

Information Security Management

06 Organisationsformen & Entscheidungswege

HSLU – Informatik

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Lernziele

Die Studierenden

- kennen normative, strategische und operationelle Führungsaufgaben
- verstehen die Wichtigkeit technologischer Innovationen für den Unternehmens-Erfolg
- begreifen Inhalt und Bedeutung von Unternehmens-Leitbildern
- erkennen Anforderungen an Informationssicherheits-Organisationen
- nehmen die Vielfalt nötiger Dokumente wahr

Agenda

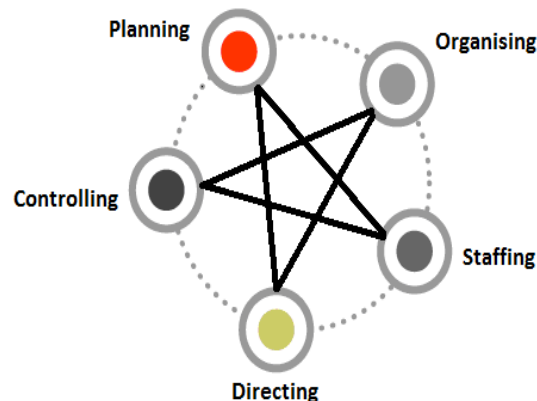
- 1. Organisationsformen und -prinzipien**
2. Organisationsprozesse
3. Organisationsstrukturen und Führungsstile
4. Entscheidungswege und –katalysatoren
5. Anhang

What is Organization?

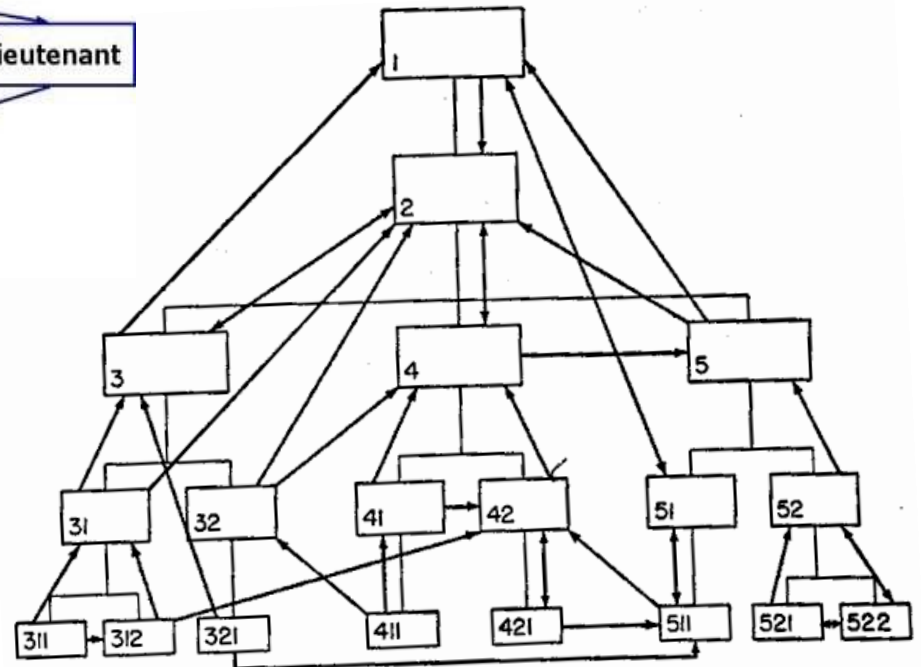
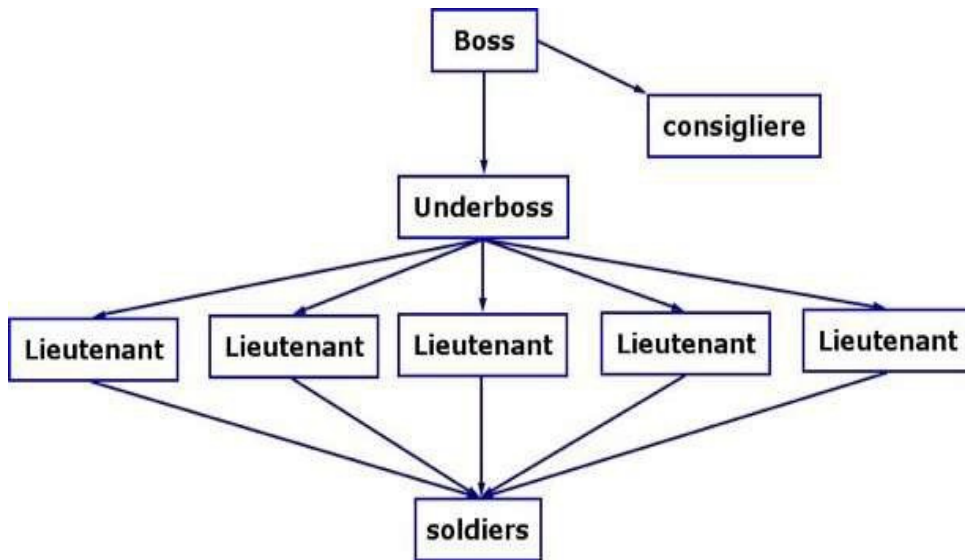
“Organization refers to a social group designed to achieve certain goals. Organization involves creating a structure of relationship among people working for the desired results”.

Concept of Organization:

- Organization refers to the institution
- Organizing is one of the functions of management



Formal and Informal organization



Organization Principles

- Consideration of objectives
- Combination of line and staff functions
- Division of labour or specialization
- Departmentation
- Decentralisation
- Principle of scalar chain
- Principle of span of control
- Principle of unity of command
- Principle of balance
- Principle of flexibility
- Authority and responsibility

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- 2. Organisationsprozesse**
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Organizing Process

- Determining, grouping and structuring the activities
- Creating rules for effective performance at work
- Allocation of necessary authority and responsibility
- Determining detailed procedures and systems for different problems areas such as coordination, communication motivation etc.

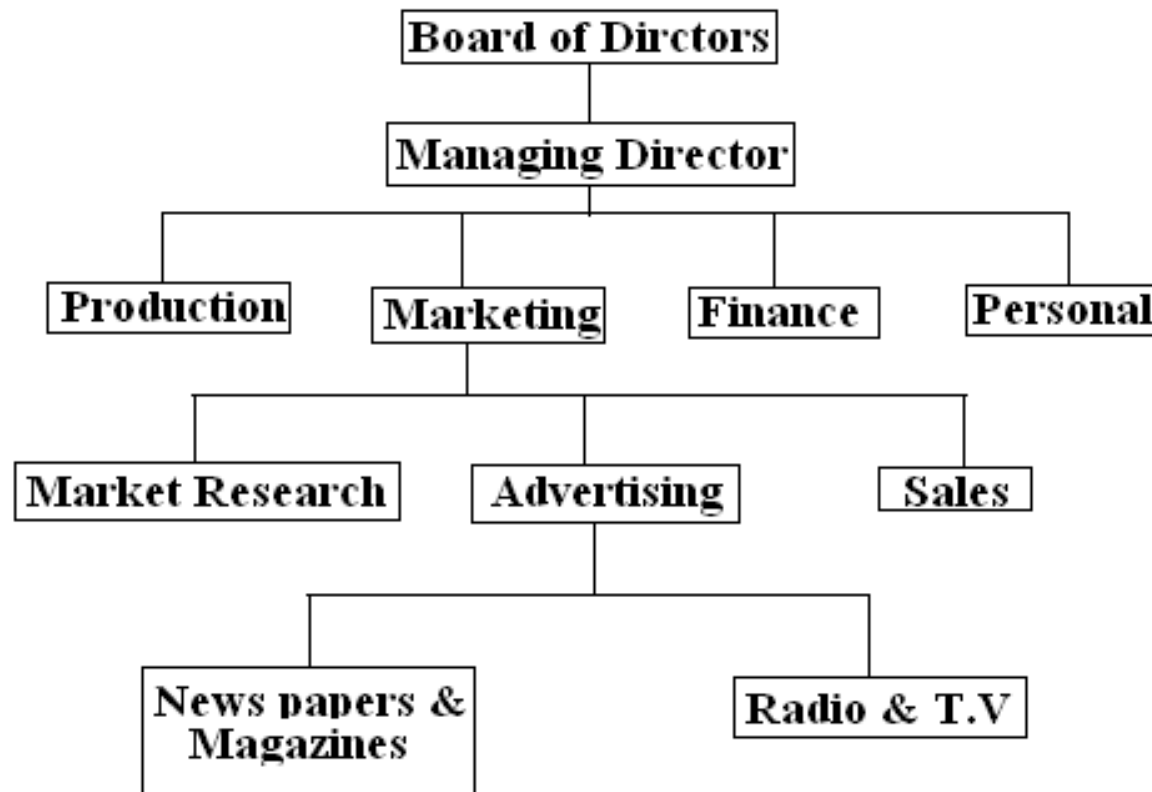
Departmentation

- The process of grouping the activities is commonly known as “Departmentation”
- Departmentation is useful for specialization and fixation of responsibility
- The departmentation concept is based on the organization functions of two types:
 - Basic functions
 - Secondary functions

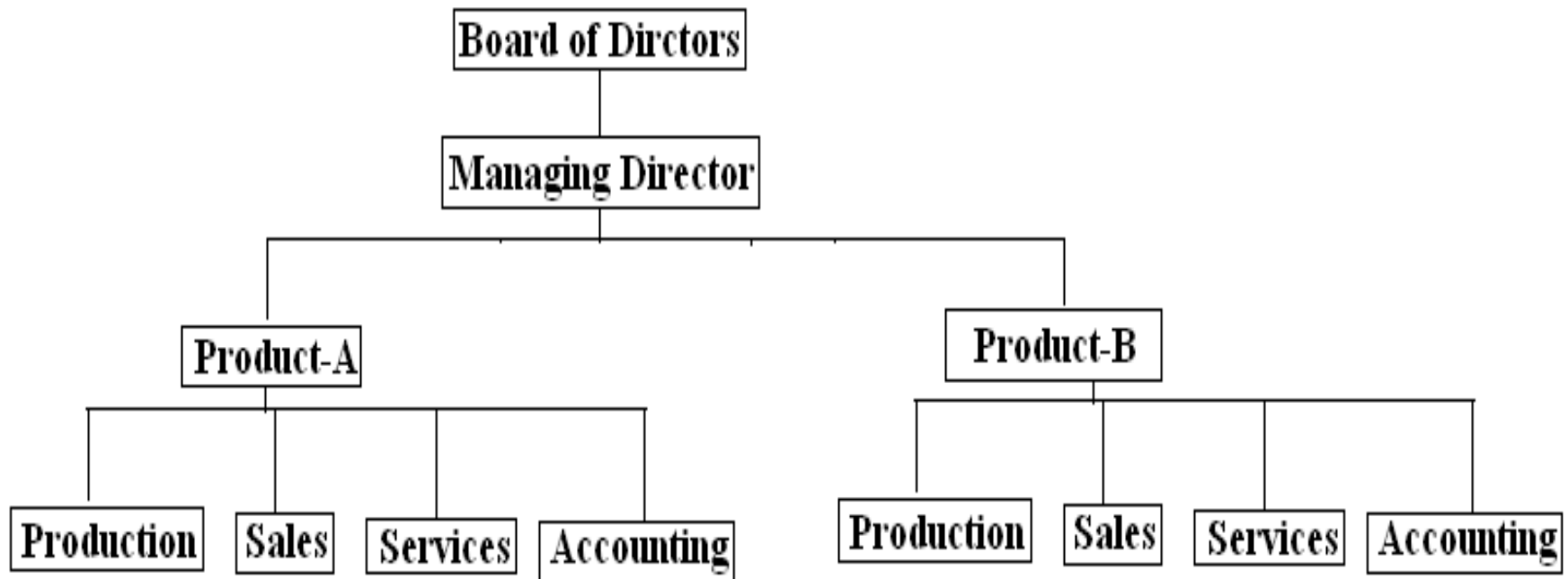
Patterns used in Departmentation

- Departmentation by function
- Departmentation by product or services
- Grouping by location or territories
- Departmentation by time
- Grouping by process and equipment

