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1 Enterprise Organization principles

This document describes how an Enterprise must be organized to be efficient in Operations and Transformation. Each Organization depends on history, culture and available people, but some trends can be identified for future Enterprise Organizations: this is why CEISAR has attempted to define some Enterprise Organization Scenarios. The reader should have read “Enterprise Modeling” before reading this document.

1.1 Organization Recommendations

Organization recommendations are:

- Adapt the Organization to the Enterprise Strategy: the Mutualization scope depends on business synergy level. We define different Organization scenarios, they are not exhaustive:
  - Each Business Unit is Independent (“Business Silos”)
  - A Shared IT Unit Transforms and Operates independent Solutions (“Standardized Technology”)
  - A Shared IT Unit builds Reusable elements
  - Focus on Agility: Split Transformation and Operations
  - Focus on Synergy: Split Specific and Shared/Reusable elements
  - Adapt to a “Group-Company structure

- Architecture Teams define the Global Model and manage Sharable and Reusable elements: create not only an IT Architecture team but also a Business Architecture team

- For each Architecture team create 2 main functions:
  - Build and maintain
  - Support Architecture for its “Clients”: communication, training, coaching, checks are very important functions for the Architecture success

- The Architecture team must host excellent people because their tasks are among the most difficult

- As Solutions and Architecture teams merge Business and IT topics, Business and IT transformation teams would be more efficient if they merged Business and IT people under the same responsibility.

To give an example, for a Group of 100,000 people:

- Operations should represent the large majority of actors (90%): 90,000 people
- Transformation (10%): 10,000 people
  - Specific or Shared Solution Models (9.9%): 9,900 people
  - Shared Elements for Solutions (0.1%): 100 people

Trends like synergy, standardization of approaches, standardization of user interfaces SOA, reused security systems, standardization of tools, master data management... will cause the latter population to grow with new Business Architects and new IT Architects.

1.2 Organization Indicators

A reference Organization will also help to build indicators like:

- Ratio of number of people in Group structures / number of people in Company structure: will measure level of synergy or level of autonomy
- Ratio of number of people in Transformation / number of people in Operations: will measure the effort made to Transform the Enterprise
- Ratio of number of people in Reusable Elements Model / number of people in Specific Elements Model will measure the effort made in integration or the level of “Silo approach”
- Ratio of number of people in Project / number of people in Maintenance of existing Solutions will measure the innovation rate

The number of people is not the single factor: quality of people, Operation productivity, personal involvement in Operations and Transformation, may change these ratios. Following the Enterprise culture and other parameters, the understanding of these ratios must be processed with other data and must be benchmarked.
2 The CEISAR Organization Cube

As defined in the White Paper on Enterprise Architecture Representation, the CEISAR Enterprise Cube defines the Enterprise according to 3 dimensions:

- **understand Complexity**: split Real World and its Model
- **Improve Agility**: split Operations Processes and Transformation Processes
- **Find the right Synergy level**: split specific Elements and Shared/Reused elements

To describe the Organization, we simply need the Real World Execution layer: we do not need the Model layer.

If the trend will be to mix Business and IT teams in the future, it has still not happened in many Enterprises. This is why we have changed the vertical dimension from “Complexity” to “Competency” (Business or IT), but we have kept the first 2 dimensions (Synergy and Agility) which are mandatory for the Organization Model.

**CEISAR Organization Cube** uses the 3 following dimensions which will fit with Organization analysis: Competency, Agility, Synergy.
3 Organization Scenarios for an Enterprise

CEISAR has defined some Organization scenarios.

3.1 Independent Business Units

No Sharable/Reusable Elements: independent Solutions Unit

The Enterprise allows each Solution Unit to Operate and Transform itself without any synergy with other Business Units. This is the most simple scenario. It would fit an Enterprise where there is no business synergy between Business Units, and where IT doesn't help much to get high competitive advantages.

The limit of this scenario is that there is no possible synergy:

- No End to End Process continuity
- No Master Data: no single view for a Client
- No UI standards to help Workers to move from one Solution Unit to the other
- Difficulty in gathering Management data (Business intelligence)
- No Transformation savings
- No IT Operations savings
3.2 A Shared IT Unit Transforms and Operates independent Solutions

IT is centralized, No Sharable/Reusable Elements

Solution Units consider that IT Resources are not part of their core business, and prefer to transfer it to a centralized Unit. IT activity is centralized inside one IT Unit which groups IT Transformation and IT Operations: this is a classical structure with a CIO which manages all IT professionals. Solutions still have no Shared Elements. This allows better management of IT resources: IT people, Computers, Software, IT Operations. But the key advantage is that the IT Unit understands that Technology must be standardized, and decides standard configurations for IT Operations: OS, DBMS, application Servers, Networks, shared IT Infrastructure, global Provider contracts.
3.3 Centralized IT builds Sharable and Reusable elements

Centralized IT builds IT Sharable/Reusable Elements

Competency

Business

IT

Transformations Operations

Agility

Synergy

Centralized IT builds IT Reusable Elements and starts to think of Business Reusable Elements: but no Business architects

Transforming and Operating specific Solutions under the same responsibility, brings initiatives for optimizing global IT Operations and Transformations.

