



# DISCON Specialists

EA Enabling Techniques

## Function Structure Diagram (FSD)

✉ **Email:**  
info@discon.co.za

🌐 **Website:**  
www.disconspecialists.com

☎ **Phone:**  
(+27) 12 667 5975

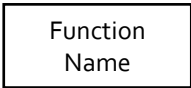
🌐 **LinkedIn:**  
<https://www.linkedin.com/company/discon-specialists>

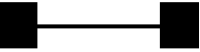
### Reason for Existence


The FSD is a graphical description of the business goals / functions and provides an overall view of the business's reason for existence.


- Can be utilised to represent both the business and technology layer of the business.
- Powerful tool for determining alignment, misalignment and gaps.
- Facilitate gap analysis among Procedural Steps by mapping the Object Interface Diagram (OID) to the Ideal FSD.
- Facility to design free from other influences such as organisational structure.
- The only technique that facilitates a business rationale switch (business focus switch).
- The only technique that enables you to define the most economical model for the business.
- Ensures the correct combination of components in the business (the definition of architecture).
- Provide scope, content and context.


### Notation

 The Function Icon is used to describe a function / goal of the business. The Function Name should consist of a **Verb** and **Qualified Object**.

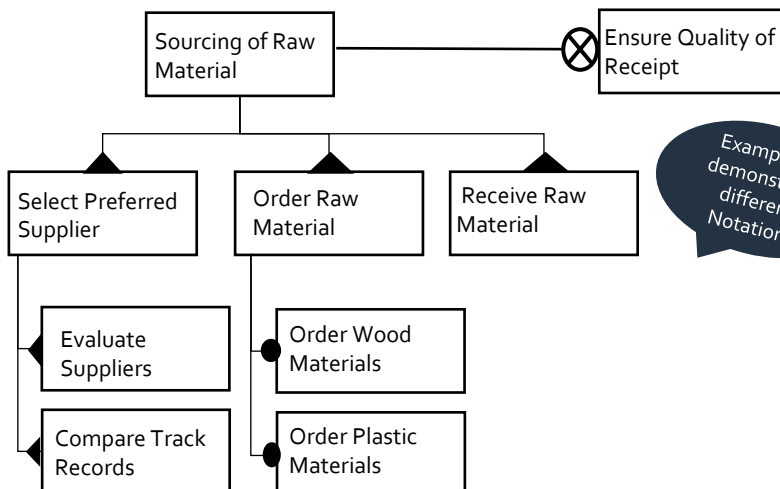
 The Mapping symbol is used to indicate a relationship spanning over facets over architecture levels.

 The Decomposition symbol is used to decompose a parent function into children sub-functions.

 The Classification symbol is used when there is enough similarity between a function's children functions. Each sub function inherit the parent

 The Auxiliary symbol is used when there is a support function that provides a service to all the sub-functions of the parent function to which it is associated.

### High-level Supply Chain Functions



Example to demonstrate different Notations

### Terminology

- **Hierarchy:** association is a hierarchy if a function can be the child of only one parent function.
- **Network:** A function association is network of nature if the same function can be the child of more than one parent function.
- **Leaf Node Function:** A function that cannot be decomposed further into sub-functions.

## Heuristic Rules

1. The Function Name should always be expressed by using a verb and a qualified object.
2. A Function Name can never contain the word "And".
3. In the naming of the functions we are not required to specify the service level indicators.
4. A function structure will always have a hierarchical layout and can be depicted graphically or textually.
5. A Parent function can be decomposed into children functions because the goal can be broken down into a number of sub-goals.
6. Functions can be classified into class structures if there is enough similarity between their children functions.
7. A function can have a combination of decomposition and classification structures underneath it.
8. If the function association is network of nature, the same function can be the child of more than one parent function.
9. A function can never have only one child.
10. The Name of the Function should indicate the result of the function clearly.
11. The depth of a function model depends entirely on how many levels we need to decompose in order to reach the Leaf Node functions.
12. Beware of 'flow' words. These functions actually represent inputs and outputs of functions.
13. The sum of the sub-goals must always be equal to the parent goal.
14. To test a functions association with its parent function, verify WHY the goal has to be achieved.
15. The number of sub-functions should be between three and seven.
16. A Leaf Node function is a function that cannot be decomposed further into goals.
17. Auxiliary functions are support functions that provide a service to all the sub-functions of the parent function with which it is associated.
18. When modelling functions at the Business Architectural level iteration, conditional logic, sequence, selection, termination and routing are irrelevant constructs.
19. Goal decomposition does not represent information, delegation or control flows up and down the hierarchical lines; it is a simple break down of a goal into sub-goals.
20. When designated with the task of modelling business functions it is advisable to start at least two levels higher if possible.
21. A function can be duplicated but may never appear in the same closure set more than once.
22. When a function makes a bigger contribution to another parent function than to its own parent, we
23. call the association with the original parent a Pathological Connection.
24. When modelling a function structure we actually imply two different structures, one Execution structure and one Management structure.
25. We align the business functions with the other business system dimensions as well as the architectural level.