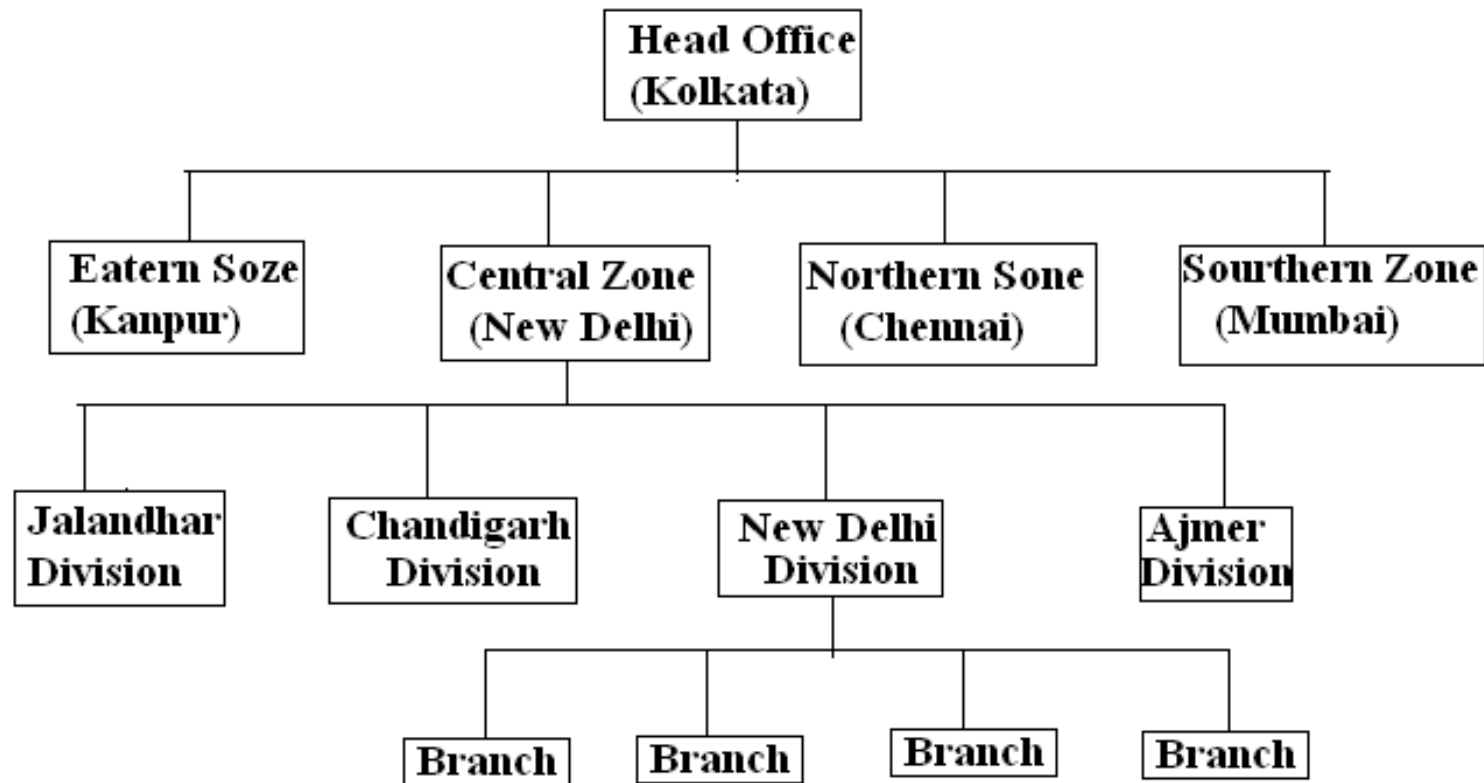
Example: Departmentation by Function



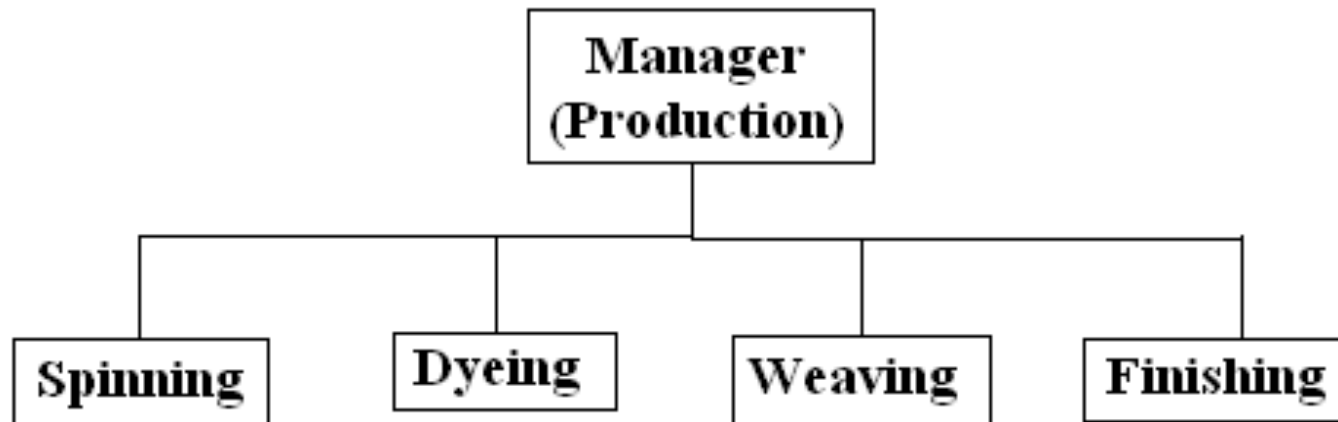
Example: Departmentation by Product or Services



Example: Grouping by Location or Territories



Example: Departmentation by Time / Grouping by Process and Equipment



Decentralisation

Decentralisation refers to the systematic effort to delegate to the lowest levels all authority except that, which can only be exercised at central points. Decentralisation is concerned with the placement of authority with reference to responsibility.

Advantages:

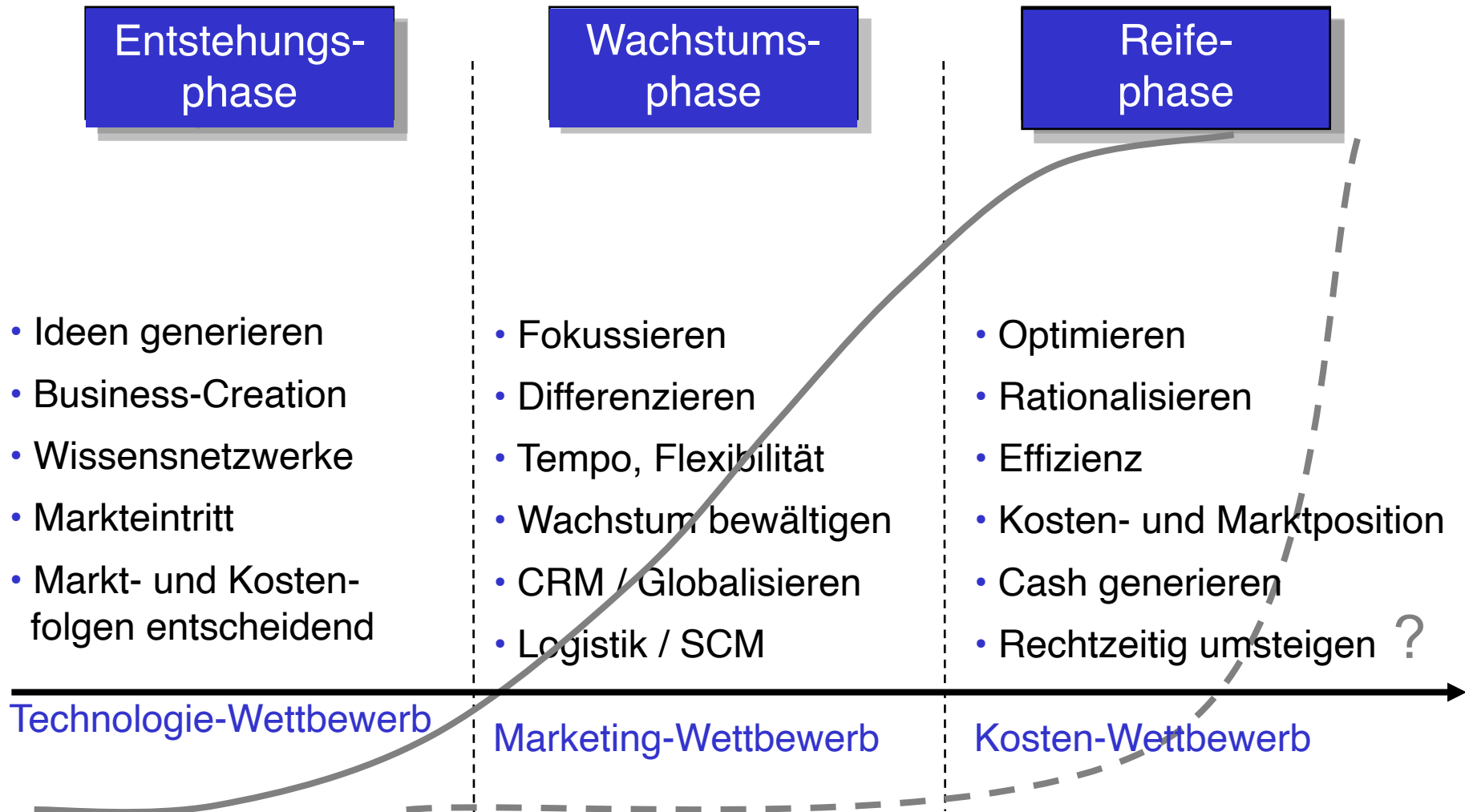
- Quick decision
- Improve effectiveness of managers democratization
- Improved morale of personnel

Disadvantages:

