data analytics is an extremely valuable and timeless skill, and the DART Program allows you to work on those skills in a variety of different settings. I also admire Lithia & Driveway and couldn't be more grateful to begin my career with such a fantastic Oregon-based organization.

Interests: Fly fishing, exploring nature, reading, watching shows, hanging out with my dogs, and enjoying the Oregon scenery.

Timothy Sawtelle

Hometown: Portland, OR

College: University of Portland

Why DART? I couldn't pass up the unique experience that DART offered, and I'm glad I didn't. I feel like I've not only found a place with a great team and company, but also a place I can build a foundation for success in any future endeavor.

Interests: Golfing, surfing, watching the NBA, and spending time with friends.

Sneha Shah

Hometown: Portland, OR

College: Oregon State University

Why DART? The DART Program is a great opportunity in a great company. After I graduated, I searched for a position that would support my exploration of data analytics while also challenging me. After I noticed the rapid growth of Lithia & Driveway, I knew I'd found the right fit for me.

Interests: Baking, hiking, painting, and anything else art related.

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The DART Program celebrated our mission *Growth powered by people* with the recent graduation of data analysts. We're excited to see their growth and drive to *Take personal ownership* as they start their new positions in the following DART departments:

Shashi Bala
New Title: Business Intelligence Developer II
Department: Digital Innovation

Noah Ballinger
New Title: Performance Analyst
Department: Driveway Reporting

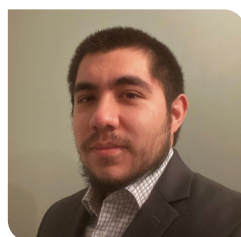**Joshua Easton**
New Title: MIA Marketing Analyst
Department: LAD Marketing

Rylan Firth
New Title: Performance Analyst
Department: Performance Management

Raul Munoz
New Title: Treasury Analyst
Department: Treasury Management

Andrew Pope
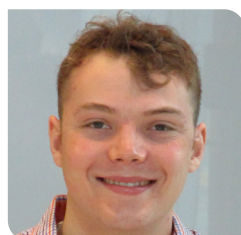*New Title:* Financial Analyst
Department: Network Development

Devin Torrey
New Title: Treasury Analyst
Department: Treasury Management

Jon Seaward
New Title: Senior Compensation Analyst
Department: Compensation

Michael Zier
New Title: Technical Business Analyst
Department: Enterprise Data Service