

This article represents an independent review of bases, concepts, and applications of Vehicles & Machinery valuations in response to current practices in Sri Lanka. Moreover, the paper has been produced in consultation with academic and independent valuation professionals. Further fundamental theories proposed here have been taken from the thesis that I submitted in 2011 for the University of Colombo and the curriculum used for asset-based valuation at the Institute of Credit Management. The paper includes a number of different technical methods for both the concept and application of an appropriate valuation approach.

Valuation is the process of determining the worth or economic value of an asset, company, investment, or any other entity. Valuation itself is not a science in the strict sense, but it can certainly be influenced by scientific knowledge and analysis, especially when dealing with scientific assets. For example, when valuing a Metal Crusher, scientific factors such as the condition of the machine line, the potential market for metal items, the likelihood of successful operational traits, economic obsolescence, and safety regulations can heavily impact its value.

In this case, scientific expertise, market research, and data analysis play a crucial role in determining the value of science-related subjects. However, it's important to note that valuation itself is an interdisciplinary field that encompasses finance, economics, statistics, and various other disciplines, depending on the specific context.

When it comes to the automotive and machinery context, which can also be seen as a specific segment within the general valuation concept, special skills are required to assess the value. In contrast to land and property valuations, the outcome of the technical appraisal has a significant relationship with the market value of vehicles/machinery. Especially in Sri Lanka, the vehicle/machinery valuation industry requires technical competency from valuers to conduct appropriate valuation assignments.

The absence of a proper system to evaluate non-standard assets, lack of knowledge, corruption in the existing system, unstable market situations, market monopoly, negligence of safety aspects, shortcomings in the legal procedure, and irregular monitoring systems are some of the reasons why special competencies are required for valuing Vehicles & Machinery.

The following are the three major appraisal scenarios where special skills and competencies a professional valuer should possess. We call this initial phase "AID":

### 1. Authentication:

Authentication involves validating the genuineness of the vehicle/machinery. This is the most important and significant aspect of a valuation assignment. The valuer is supposed to endorse the genuineness of the respective vehicle/machinery and is held responsible for its legal status. Unlike other property valuation mechanisms, this requires a lot of experience and judicious skills. Authenticating typically involves verifying its identity and ensuring that it is not counterfeit or forged. There are several types of illegal means used to create fake vehicles in the market. We have identified 12 approaches used in this phenomenon using different channels. Authentication requires years of experience and expertise skills that can only be developed by working under the direct supervision of a professional valuer. Some examples include chassis number/serial number alteration, illegal fabrication, wheelbase extensions, cut & paste, scam couple, illegal assembling, and conversions.

### 2. Identification:

This refers to the process of recognizing and distinguishing the property based on specific characteristics, unique features, identical traits, and attributes. Identification is a broad concept that involves comparing information with related verification documents such as reshipment inspections or certificates of registration. The original specifications of the vehicle should be taken into consideration for a successful assessment. There are many factors to be analyzed in order to reach a perfect judgment. All the observations are directly associated with the market value at different levels. Some examples include attribute changes, drive train alterations, just low conversions, grade updating, and collaborations.

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### 3. Diagnose

This is where the technical know-how is applied to conduct an assessment of overall health and performance. The important factor in this situation is valuers are not supposed to carry out a comprehensive inspection. Conducting a superficial inspection of all the Systems and functions is mandatory. This superficial inspection mainly can be categorized in to following segments.

- |   |                               |
|---|-------------------------------|
| a. Cosmetic look-over                   | f. Other System Observation   |
| b. Interior Assessment                  | g. Modifications              |
| c. Mechanical & Drive Train examination | h. Safety Audit               |
| d. Electrical and Hydraulic Operations  | i. Technical Obsolescence     |
| e. Functionality Check                  | j. Accidents & Deteriorations |

Assessment of all these aspects is directly related with the average market value. Therefore, this needs certain academic and practical knowledge to ensure the level of condition at the time of inspection.

#### Valuation Approaches and Methods

Second phase of the process is determining the appropriate Valuation Approach and Method. Valuers are responsible for adopting, and as necessary justification, the valuation approach or approaches and the methods used to fulfill the valuation project. These must always

- # The nature of the asset
- # Intended use, purpose and context of the particular assignment and
- # Any statutory or other mandatory requirements applicable in the jurisdiction concerned.

The appropriate valuation approach is chosen basically after defining the purpose for which it is required, the nature of the asset and any statutory or other mandatory requirements applicable.