- Violating unity of command
- Misuse of power

Leitbild, Grundsätze, Organisation

Innovations-Kulturen je nach Unternehmens-Phase



Leitbild, Grundsätze, Organisation

Langfristiger Innovationsprozess in der Photographie

1995

2000

2005



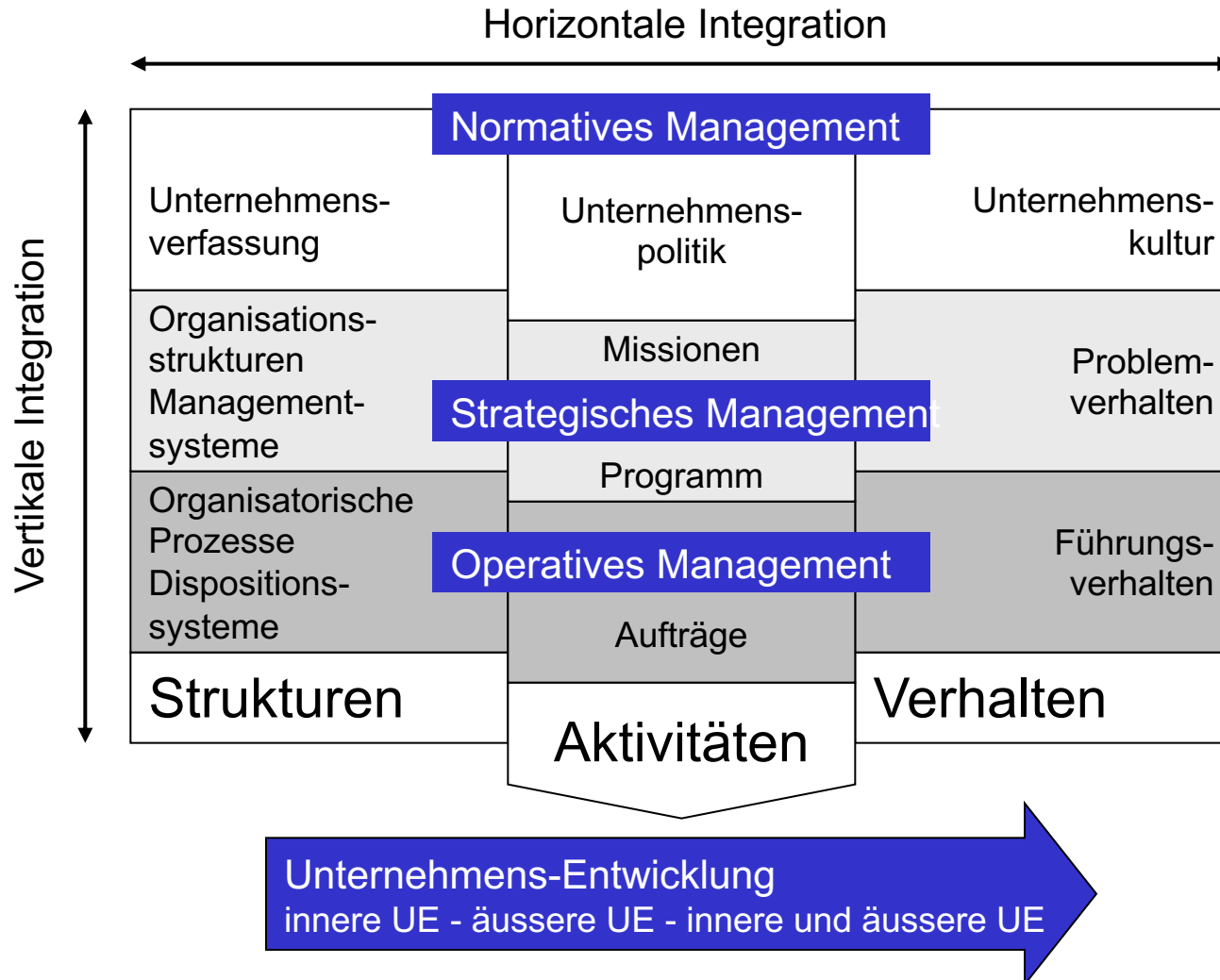
Leitbild, Grundsätze, Organisation

Die 3 Management-Ebenen



Leitbild, Grundsätze, Organisation

Konzept des integrierten Management (HSG-Modell)



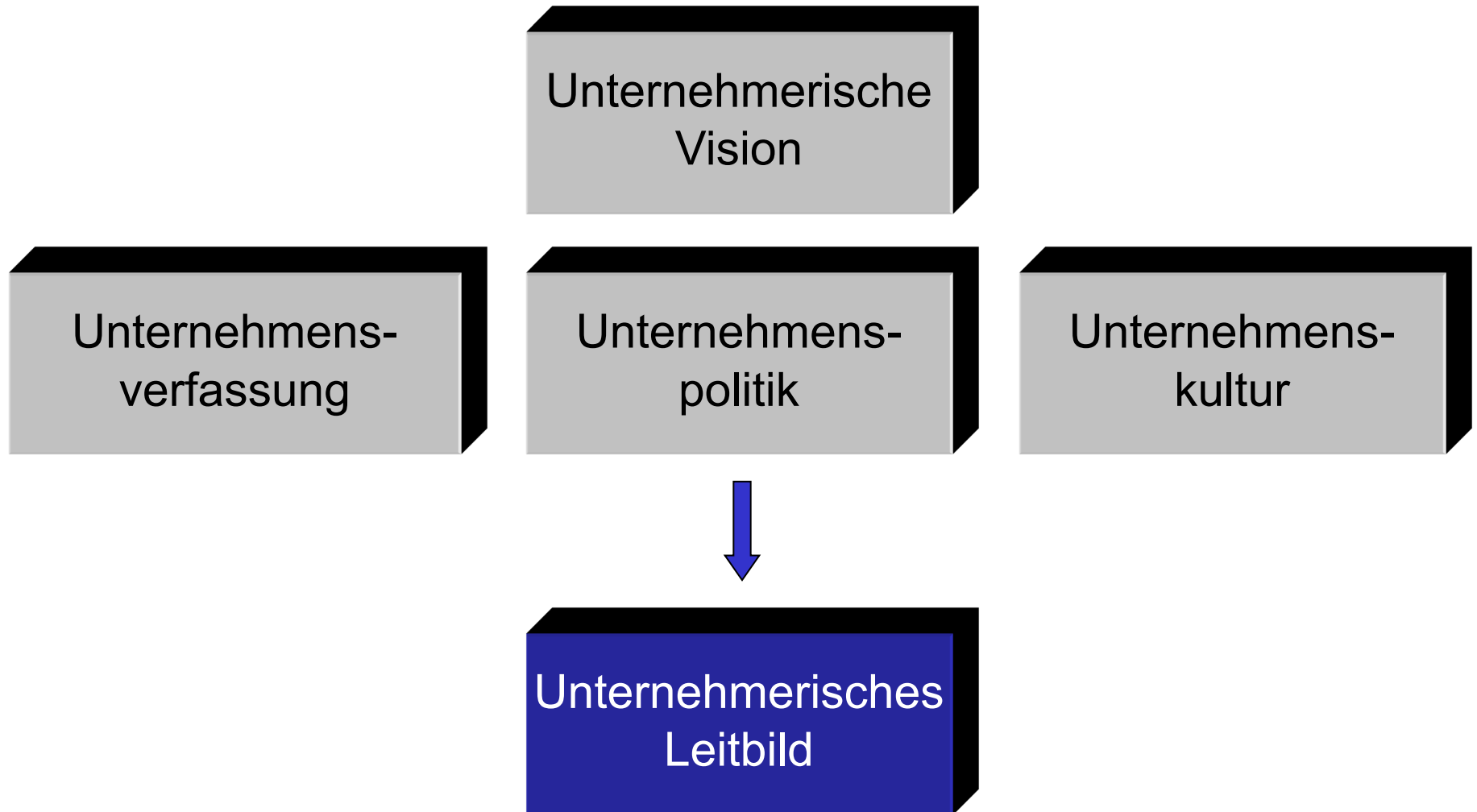
Leitbild, Grundsätze, Organisation

Normative Führung

- Langfristige Sicht
- Sicherstellung der Lebensfähigkeit
- Prinzipien, Normen und Spielregeln der Gestaltung, Lenkung und Entwicklung
- Dominierend: Prinzip des Sinns
- Konstituierend: Vision, Unternehmenspolitik, Unternehmensverfassung, Unternehmenskultur
 - ➡ Grundlegend: Unternehmerisches Leitbild

Leitbild, Grundsätze, Organisation

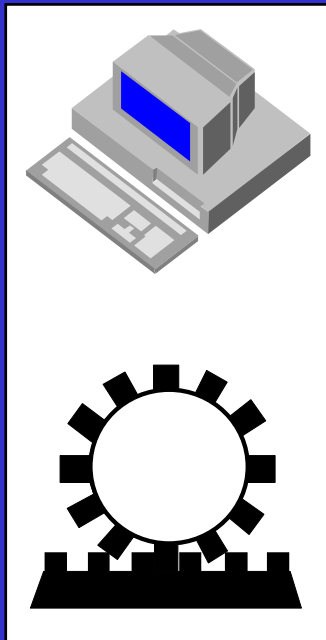
Bausteine der normativen Führung



Leitbild, Grundsätze, Organisation

Wie kommen Unternehmen zu Technologien?

Erkenntnisse und
Phänomene aus
der Forschung



ausschöpfen

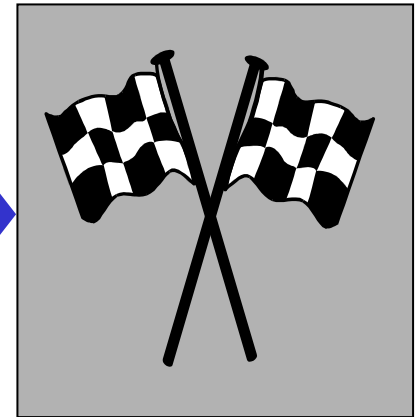
Kunden-Bedürfnisse
aus den relevanten
Markt-Segmenten



erkennen + entwickeln

x

=



Technologie

x

Markt


=

Erfolg

Leitbild, Grundsätze, Organisation

Unternehmerische Bausteine von Innovations-Strategien

Grundsätze der Führung ➡ Grundsätze im Innovations-Management

- 
1. Ausrichtung auf das Ziel
 2. Schwergewichtsbildung
 3. Einfachheit
 4. Sicherheit
 5. Ökonomie der Kräfte
 6. Einheitlichkeit des Handelns
 7. Führbarkeit
 8. Flexibilität
 9. Freiheit des Handelns
 10. Überraschung

1. Schaffen verteidigen
Wettbewerbsvorsprung
2. Konzentration der Projekt-Kräfte
3. Verständliche Innovations-Lösungen
4. Risikoausgleich im Innovations-Portfolio
5. Abstimmung von Zielen und Mitteln
6. Nachhaltige Innovations-Prozesse
7. Minimierung der Führungs-Komplexität
8. Ausnützen externer Koalitionschancen
9. Stärken-Ausbau, Schwächen-Vermeidung
10. Geschickte Markt-Einführungen

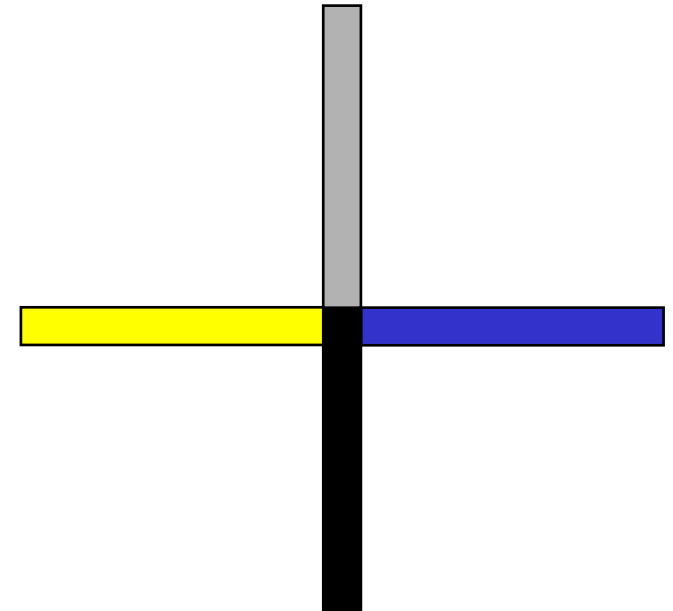
Leitbild, Grundsätze, Organisation

Lesson learned und Aufgabenstellung

Innovativ nachhaltige



Führung



Übungen (Bearbeitung anhand der Nachhaltigkeitsberichte)

1. Welche Organisationsformen haben ROCHE und ABB?
2. Für welche Aufgaben eignen sich Task-Forces?

Leitbild, Grundsätze, Organisation

Nachhaltigkeit bei ABB

1. Wie definiert ABB ihre nachhaltige Unternehmens-Entwicklung?
2. Welche Säulen, mit welchen Elementen, weisen sie in ihrer Nachhaltigkeit aus?
3. Welche Strategien / Prioritäten für die nachhaltige Entwicklung verfolgt dieses Unternehmen?
4. Welche unternehmerische Rolle nimmt dabei die technologische Innovation ein?