IT Units progressively construct Sharable and Reusable IT elements like:

• Global Model (Maps) to better understand the overall Enterprise Architecture
• Reusable Model for Transformation: Transformation Process (methodology), development tools
• Reused Technical Software Services for building Solutions like Security Function

And the Centralized IT Unit gradually recognizes that it is possible to go further by proposing not only IT Shared elements but also Business Shared elements like:

• Reused definitions of Business Entities: same language between Business analysts and IT developers
• Reusable Business Software Services: like “Compute price”, “get Customer summary”
• Reused Data Model

The difficulty is then to convince the Business Units to Share and Reuse: each one is evaluated by its individual performance and not by its contribution to Enterprise Mutualization.

As there is no structure, no Unit to host Business Architects, the IT Unit becomes the central structure where Enterprise Business Analysts define and implement the shared Business Functions.

Remark: this scenario is called “Optimized Core” and “Business Modularity” by MIT Sloan Center for Information Systems Research.
If an Enterprise decides upon a leap forward, then it must isolate the Transformation team to protect it from Operations concerns. This structure is implemented when deep Transformation is required to answer to strategy.

This structure can be built at Company level or at Business Unit level, depending on the Transformation scope.

The “Enterprise Transformer” has a responsibility to Transform the Enterprise, while the “Enterprise Operator” has a responsibility to Operate the Enterprise, including IT Operations.

Once the major Transformation is done, the structure may be modified, to return to a more classical structure.
3.5 Focus on Synergy: Split Specific and Shared/Reusable elements

Split Specific Elements and Sharable/Reusable Elements

If an Enterprise decides to strongly increase synergy, then it must build an Architecture Unit which groups Business and IT Architects. This team has 2 responsibilities: construct the Reusable elements and Support them for the Solution Transformation teams. This scenario only works if the Architecture Unit is strongly supported by the top management.

If the Architecture is powerful and well supported, then it is possible to manage Transformation efficiently in each Business Unit. Consistency and economies of scale will result from Reuse of the same Architecture. This is certainly the best target structure, but it only works if:

- Architecture is strong
- Architecture is well supported
- Solution Units accept to reuse Architecture
4 Outsourcing and Group centralization

Enterprise Model or Enterprise Operations can be executed outside the Enterprise, for economies of scale or to respect a Group strategy.

An Enterprise may outsource Operations and/or Model (Global or by Solution)

<table>
<thead>
<tr>
<th>Solution</th>
<th>Operated for who (Target Enterprise)</th>
<th>Operated by who (Operating Enterprise)</th>
<th>Modeled by who (Modeling Enterprise)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enterprise operates and models</td>
<td>Enterprise A</td>
<td>Enterprise A</td>
<td>Enterprise A</td>
</tr>
<tr>
<td>Enterprise operates on a model provided by others</td>
<td>Enterprise A</td>
<td>Enterprise A</td>
<td>Group or Package Provider</td>
</tr>
<tr>
<td>Enterprise outsources operations but imposes its model</td>
<td>Enterprise A</td>
<td>Partner</td>
<td>Enterprise A</td>
</tr>
<tr>
<td>Enterprise outsources operations and the model</td>
<td>Enterprise A</td>
<td>Group or Partner</td>
<td>Group or Package Provider</td>
</tr>
</tbody>
</table>

4.1 A group composed of Enterprises

An Enterprise may be composed of Enterprises. For example:
- a Group of Companies is an Enterprise and
- each Company in the Group is also an Enterprise

Different break-down criteria may be used. Traditionally, the key criteria were geographic because Products and cultures were different, and distance was a problem. But easier communications, easier transportation of people and goods, worldwide products, has reduced such geographical gaps. Key criteria are increasingly the Product Domain or the Process Domain (ex: Distribution/production).
4.2 What a Group may centralize?
When the Enterprise is a Company in a Group, synergy may also come from Group level.

A Group of Companies may centralize different elements at Model or Operations levels.

What can be centralized in a Group of several Companies?

