



Q. Are you Struggling with Data for Logistics Support Decision Making? A. Use the TFD Data Vault as the Single Trusted Source of Logistics Data

Are you struggling with:-

- Not having the data?
- Having too much raw data to manage?
- Incomplete, incoherent and inaccurate data that can't be trusted?
- Spending too much time collecting and collating data that the analysis is too late to influence the decision?
- All of the above?

Stop Struggling! TFD can help you

Effective logistic support analysis requires the triad of tools, analysts and data. While powerful tools and skilled analysts are freely available, data is the critical element that underpins evidence-based decision making. Without data, only judgement is possible and that is frequently flawed.

So what can be done about the very common difficulties with obtaining dependable data to make logistic decisions for large, complex, critical and costly systems? To understand, we need first to dig into the root causes of the typical problems.

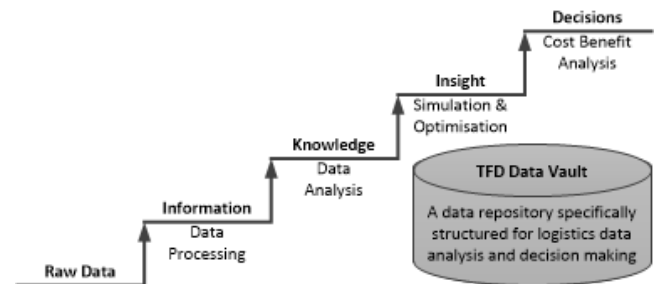
Data is an Asset

The importance of accurate and dependable logistic data is rarely disputed, and its value as a critical asset is widely recognised. On the one hand, industry carefully guards its data as intellectual property while seeking to gain as much feedback as possible of customer usage data.

Data itself is merely numbers or text, but the real value of data comes from the decisions that it informs. System and performance measurement enables business decisions with less inherent uncertainty and risk.

The Data Staircase

Sophisticated data exploitation strategy and management techniques are required to extract and cleanse the raw data, and develop useful information, knowledge and insight to support decisions. Moving up the Data Staircase, as illustrated, requires progressive data capture and processing, with analysis, simulation and optimisation, to inform cost benefit analysis about business decisions.



Data Sources

Logistic data is typically drawn from many and varied sources with disparate original purposes. While the old adage suggests "collect data once, use many times", it can be taken too far with data often misused out of context because it was available.

The only true solution to this conundrum is to understand how and why data has been captured, and in what context. If it is then structured in true relational terms, the original meaning is preserved and then can be used. This requires very careful thought on how to structure the data repository.

Fortunately, TFD Group has developed and evolved the TFD Data Vault (TFD dV) over 30 years as the single dependable source of trusted logistic data within a true relational database that has been specifically designed to contain the data needed for logistic decision making.

The TFD dV can be used to drive a wide range of analytical tools, including those of other tools providers, across the world. It is unique in both the approach and base of experience.

Data Currency

Out-of-date data is dangerous and can provide a misleading illusion of currency and dependability. A key data concept to manage this time-based problem is that of Static and Dynamic Data.

Static Data does not change unless the system design is changed: part numbers, tools, maintenance procedures are all fixed subject to configuration control. On the other hand, Dynamic Data will constantly fluctuate even in a fixed system design: usage, reliability, price and manpower costs all change and must be actively managed to maintain currency.

Data Assurance

The need to assure data quality, by using agreed data standards and applying sound processes throughout the data life cycle, is well recognised. These ideals are not yet universal and most logistic data was either developed historically or is still not assured.

Data standards are often ‘tailored’ locally which destroys their very purpose. This situation is likely to continue, and we must accept the reality of having to use legacy data for very many years.

Fortunately, the **TFD dV** applies rigorous data validation checks to ensure that only legitimate and logical data can be entered. For example, uploading a recent ‘standard’ air platform LSAR to the **TFD dV** exposed 70,000 errors; this rate is quite common.

Data Cleansing

Data cleansing is, therefore, an inevitable and very laborious burden. But even if the data is cleansed before analytical use, unless the original data sources are also cleansed, the errors will perpetuate, and all the good work will be undone when the next update is loaded.

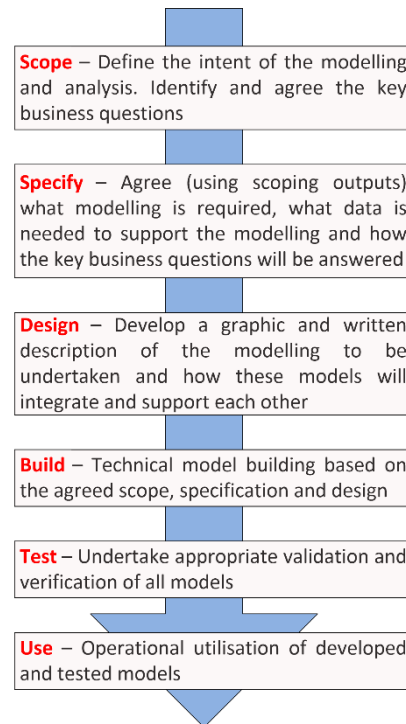
The **TFD dV** deals with this issue by assigning a Data Quality Attribute to each and every field. This can be set to protect cleansed data from subsequent automated updates. It can also be used to manage progress with the data cleansing process and focus attention on the data fields with the greatest business impact.

Modelling and Analysis

Supportability modelling and analysis provides information and insights to support evidence-based decision making for confidence in affordable operational delivery. Data is the key to designing and modelling support solutions; it enables the proposed solution to be tested before contract implementation to ensure that performance and cost targets will be met as shown opposite.

It is highly unlikely that all the required data will be available, assumptions and data creation are inevitable and a Master Data and Assumptions List under configuration control is a vital tool. However, there is nothing like building a model of a system to refine the needs for data.

Two very appropriate adages come to mind “*The more you use the data, the better it gets*” and “*It’s better to model with some data than not to model at all.*” To misquote General Eisenhower “*It’s not about the model, it’s about the modelling*”.



Using a common process to identify, quantify, report and manage Performance (KPI's and PI's) and a variety of Financial measures (NPV, ROI, DCF etc)

The **TFD dV** is the vital core of the powerful suite of logistic support decision tools in the **TFD Supportability Workbench**. It:

- Was specifically designed and evolved over 30+ years to support logistic support decisions.
- Contains logistic support data in its appropriate context for dependable reuse.
- Enforces data quality during data entry and protects it subsequently from corruption through over-writing by automated uploads.
- Drives the **TFD Supportability Workbench**.
- Can also drive 3rd Party analysis tools.

The TFD dV is the solution to your data problems.

TFD also provides skilled and experienced analysts who understand the logistic support business to solve your data problems.

STILL Struggling?



For more information about all TFD products please contact:

Email: tfde@tfdg.com

Tel: +44 (0) 1603 726660

TFDE/2.006 (V2.0)