Quelle: Nachhaltigkeitsberichte ABB

<https://sustainabilityreport.abb.com/2021/servicepages/downloads/files/sustainability-performance-abb-csr21.pdf>

Leitbild, Grundsätze, Organisation

Unternehmerisches Leitbild von HELSANA

1. Welches sind die Säulen des Unternehmens-Leitbildes von HELSANA?
2. Welche Kern-Aussagen werden bezüglich Markt und Kunden definiert?
3. Welche Kern-Aussagen werden bezüglich Technologie und Innovation formuliert?

Quelle: Unternehmens-Leitbild HELSANA

Agenda

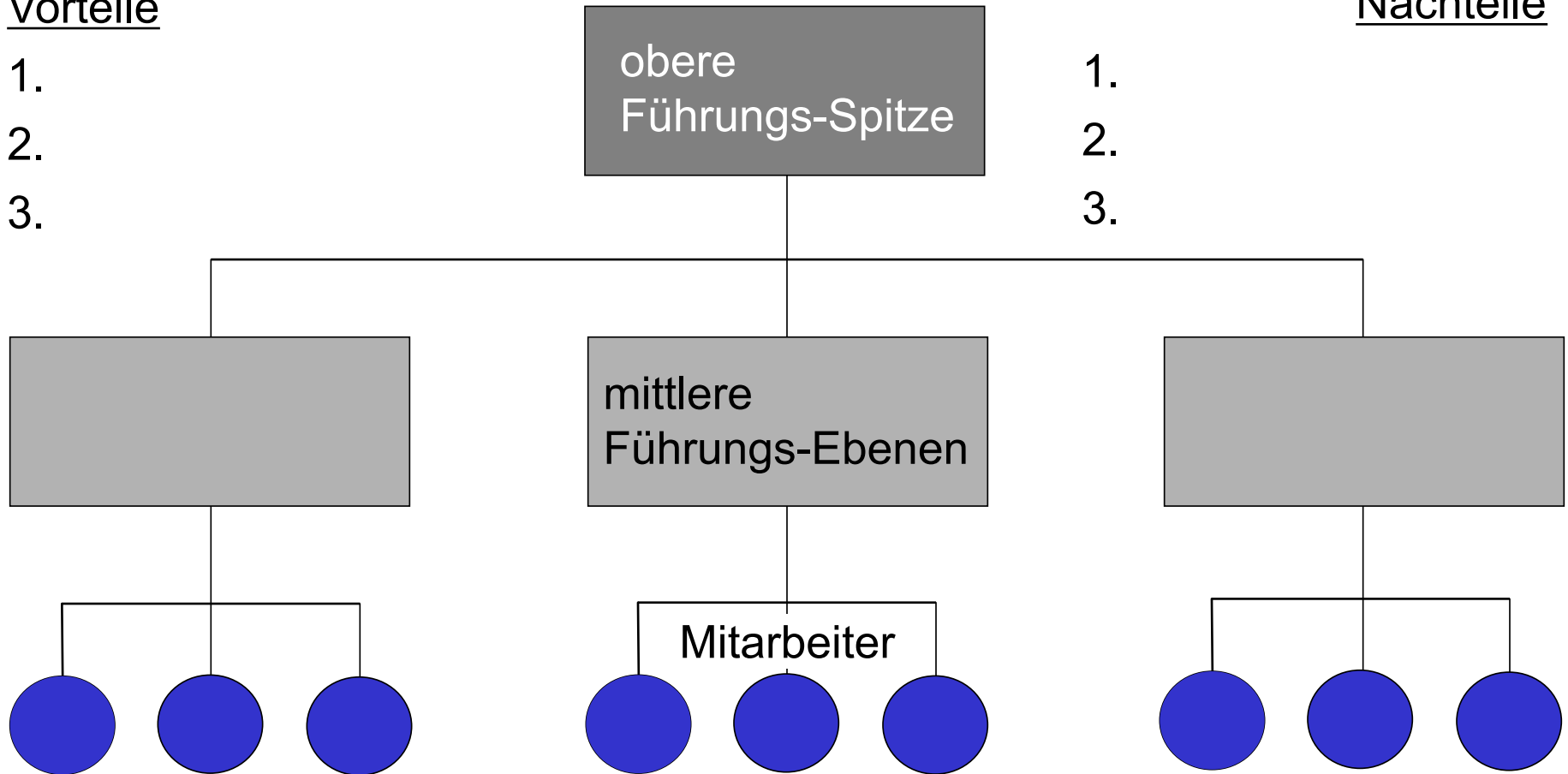
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Linien-, Sparten oder Profit-Centre-Organisation

Einlinien-System mit einheitlicher Führung

Vorteile

- 1.
- 2.
- 3.



Nachteile

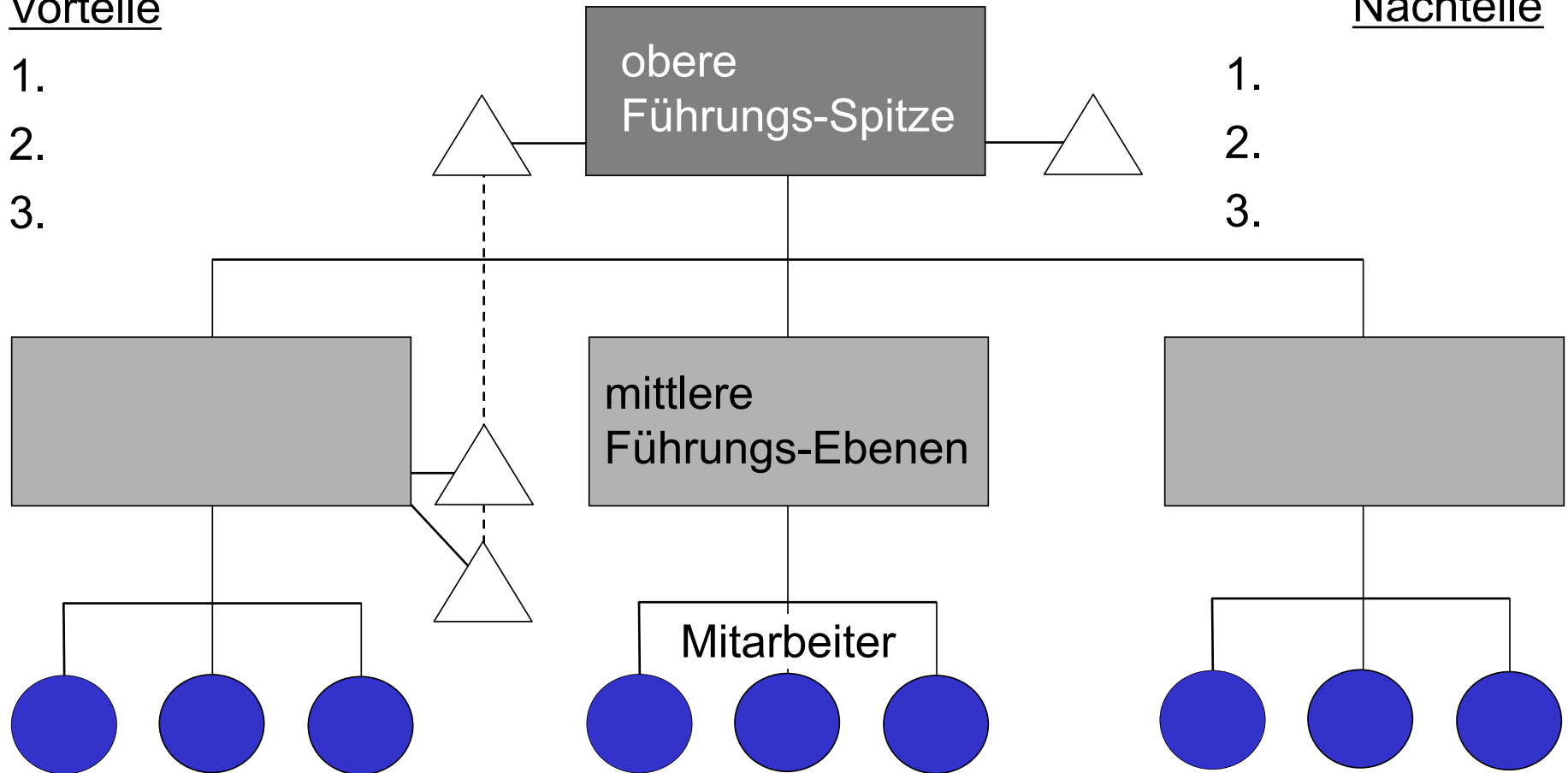
- 1.
- 2.
- 3.

Stab-Linien-Organisation

Stablinien-System mit einheitlicher Führung und Stabsstellen

Vorteile

- 1.
- 2.
- 3.



Nachteile

- 1.
- 2.
- 3.

Mehrlinien-Organisation

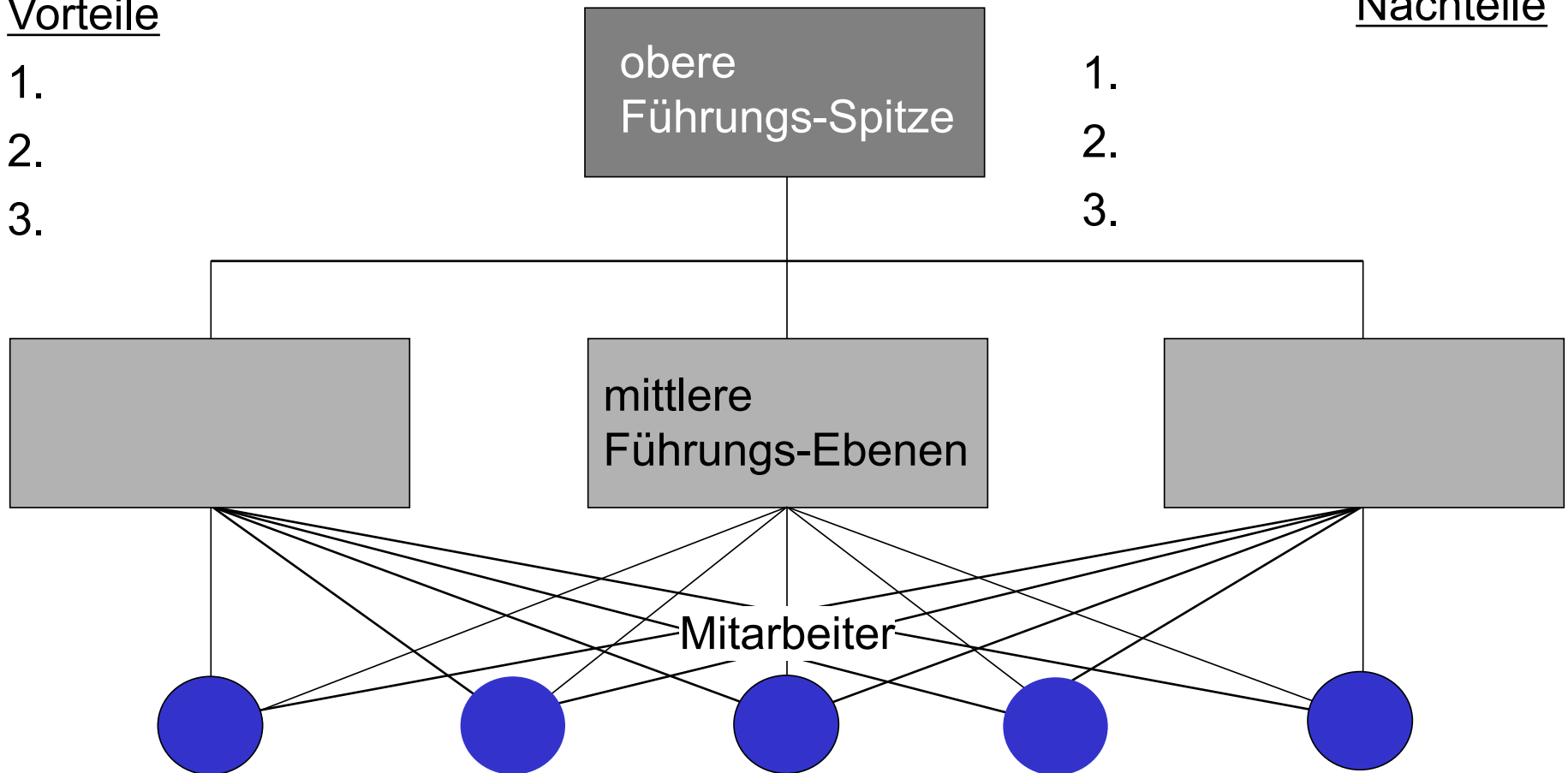
Mehrlinien-Organisation mit Mehrfachunterstellung

Vorteile

- 1.
- 2.
- 3.

