



# Understanding Dashboards



## Key Distinguishing Factors

From 83 corpus of dashboards, 15 distinguishing factors were identified into four major categories.



### PURPOSE

The intended use of dashboard defines the basis for its visual & functional design.

Two possible intents either decision making or pure communication and learning.



### AUDIENCE

Identifying the target viewers of the dashboard serves as a key factor.

Main audience classes can be Public, Social, Organization & Individual.



### VISUAL AND INTERACTIVE FEATURES

User interaction can be achieved in numerous ways

few of them are customization, data filtration and modification etc.



### DATA SEMANTICS

Dashboards often visualize the anomalies and highlights for awareness.

Ideal goals known as the benchmarks are the valuable semantics.

## Dashboard Clusters

Decision-Making

Strategic Decision-Making

Operational Decision-Making



Awareness

Static Operational

Static Organizational

Motivation & Learning

Quantified Self

Communication



Dashboard Evolved

## Major Challenges

Other than familiar visualization challenges there are few newly accentuated challenges in the process of designing dashboards.

### Data Design

Metrics

Adaptivity

Data and Metadata

Impoverished Data Vocabulary

### Social Impact

Privacy

Social data as context

Data -Driven thinking

Sharing, Security & Privacy