

## Specialization

	No separate function	Position	Department	Division
Marketing				
Construction preparation				
Technological preparation				
Design and investment management				
Production implementation				
Renovations and power supply works				
Transport				
Accounting activities				
Finances management				
Payroll management				
Human resources				
Social and welfare				
Interpersonal relations				
Supply				
Market				
Legal and organization				
Asset management				
Prevention (OH&S, fire protection, property protection)				

The operationalization of the specialization as a structural feature focuses on two of its dimensions – the scope and extent. The scope of specialization can be determined using the following ratio:

$$Z = \frac{L}{W}$$

where:

Z – ratio of the scope of specialization,

L – the number of functions, for which organizational units were isolated within the organization,

W – the number of all functions assigned for assessment.

Coefficient values range between 0 and 1. The higher the coefficient value, the greater the scope of the functional specialization within the organization.

The degree of specialization is the intensity of its occurrence regarding particular functions. The degree of specialization defines the type of the organizational unit fulfilling a given function. Particular units are given defined rank values, signifying their level of specialization (1 for a workstation, 6 for a department, 30 for a division). If it is defined for all organization' functions, then the coefficient takes on the following definition:

$$S_p = \frac{\sum s_f}{W}$$

where:

S<sub>p</sub> – degree of the functional specialization of the organization;

$S_f$  – degree of specialization of a given function  $S_f = \frac{r_f}{r_{\max}}$ ,

$r_f$  – calculated gradual value of the specialization of a given function,

$r_{\max}$  – maximum gradual value of the specialization of a given function;

$W$  – number of functions in the organization subjected to the assessment.

Similarly, the coefficient can range from 0 to 1.

**Degree of Centralization** (R. Kamiński, 2003):

Calculated analogically as the degree of specialization.

What is the lowest level of hierarchy in the organization where competencies to make given decisions are placed?

	Executive staff	Line managers	Department managers	CEO	Beyond organization
Defining the production level					
Defining the production program					
Promotion decisions					
Supplier selection					
Creating new jobs stations					
Creating new units					
Defining goals					
Determining purchasing policy					
Deciding to introduce overtime					
Opening new markets					
Allocating of the workers to tasks					
Decisions about the production schedule					
Determining the course of work in administration					
Choosing training opportunities					
Decisions regarding new technologies					

The level of centralization concerns the level of hierarchy where permissions to make given decisions are placed. Particular levels have assigned particular ranking values, defining the level of centralization (respectively: 1, 3, 6, 18 and 30). The coefficient takes on the following formula:

$$C_D = \frac{\sum c_d}{W}$$

where:

$C_D$  – degree of decision centralization;

$C_d$  – degree of centralization of a particular decision  $c_d = \frac{r_d}{r_{\max}}$ ,

$r_d$  – the obtained gradual value of centralization of a particular decision,

$r_{\max}$  – maximum gradual value of centralization of a particular decision;

$W$  – number of decisions in the organization subjected to the assessment.

The coefficient can have a value from 0 to 1.

**Formalization** is mostly characterised due to its scope and the informative content of an organizational document. The scope is measured by the presence of selected documents in the organization. A list of documents has been prepared by Przybyła et al. (???) and it is listed in the table below.

Which of the following documents is used in the organization?	
Statute	
Organizational Regulations	
Service Book	
Organizational Structure Diagram	
Document Circulation Cards	
Work Regulations	
Internal Control Regulations	
Terms of Legal Services	
Regulations of the Supervisory Services	
Quality Control Regulations	
Secretarial Instructions	
Instructions on documenting cash transactions and payroll	
Instructions for the receipt of deliveries of materials and forwarding of goods	
Rules and procedures for observing state and professional secrecy	
Inventory Instruction Manual	

Degree of formalization in the organization is defined by the authors as:

$$F_z = \frac{D_p}{n},$$

where:

$F_z$  – scope of formalization,

$D_p$  – number of organizational documents used in a given organization,

$n$  – number of possible organizational documents (in this example  $n=15$ ).

The coefficient can take a value of 0-1. The closer to 1, the greater the degree of formalization. In turn, the informative content and the degree of organizational stringency of documents is defined using the following coefficient:

$$F_d = \frac{r}{r_{\max}},$$

where:  $F_d$  – degree of document formalization,

- r – rank assigned to a document, resulting from its informative content and the stringency value (documents 1-3 are assigned a ranking value of 1, documents 4-10 a value of 2, and documents 11-15 a ranking of 3)
- r<sub>max</sub> – maximum ranking value.

The level of formalization within the organization is defined using the following formula:

$$F_p = \frac{\sum_{i=1}^n F_d}{n},$$

- where: F<sub>p</sub> – degree of the organization’s formalization,
- n – number of all organizational documents.

### Configuration

How many levels are found along the longest “chain” of the organizational structure?

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How many people on average are under direct supervision of one director (e.g. number of employees/ number of directors)? .....

$$W_s = \frac{S}{R},$$

- where: W<sub>s</sub> – coefficient of the organizational structure organization leanness,
- S – number of levels in the organizational structure,
- R – average span of control.

The higher the coefficient, the leaner the structure!