**The market approach** is based on comparing the subject asset with identical or similar assets for which price information is available, such as a comparison with market transactions in the same or closely similar type of asset (or liability) within an appropriate time horizon.

Ex. Used Toyota Sprinter Saloon Car (Compare with similar type / age other make and models)

**The Income approach** is based on capitalization or conversion of present and predicted income (cash flows), which may take a number of different forms, to produce a single current capital value.

Ex. Metal Crusher (Discounted Cash flows / Projected Income schemes)

**The Cost approach** is based on the economic principle that a purchaser will pay no more for an asset than the cost to obtain one of equal utility whether by purchase or construction.

Ex. Un Registered Vehicle, Constructing a Brick Machine (CIF Value / FOB)

#### Valuation Methods

Valuation methods may include a range of analytical tools or techniques used in Sri Lanka. Some of them are practical strategies used by professionals. Those methods have identical traits that distinguishing each other. Valuers should have an intensive proficiency about how things stand, how long last and magnitude of their affect.

**Popularity Basis** - According to the popularity created in the market due to varies. This does not last long.

**Benchmark Assessment** – It is understood that some models act as a standard or reference point to determine values of other vehicles in the similar range in terms of body type, engine capacity or any other features. Toyota Aqua, Toyota Axio Corolla Hybrid, Toyota Premio, Suzuki Alto, Viva Elite, Mitsubishi Montero and Suzuki WagonR are kind of models which are positioned in a structured way where by demand and prices are set accordingly.

Ex. Values of all the Standard Hatch-Back cars range according to the Value of Suzuki Indian alto car of a particular year of manufacture.

These types of models are popular in the market and they have a stable demand and price is very sensitive to external factors. Value of similar type vehicles (KWID, Viva Elite, Nissan Redigo, Hyundai Eon

**Base Value Assessment** -Value of a particular model is considered with the selling prices set by agents or importers. It varies in a descending structured way against to base value.

**Formative Assessment** - Market equilibriums fluctuate accordingly to seasonal factors. There is a pattern of this trend.

**Continual Analysis** – This is the vertical and horizontal analysis done through the same models / generations of a particular manufacturer. In This scenario valuer should not look in to the values of other manufacturer’s models.

**Overfull Demand Context** – When there is an exceptional demand created by due to scarcity of assets or when buyers expecting a sudden escalation, this situation will create. In this context market prices of registered vehicles are higher than un registered prices. This may occur mostly to just registered vehicles in the same year.

**Speculative Application** - When there is no appropriate evidence to justify the value of a particular vehicle, this method is exercised. Especially when there is only one or few units available in the market this application can be applied.

**Bubble Market Motion** – This is a special market situation in which mostly overall market experience rapid increases where average market prices disconnected from its intrinsic value or the underlying economic fundamentals. With the self-reinforcing cycle can create speculative frenzy. Assessing the value is become more complex being selling and buying rates are heterogeneous.

**Perceived Factors** - The value or the worth that individuals assign to an asset. This factor is influenced by variety of factors, including beliefs, social status, experiences, personalized features and emotions. Valuer must be careful and prudent how perceived value is assigned to the average market. There are some instances where valuer is allowed to attribute part of a perceived value to the common market.

Ex. Extra demand for First Owner Vehicles.

This is where we recognize the term “Value is what you get, Price is what you Pay”

**Value Creations** – This is where realistic value of extras, accessories, fittings, legal modifications and alterations physically done are concerned for the estimation. A comprehensive knowledge of values and status of above factors are significant in the evaluation process. Moreover, valuer should understand the proportional rate of the value that could be attributed to the vehicle also important. Also, it is important to have a broad idea about cost of local fabrications and modifications.

**Peripheral Appraisal** – This refers to the studying of influence of all the sources towards market demand. We have clearly noticed that there are varieties of variables that affect to the intrinsic value. Legal compliance, Special Conditions stipulated by government authorities and vehicle registration characteristic can be identified under this concept.

Ex – Government Auction Vehicles / Restriction imposed for Travelling and ownership transfer, Changes in Registration Status.

Automotive and Machinery/Plant Valuation is a very challenging profession in Sri Lanka and no one can be a professional valuer neither by academic qualifications nor experience in the technical stream. On the other hand, a genius in the other valuation industry also cannot be a professional related to vehicle/machinery. A person who is well equipped in multiple disciplinaries and having analytical skills with hands on experience only can become a professional Automotive and Plant/Machinery Valuer.



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