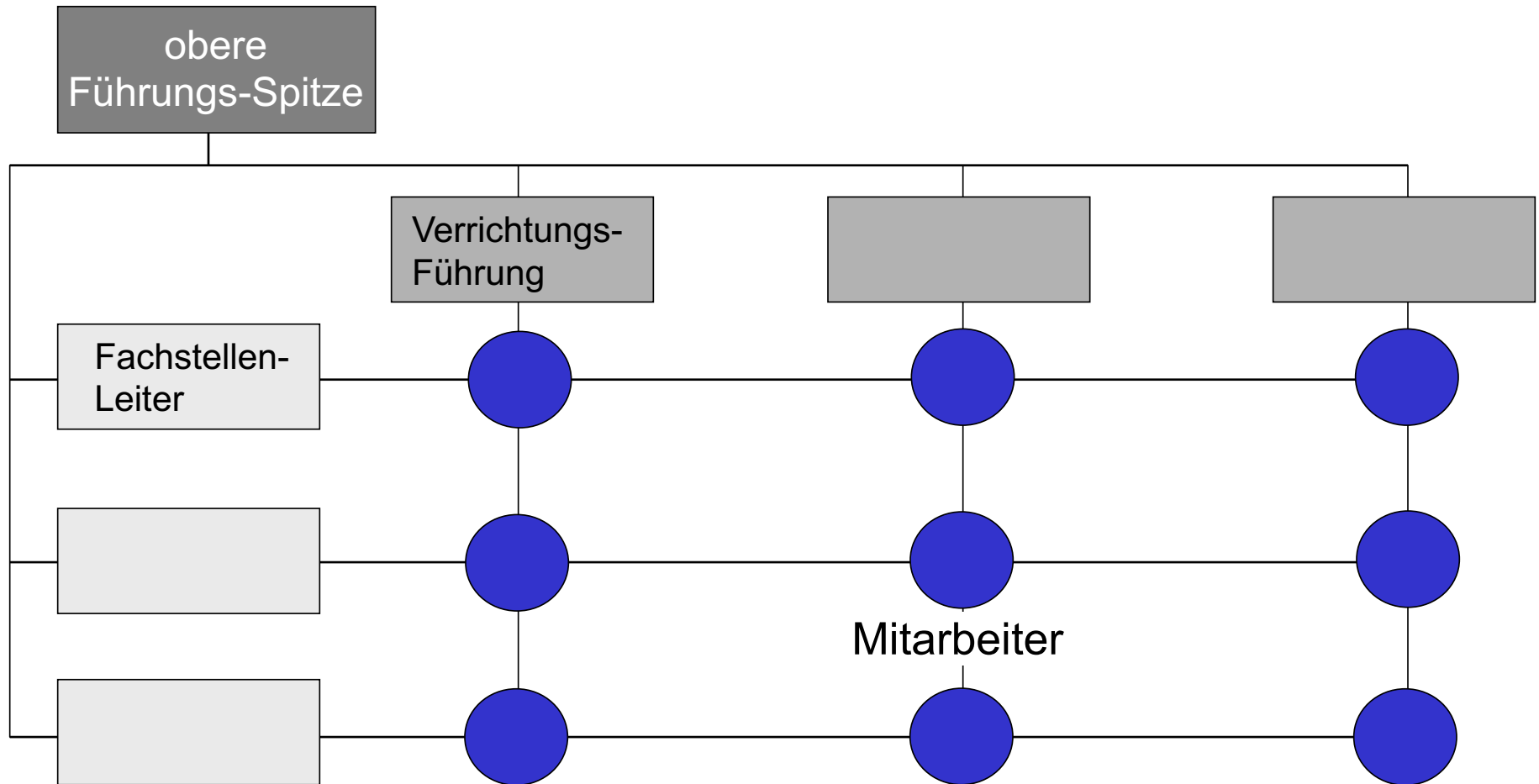
Nachteile

- 1.
- 2.
- 3.



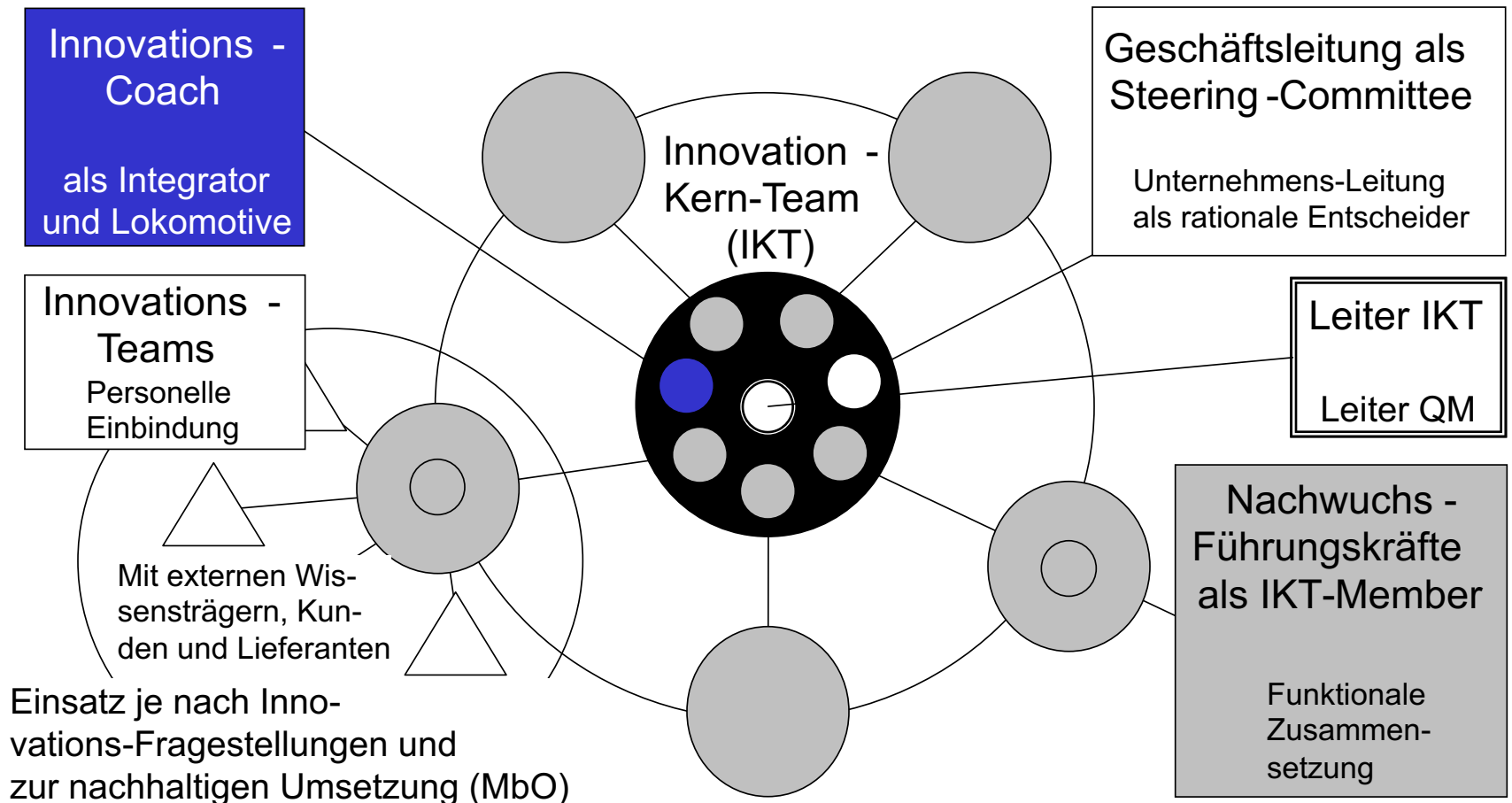
Matrix-Organisation

Organisation nach Verrichtung wie Objekten, Regionen, Projekten



Task-Force-Organisation

Beispiel einer Sekundär-Organisation als Projekt-Organisation



Persönliche Führungsstile

Boss, Leader, Manager

1. Boss

Command & Control: klare Aufträge und Weisungen, regelmässige Kontrolle der Erfüllung. Klassisches, veraltetes Führungsmodell. Er ist *über* dem Team, das Team tritt nicht in Erscheinung

2. Leader

Vision & Frontman: hohe Ziele und starker Drang nach vorne. Vorbild, Motivator, der der Mannschaft die Fahne *voraus* trägt.

Er ist gegenüber dem Team exponiert.

3. Manager

Process-Enabler & Supporter: steht *hinter* seinem Team, bereitet den Boden und unterstützt. Das Team erntet die Lorbeeren.

