

# **Data Strategy: A pathway for digital media**

A WHITE PAPER

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### 1. Background

In the digital era, data is the quintessence of businesses; data piling up from various customer or operational touch-points have to be efficiently collected and managed for a business to thrive.

In such a scenario, it is only natural that **Data Strategy** will play key roles in running business efficiently.

### 2. What is Data Architecture

Data Architecture defines how data is acquired, stored, processed, distributed, and consumed for further presentation such as Dashboards or PDFs.

The overall goal of the Data Strategy revolves around mitigating risks, improving Data Quality, streamlining business processes while reducing operating cost, developing and executing advanced Analytics.

### 3. Current Scenario

Some Product portfolios have a unique view of the dimensions of Data Architecture, while some products use for migration of the data between the integrated systems , the other set of products use for streamlining the data for the creation of new products/developments. However, Data Architecture is just one component in the overall Data Governance framework.

Currently, despite the various portfolios and their strategy mechanisms, there is a need for standardizing data architecture across enterprise for the following reasons, primarily :

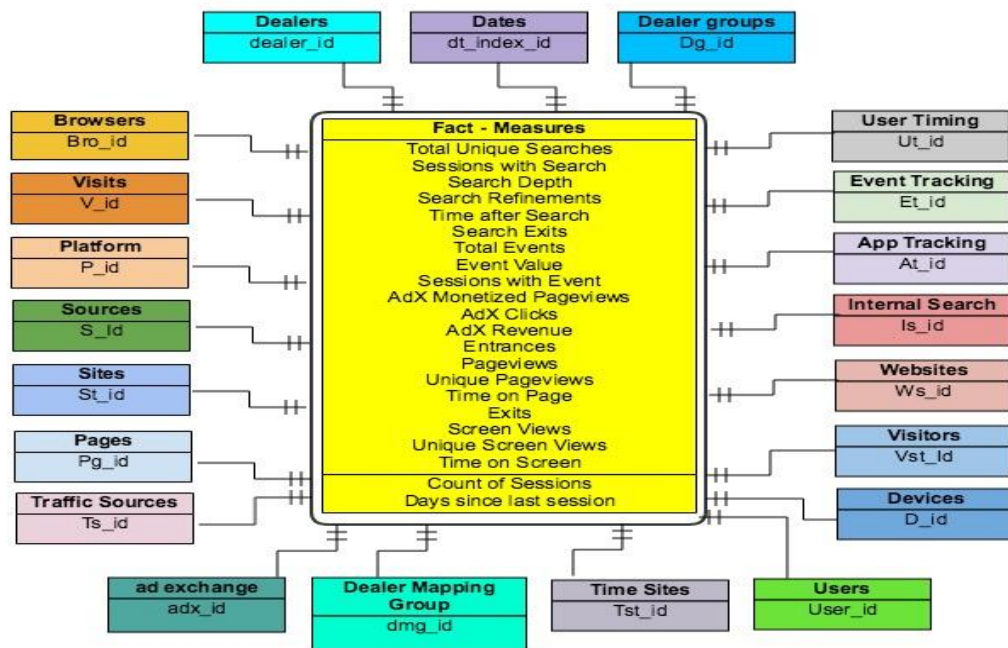
- ✓ Most products rely on data-driven web applications for acquiring transactional, operational, performance, customer behavior, and all other types of data affecting daily business processes.

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- ✓ The meteoric rise in volumes (petabytes) and types of data (social, mobile, web) have necessitated the use of highly sophisticated tools for Data Analytics.
- ✓ Cross-functional data requirements to develop instantaneous marketing plans and programs need sophisticated tools and expert skills.

### 4. What significance does this idea bring ?

#### a. Universal model for Digital data :



The above diagram is for illustration purpose only. It is an extract from the one of the product data model and most of the attribute elements from the dimension table were not displayed due to proprietary reasons. Also, selective metrics have been captured in the “fact – Measures” section, exclusively meant for demonstration purpose. If you would like to know more in detail about data model, you may reach out to Authors of this paper.

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As a result of data research from various sources, we were able to identify multi set patterns of data. Further, we translated them into “Dimensions” and “Facts - Measures”.