- **G-Shared Transformation Resources**
  - Group Transformation Actors (Workers and Computers)
  - Company Transformation Actions
  - Group Transformation Informations
  - Ex: Shared Development Unit

- **E-Shared Operations Resources**
  - Group Operation Actors (Workers and Computers)
  - Company Operation Actions
  - Group Operation Informations
  - Ex: Procurement, HR, IT Operation Center, call Center

- **H-Reused Transformation Model**
  - Reusable Transformation Actor Model
  - Reusable Group Methodology/Tools
  - With Reusable Transformation Data Model

- **F-Reused Operation Model**
  - Group Maps
  - Group Operation Actor Model
  - Group Operation Action Model (Solution Models, Software Services like Security, UI, workflow, pricing)
  - With Reusable Operation
  - Group Operation Data Model
Centralizing elements of Operations

- **Solutions Unit**: the Group may Operate some Activities for its Companies
- **IT Operations Unit**: the Group may Operate IT Operations centers or Worker support activities
- **Group Master Data**: the Group may manage Master Data like Group Customer Information

Centralizing elements of Models

It is very difficult to ask any Company to Build and Maintain Group Reusable Elements, because Company motivation is “how to increase the efficiency of my own Company”. It is recommended that Group Reusable Elements are managed by a unique Group team.

For example, if it is decided that a Company Solution Model must become a Group Solution Model offered to all Companies, the adaptation and support of this Solution must be under the Group responsibility and not the Company responsibility.

Some Group leaders must have **operational experience** to be respected by Company people.

Examples of Elements which can be shared/reused:

- **Governance Rules**
- **Transformation Processes and tools**: how to define requirements, design, develop, test, integrate, train, migrate data, manage software configurations
- **Maps** for Processes, Activities, Function,
- **Solution Models**: like HR, Procurement, e-mail and office automation
- **Software Services** for Security, Workflow, UI, to-do lists
- **Data Models**
- **Nomenclatures**: Classifications for Management Data, Configurations for IT Operations

4.2.1 Sharing a Solution Unit

A Group may decide to create, at Group level, a Solution Unit which operates for several Companies.

**Motivation**
- economies of scale

**Difficulty**
- to build Processes which run across different Organizations

4.2.2 Sharing IT Operations

A Group may decide to centralize its IT Operation Center and Worker support

**Motivation**:  
- economies of scale  
- formalizes Contracts between IT Users and IT Operations

**Difficulty**  
- more difficult if there are no IT Operations approaches and tools which are Reused in the different Companies of the Group.

4.2.3 Sharing Master Data

A Group may decide to Share Group Data stored on a Single Server and Piloted by a single Group Unit.

**Motivation**:  
- central view of customer (global profitability, global risk, Products equipped with, behavior)  
- central view for Group and Company Organization, rights, duties  
- central definitions for nomenclatures

**Difficulties**
- supposes Reuse of Data Model (see below)  
- to define who is the Data Model Owner and the Data Operation Pilot  
- to manage synonyms

4.2.4 Reuse of Governance Rules

Group may decide to define Governance Rules which apply to each Company.

**Motivation**: 
- transparent decisions

**Difficulties:**
- specific company culture

### 4.2.5 Reuse of Transformation Processes and tools

Group may decide to Reuse Transformation Processes (often called “Methodology”) and Transformation Tools.

**Motivation:**
- a condition for sharing Solution Models and Software Services
- ease of IT Developer mobility between Companies
- simplification of IT Operation Center activities

**Difficulties:**
- convincing the Technical Architects of companies
- training Business and IT people
- supporting the approach and tools

### 4.2.6 Reuse of Maps

**Motivation**
- To Reuse a global view of Enterprise Architecture: Process Map, Activity Map, Function Map, Entity Map, Software Service Map... to identify possible mutualization of Projects

**Difficulties**
- Defining a Reusable business language for Entities and Actions (Processes, Functions, Activities)
- Alignment between Maps

### 4.2.7 Reuse of Solution Models

Reuse of the Solution Model does not necessarily mean Sharing of Operations. For example, each company may operate Human Resources Processes by itself by reusing the same Solution Model.

**Motivation:**
- transformation cost reduction,
- capacity to share Organization Units

**Difficulties:**
- designing a Solution which covers the requirements of all Companies
- customization
- parallel evolution of Solution Core and Solution customization

### 4.2.8 Centralizing Software Services

Building and supporting, at Group level, a framework of Software Services sharable by Company Transformation teams.

**Motivation:**
- helps each Company accelerate Transformation

**Difficulties:**
- identifying shared Services
- supporting their use
- ensuring ascending compatibility

### 4.2.9 Reuse of Data Models

Defining a Data Model for Entities used by all Companies.

**Motivation:**
- condition for Operating Master Data
- condition for Reuse of Solution Models
- condition for sharing Software Services

**Difficulties:**
- defining shared Information and Types
- allowing each company to add Attributes
- defining who is the Owner
• building clean interfaces
• allowing data model evolutions without disturbing Solutions which use preceding versions

4.2.10 Reuse of Operations approach and tools

Motivation:
• procurement policy: to subscribe Group contract with providers
• easier to share IT Operations: IT centers and support

Difficulty:
• it is very long to transform existing Solutions which do not follow these standards