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Organisation der Informationssicherheit

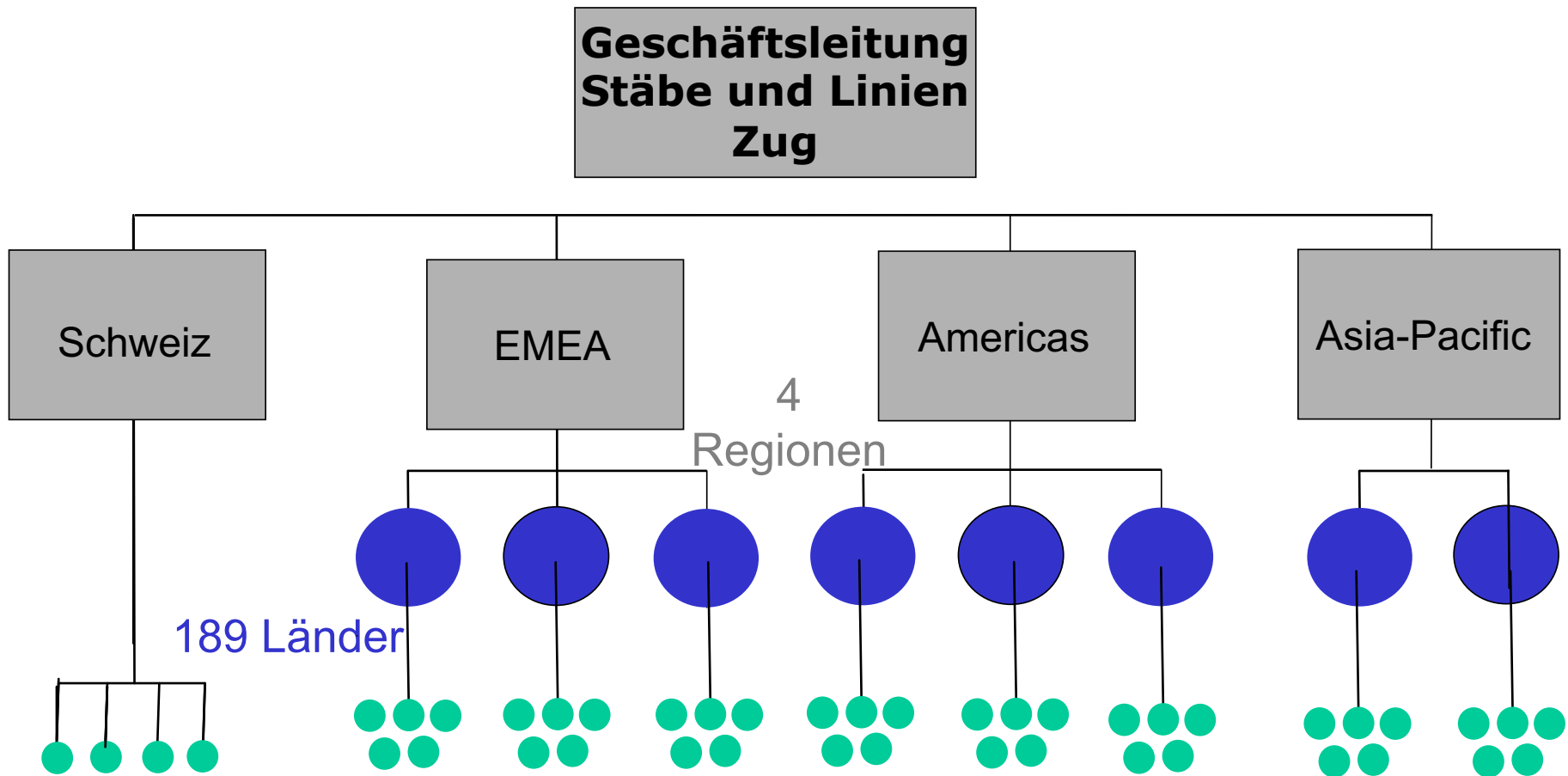
Wie sieht diese im Vergleich zur Unternehmensorganisation aus?

1. Zu beachten: Prozesse und Zuständigkeiten in der Firma
2. Nahe an der Geschäftsleitung, Struktur meist ähnlich der des Unternehmens
3. AKV: autonom, eigenes Budget und Ressourcen
4. Fachgebundene Richtlinienkompetenz

Organisation der Informationssicherheit

Landis & Gyr kurz nach der Übernahme durch Siemens

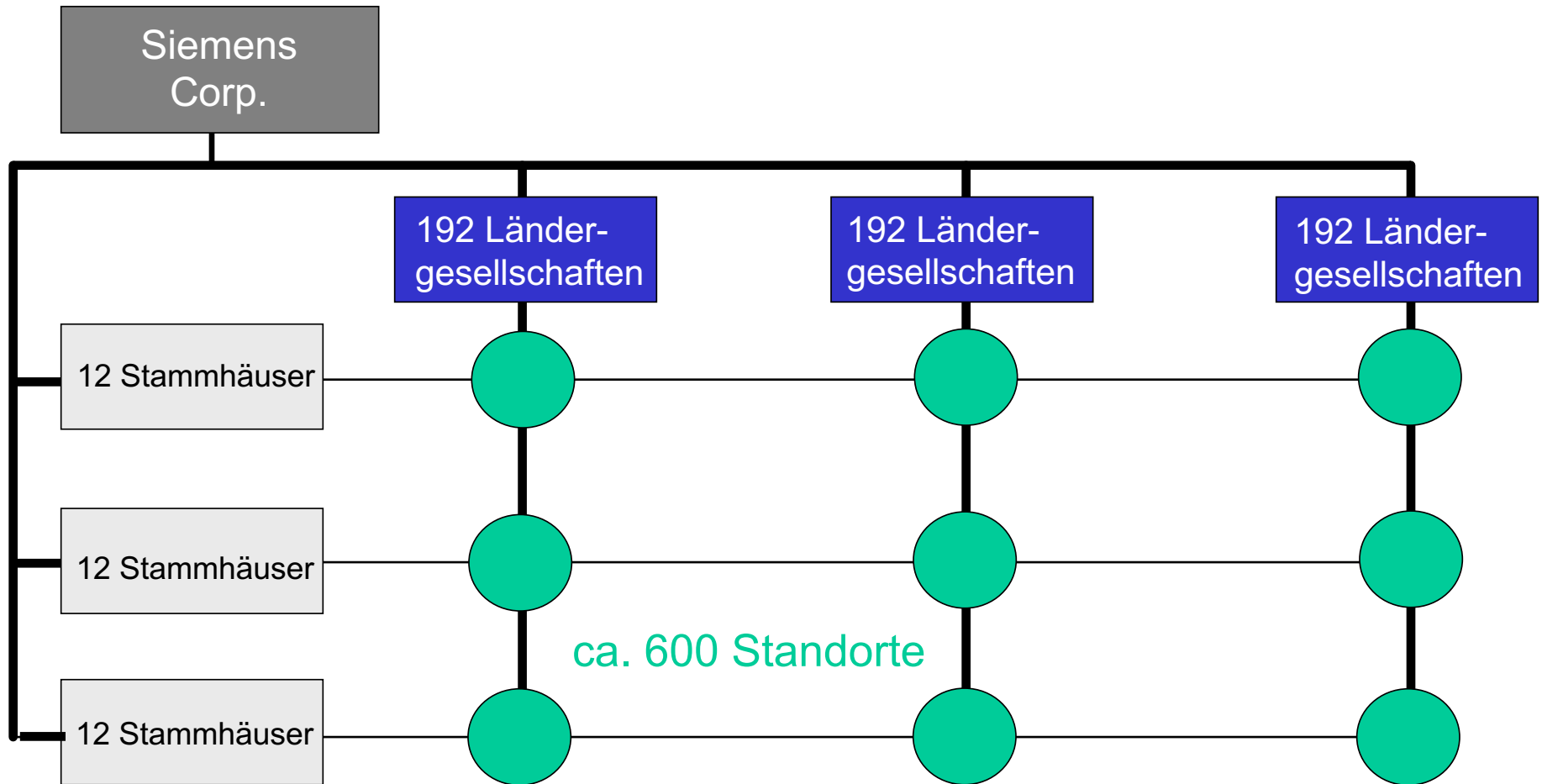
Zentrale Führung aus dem HQs Zug



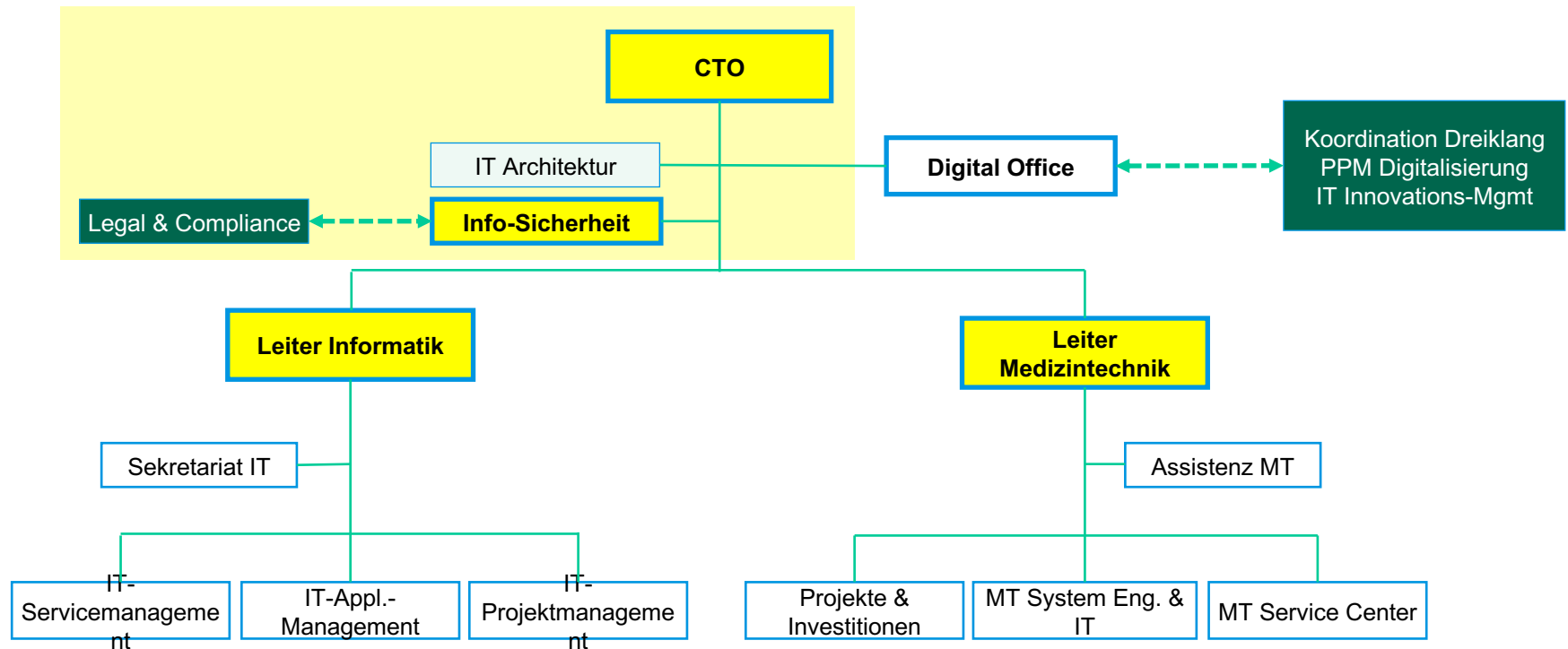
Organisation der Informationssicherheit

SBT 3 Jahre nach der Übernahme durch Siemens

Organisation nach Landesgesellschaften und Stammhäusern



InfoSec @ Kantonsspital Aarau



Entscheidungswege

- Entlang der Linie
- Komitees
- Direkt auf Fachebene
- Mittelbar durch Stakeholder
- Indirekt via Lobbying

Entscheidungskatalysatoren

- Vorbereitung
- What if ...?
- Lobbying
- Stakeholder Management
- Drei Optionen
- Auftreten

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Concept of organization Structure

- Line organization structure
- Functional organization structure
- Line and Staff organization structure
- Committee organization structure
- Matrix organization structure
- Virtual organization structure
- Cellular organization structure
- Team organization structure
- Boundaryless organization structure
- Inverted pyramid organization structure
- Lean & Flat organization structure

Line organization Structure

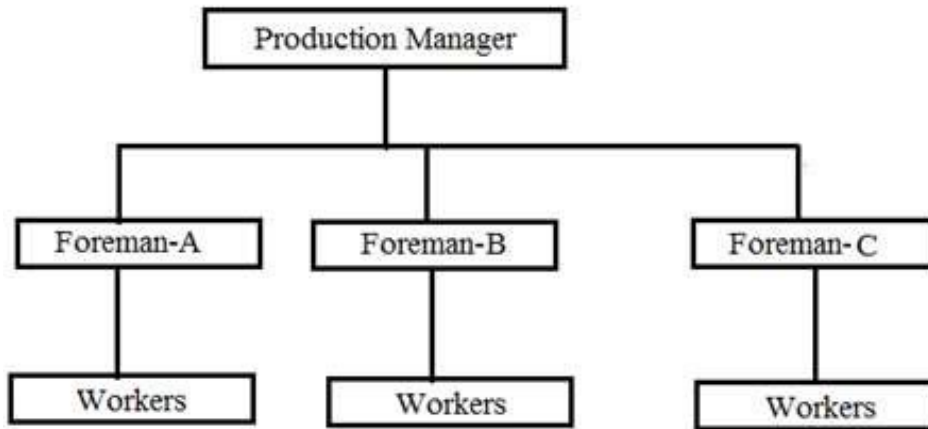
It is also known as scalar, military, or vertical organization and perhaps is the oldest form.