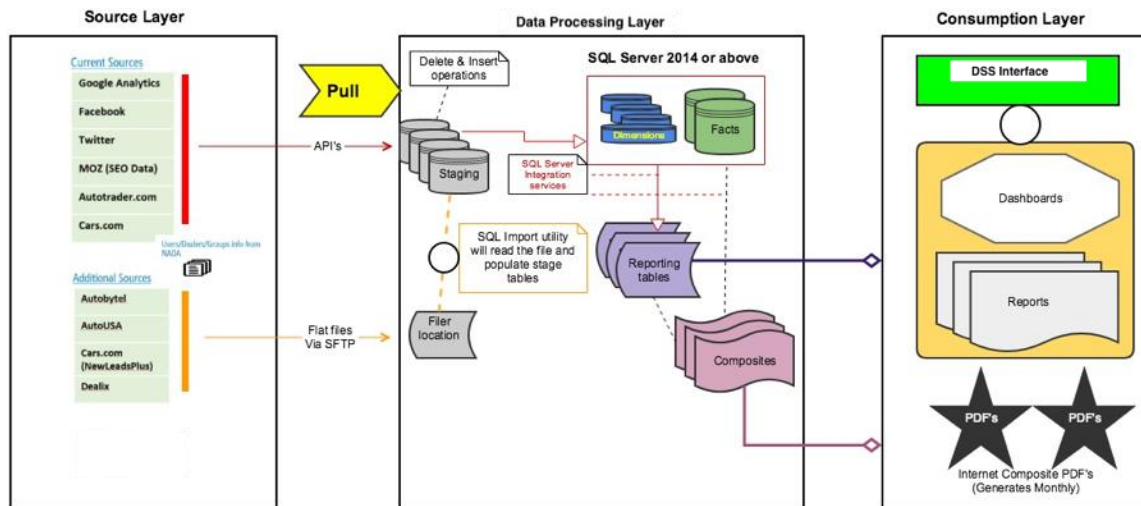
The dimension “Sources “ would serve as one of the primary table which comes with key attributes like Source name , Source Type and Source category. While Source Name carries values (like “Blog”, “Twitter”, ”Google”, “Facebook”) , Source type mentions about whether data is from “Social media” or provided by “Dealer”. More importantly, Source category highlights whether data is being pulled through “API Extract” or “via Flat Files”.

Each color pallet above represent the individual dimension. Each dimension will have unique identifier which has a reference in fact table. The fact table above contains metrics which can be derived further for management dashboards / reports to display relevant KPI’s.

At the moment, our effort here is to plug in common metrics from Google analytics – Twitter -Facebook with data architecture model ,which primarily revolves around industry standard KPI’s. However, there is a scope for further evaluation with next gen implementations.

### **b. Omnipresent Data Architecture :**

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The architecture comprises of three layers , source layer, data processing layer and consumption layer. Here, data extracted through API's via 'Pull' for few of the sources and 'Push' for identified websites extracts through flat files. There will be dedicated staging area tables for each source.

Further, reporting tables will be populated via ETL process and will serve as reference for “decision support systems” interfaces to meet the reporting / dashboard needs.

Leveraging Omni-Channel Analytics gives dealerships the opportunity to better connect with a new generation of vehicle buyers, differentiate their experience, and create customers for life. Vehicle ownership lifecycle will increase customer acquisition, improve service retention, drive storewide profitability, and gain the ultimate competitive edge. It is inevitable for dealerships to embrace “multi-connect” strategy that engages customers at every stage of their buying journey. This emphasizes the dealership segments (it can even be OEM’s) to have “Proper data strategy” in place (on their own) to achieve advantages listed above.

Having said the above, the purpose of this article is to introduce standard data architecture model which enables Technology company to serve dealerships / enterprises / OEMs in achieving the benefits of standard data strategy.

### 5. Who gets benefited?

The technology company will be in a position to help customers to have data available from multiple channels to get valuable insights out of it. In addition, this would open door to all kinds of value creation, such as customer analytics

Dealership users can get benefited by using this data to drive all the advantages we mentioned in the beginning of this article, refer section “What significance does this idea bring? “

### 6. Conclusion :

This model emphasizes on how we can leverage the benefits of core components of data architecture, such as standardized version of data model.

While Organization’s Data strategy provides a common set of goals and objectives, It is high time for enterprises to revisit their data strategy to ensure data architecture platforms are well aligned with business and data becomes an asset across product portfolio.

**Let’s make data work for us, not we work for the data in search of a problem that it could address.**

We can perhaps achieve this by standardizing the data architecture platforms to maintain balance between single source of truth and multiple versions of the truth and also this would certainly help us to optimize the data analytics, modelling , visualization , transformation and data enrichment.

Above all , it improves organization's competitive position and profitability by improving customer experience.

### **7. Appendix I – References**

<https://www.nada.org/>

<https://www.dama.org>

<https://www.dataversity.net>