Cost

Go up to Terms and Definitions

Discussion

Cost is an Evaluation Characteristic concerning the value of Resources required, consumed, committed, or foregone for a specified subject, activity, or outcome.

Cost can apply to:

- A Candidate Solution
- A Distributed System
- A Node
- A Qualified Node
- A Node Set
- A service
- A product
- A deployment
- A maintenance activity
- A Test Run
- A transition
- An operation
- An acquisition
- Another subject, activity, or outcome having an assigned value

Cost can include:

- Acquisition cost
- Licensing cost
- Development cost
- Integration cost
- Deployment cost
- Infrastructure cost
- Operating cost
- Storage cost
- Energy cost
- Communication cost
- Maintenance cost
- Support cost
- Training cost
- Migration cost
- Transition cost
- Recovery cost
- Compliance cost
- Decommissioning cost
- Disposal cost
- Opportunity cost

- Another cost category established by the Acceptance Criteria

Cost can identify:

- The evaluated subject
- The specified activity or outcome
- The cost category
- The included Resources
- The excluded Resources
- The applicable time period
- The applicable jurisdiction
- The applicable currency
- The applicable valuation date
- The applicable price source
- The applicable discount rate
- The applicable allocation method
- The applicable normalization method
- The applicable assumptions
- The applicable uncertainty
- The applicable DIDO Baseline
- The applicable Validation Criteria
- The applicable Acceptance Criteria
- Its Evidence
- Its Provenance
- Its Traceability

Cost can be expressed as:

- Total cost
- Initial cost
- Recurring cost
- Fixed cost
- Variable cost
- Marginal cost
- Cost per transaction
- Cost per Test Run
- Cost per Node
- Cost per User
- Cost per unit of time
- Cost per unit of completed work
- Lifecycle cost
- Another value established by the Acceptance Criteria

Definition

Evaluation Characteristic concerning the value of Resources required, consumed, committed, or foregone for a specified subject, activity, or outcome

Source

Adapted from:

- Evaluation Characteristic
- Resource
- Resource Consumption
- Financial Systems Archetype, Part 7: Governed Node Service Market
- DIDO Reference Implementation Conceptual Model
- DIDO-TE draft Requirements Register
- DIDO-TE Broad Agency Announcement source material

Note

Cost differs from price:

- Cost concerns the value of Resources required, consumed, committed, or foregone
- Price identifies an amount requested or paid in an exchange

Price can contribute to Cost but does not necessarily represent total Cost.

Cost differs from Resource Consumption:

- Resource Consumption identifies the amount of a Resource used
- Cost assigns a value to Resources required, consumed, committed, or foregone

Two Candidate Solutions can consume equivalent Resources but have different Cost because of differences in:

- Prices
- Licensing
- Jurisdiction
- Allocation methods
- Support arrangements
- Contract terms
- Valuation dates

Lower Cost does not necessarily indicate a preferable Candidate Solution. The lower-Cost Candidate Solution can have lower:

- Functional Correctness
- Performance Efficiency
- Reliability
- Security
- Interoperability
- Scalability
- Maintainability
- Recoverability

A Cost comparison must identify its boundary. Statements such as **lower cost** or **cost effective** are not objectively verifiable without identifying:

- The included Cost categories
- The excluded Cost categories
- The evaluation period
- The currency
- The valuation method
- The normalization method
- The comparison reference

Estimated Cost should be distinguishable from measured, incurred, invoiced, or paid Cost.

Example

DIDO-TE evaluates three Candidate Solutions over a projected five-year operational period.

The Acceptance Criteria include:

- Acquisition cost
- Licensing cost
- Deployment cost
- Infrastructure cost
- Energy cost
- Storage cost
- Maintenance cost
- Support cost
- Decommissioning cost

The Acceptance Criteria establish the currency, valuation date, discount rate, workload, and allocation method.

DIDO-TE associates measured Resource Consumption with the applicable price information and records each Cost assumption.

The comparative evaluation reports total and per-transaction Cost for each Candidate Solution while preserving Evidence, Provenance, and Traceability.