There are two types:

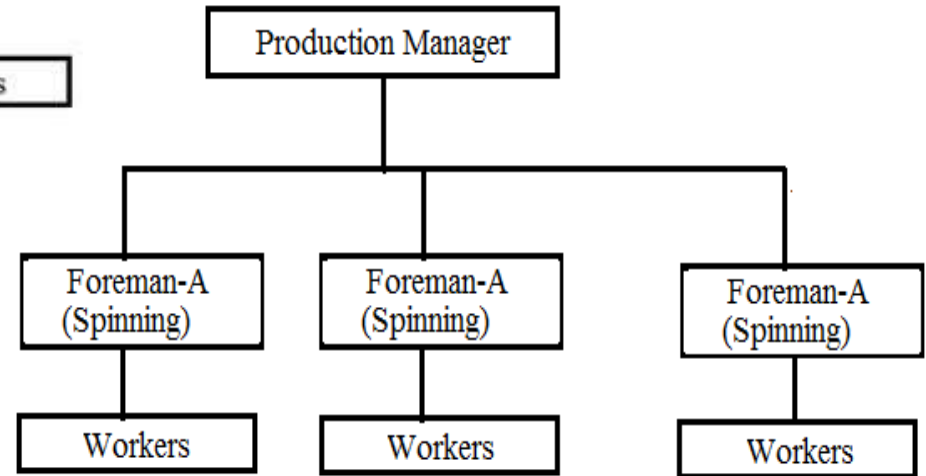
- Pure Line organization
- Departmental Line organization

Example: Line organization Structure

Pure Line Organisation



Departmental Line Organisation



Line organization Structure

Characteristics:

- Line authority and instructions are vertical, that is, they flow from the top to the bottom.
- The unity of command is maintained in a straight line.
- All persons at the same level of organization are independent of each other.
- This structure specifies responsibility and authority for all the positions limiting the area of action.

Line organization Structure

Mertis

- Simplicity
- Discipline
- Prompt Decisions
- Orderly Communication
- Easy Supervision & Economical

Demerits

- Lack of Specialisation
- Absence of Conceptual Thinking
- Autocratic Approach
Problems of coordination

Suitability: It is suitable to small – scale organizations where the number of subordinates is quite small.

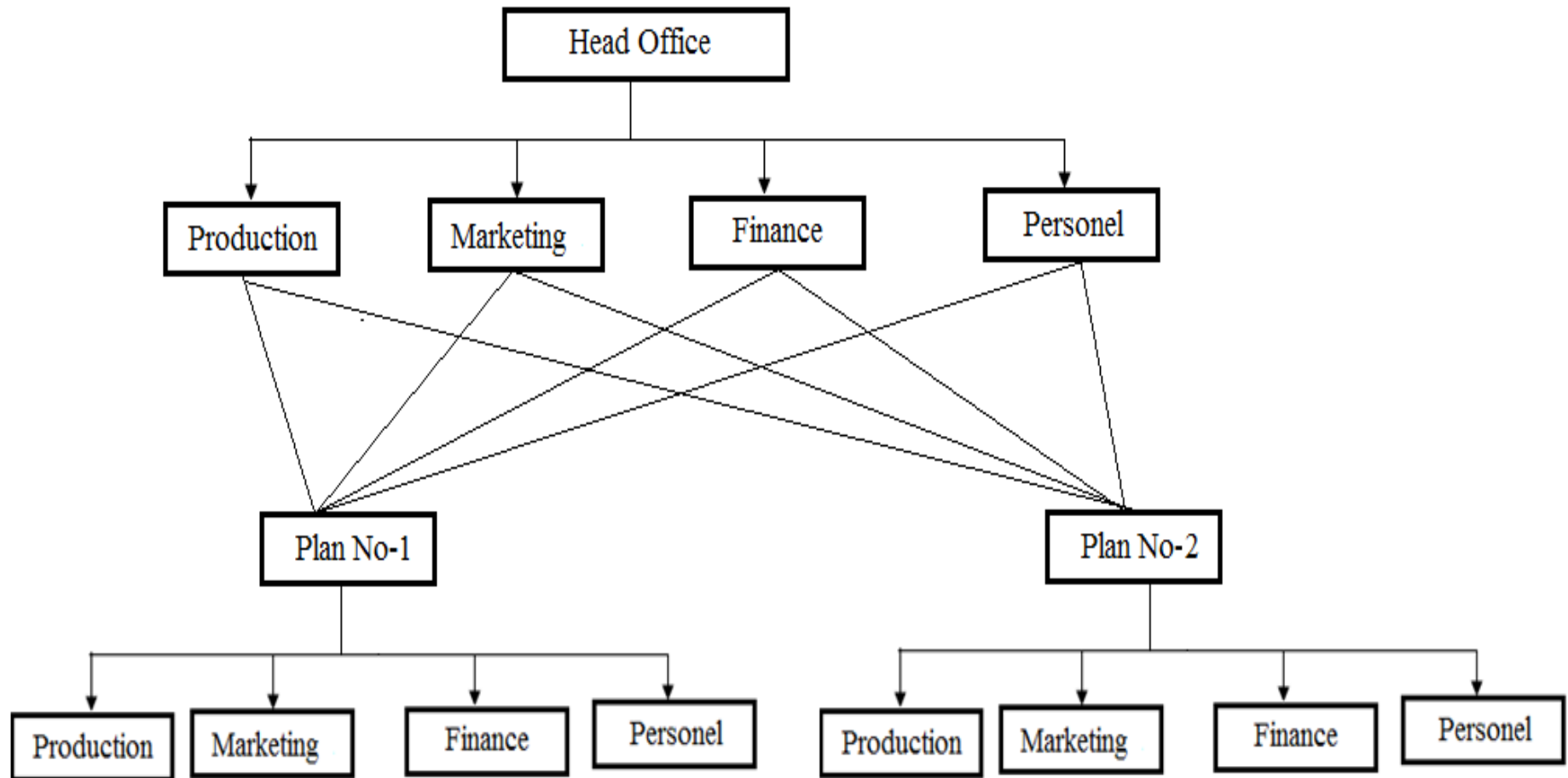
Functional organization Structure

- Functional structure is created by grouping the activities on the basis of functional required for the achievement of organizational objectives
- For this purpose all the functions required are classified into basic, secondary and supporting functions

Features:

- The whole activities of an organization are divided into various functions
- Each functional area is put under the charge of one executive
- For any decision, one has to consult the functional specialist
- Limited span of control is there.

Example: Functional organization Structure



Functional organization Structure

Mertis

- High Specialisation
- Clarity in functioning
- No duplication
- Satisfactions
- Control and Coordinate

Demerits

- Calls for more coordination
- Clear line of authority
- Slow decision making

Suitability: The establishment of functional organization structure becomes necessary as a small organization grows and business activity becomes more and more complete.

Line & Staff organization Structure

Characteristics:

- It refers to a pattern in which staff specialists advise line managers to perform their duties.
- Line people will give advices
- The staff people have the right to recommend, but have no authority to enforce their preference on other departments

Line & Staff organization Structure

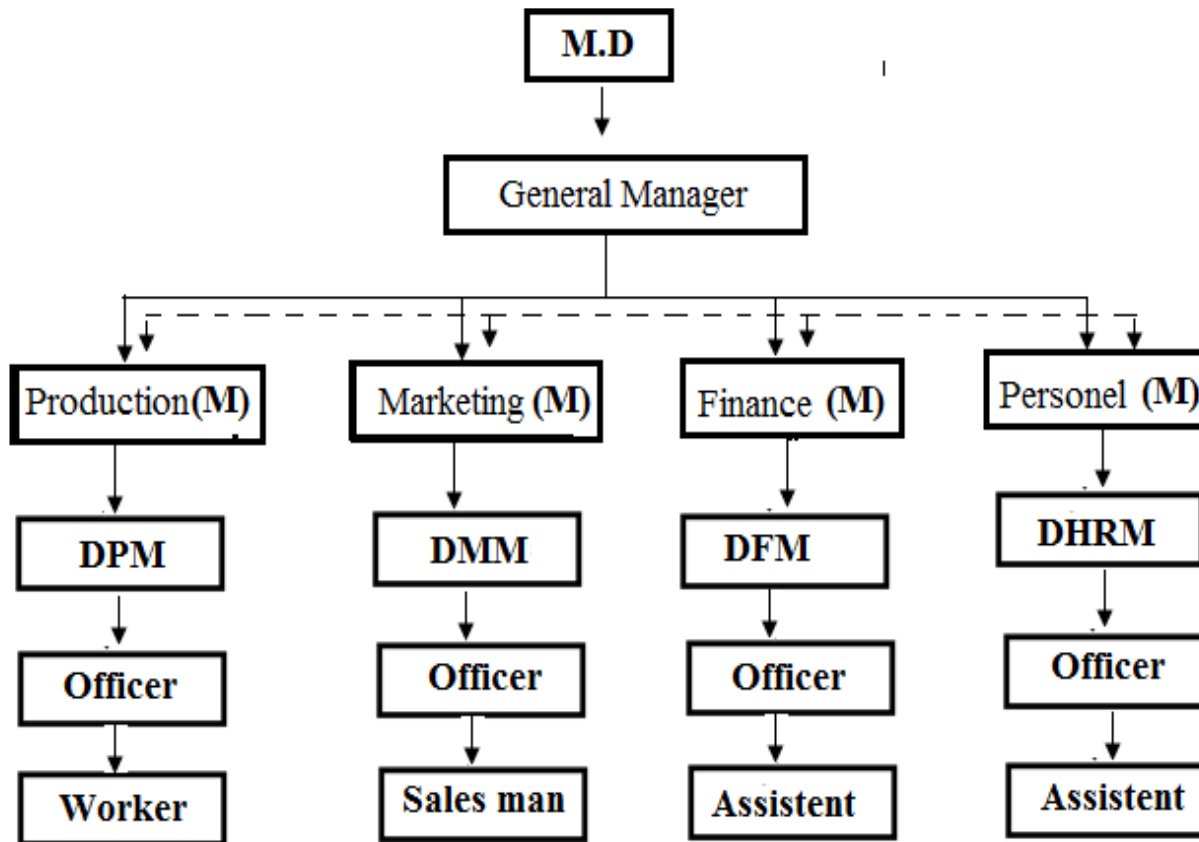
Features:

- This origin structure clearly distinguishes between two aspects of administration viz., planning and execution.
- Staff officers provide advice only to the line officers; they do not have any power of command over them.
- The staff supplements the line members.

Suitability:

It can be followed in large organizations where specialization of activities is required, because it offers ample opportunities for specialization

Example: Line & Staff organization Structure



Line & Staff organization Structure

Advantages:

- It adds functional specialists to the pure line organization and thus aims at combining the merits of the two.
- It brings expert knowledge to bear upon management.
- Functional specialists provide expert advice to the management on wide-ranging matters.
- It provides for better placement and utilization of personnel and leads to more skill development

Line & Staff organization Structure

Demerits:

- The line and staff relationship often lead to many frictions and Jealousies
- Line managers may depend too much on staff experts and thus lose much of their judgment and initiatives
- The staff experts may remain ineffective because they do not get the authority to implement their recommendation.

