# Operations

Operations are high level categorizations of information manipulation functions that have similar implications for the more specific requirements for the Deployable Components that will implement the Operations.

# Specifics

Operational groupings of functions consist of specifics of create, store, transmit, or manipulate data.

### Create

1. UI Input: Authenticated Editing Service
2. Sensor: Non human input from a device
   a. Attached hardware devices
   b. Time
3. Transact: One or more inputs are used to create a new output.

### Store

4. Store: Persit in non volatile ways as  either of:
   a. A system of record
   b. An operational cache
   c. What are the model details for a decomposition of data storage at the same level of understanding that the model has for data transmission?

### Transmit

5. Publish: Send data on a transport
   a. Relay it to multiple other component transports.
6. Receive: Receive data on a transport

### Manipulate

7. Enrich (denormalize): Change representation to dereference identifiers (such as foreign keys or pointer) to include data with direct semantic meaning to users.
8. Reduce (Normalize): Change representation to keep only references to data with direct semantic meaning to users
9. analyze data to discover common referential data
10. Change its representation:
    i. encrypt it
    ii. decrypt it

<ol start="3" type="i">
<li>Change encoding (e. g. Amongst  UTF strings, ASCII, EBCDIC, binary,, etc)</li>
</ol>

    b. Filter it

<ol type="i">
<li>By record</li>
<li>By field</li>
<li>By combination of record and field</li>
</ol>

    c. Inflate it (colate)

11. Change state or mode or context for interpretation of subsequent data.

## Output

12. UI Viewer: Authenticated Reporting Service
13. Control: Non human manipulation of an environment or device state.