Conflicts between Line & Staff

- More frequently line and staff relations become potent sources of friction, inefficiency and organizational ill health.
- Rivalry between them very often takes the form of animosity. Both line and staff have their own viewpoints to offer relating to this problem.

Conflicts between Line & Staff

Line Point of View:

- Staff undermines line authority
- Staff think in vacuum
- Staff steals Credit
- Staff fails to keep the line informed
- Staff fails to give the sound advice to line

Conflicts between Line & Staff

Staff Point of View:

- Lack of authority to command line subordinates
- Resistance to change by the line
- Inability to make proper use of staff
- Allured by the special skill and ability in a particular field the staff is tempted to think that the solution to the problem recommended by him is best and needs be enforced on the line manager. Line is also charged with being short-sighted and resistant to change

Conflicts between Line & Staff

How to minimise:

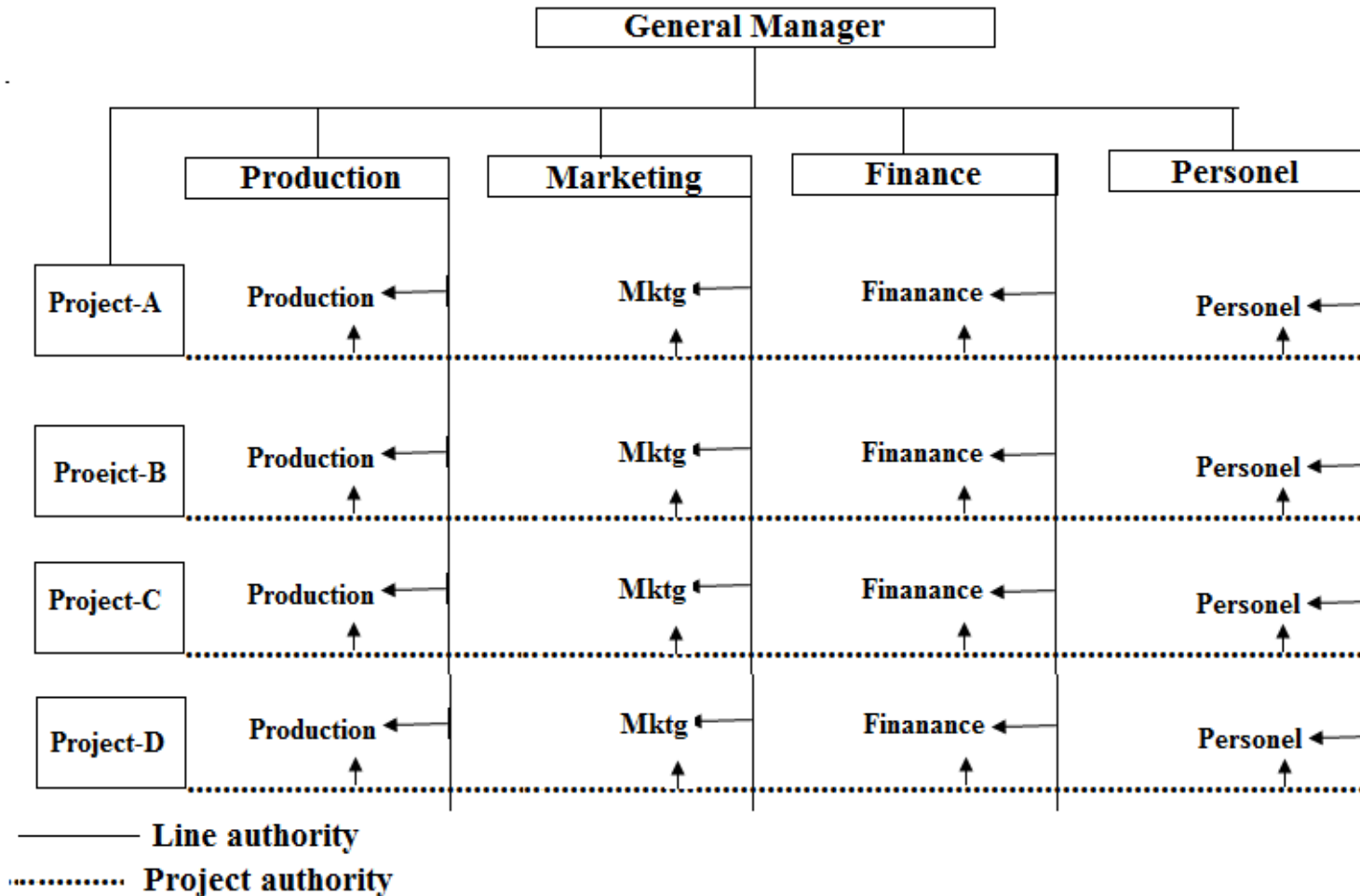
- Line and Staff should understand their proper position in the organisation
- Line should be educated and encouraged to use staff effectively
- Staff should render complete advice on the problem concerned staff should constantly strive to acquire and increase its proficiency

Matrix organization Structure

- Matrix organization structure is essentially a violation of unity of command
- Matrix structure is the realisation of two-dimensional structure which emanates directly from two dimensions of authority.
- In matrix organization structure, a project manager is appointed to co-ordinate the activities of the project.
- Personnel are drawn from their respective functional departments.
- Each functional staff has two bosses his administrative head and his project manager.

$$\text{Matrix Organisation} = \text{Matrix Structure} + \text{Matrix System} + \text{Matrix Culture} + \text{Matrix Behaviour}$$

Example: Matrix organization Structure



Matrix organization Structure

Mertis

- It offers operational freedom & flexibility
- It focuses on end results.
- It maintenance professional Identity.
- It holds an employee responsible for management of resources

Demerits

- It calls for greater degree of coordination
- It violates unity of command.
- Difficult to define authority & responsibility.
- Employee may be de motivated.

Suitability: It can be applicable where there is a pressure for dual focus, pressure for high information processing, and pressure for shared resources. E.g. Aerospace, chemicals, Banking, Brokerage, Advertising, etc.

Committee organization Structure

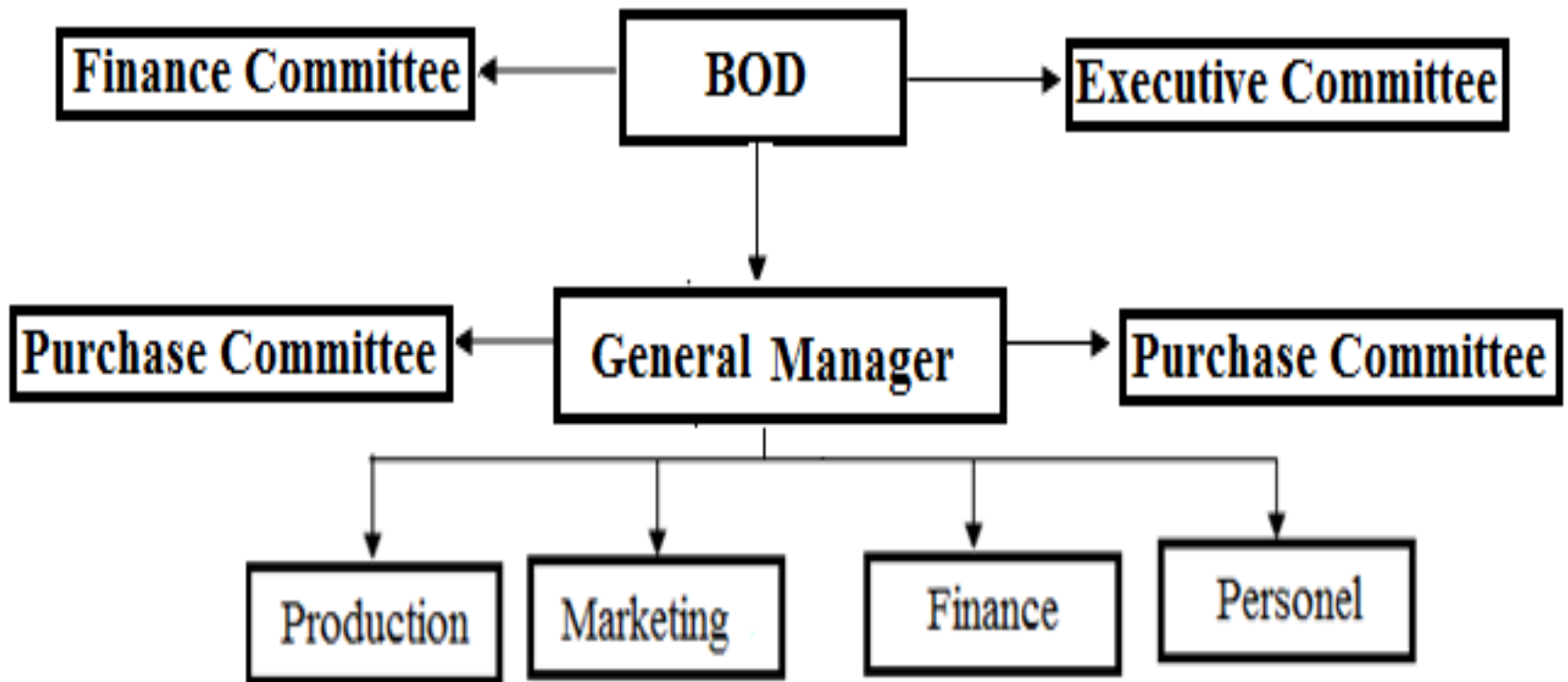
- A committee does not represent a separate type of organization like line and staff, or functional.
- A committee may be defined as a group of people performing some aspects of Managerial functions.

Definitions:

“A committee consists of a group of people specifically designated to perform some administrative work”
(W.H. Newman)

“ A committee is a body of persons appointed or elected to meet on an organized basis for the consideration of matters brought before it”. (Allen)

Example: Committee organization Structure



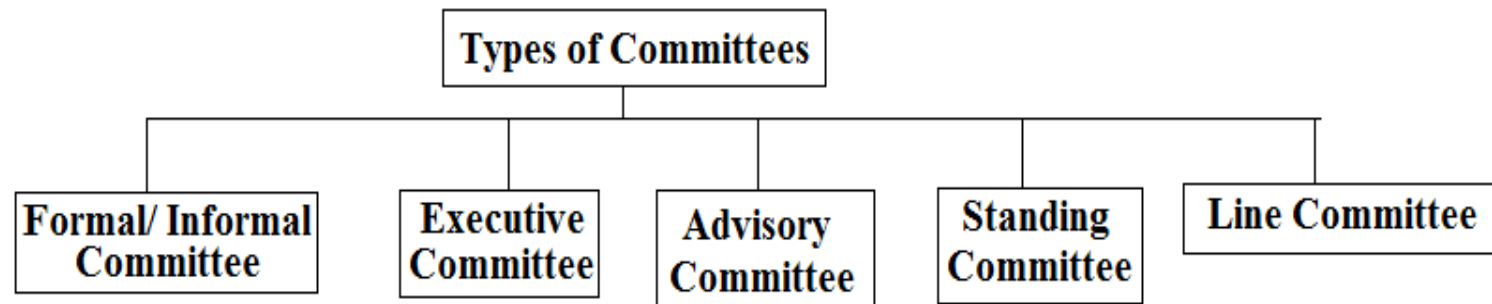
Committee organization Structure

Mertis

- Pooling of Knowledge
- Effective co-ordination is available
- Effective Communication
- Motivation through participation of employees

Demerits

- Slow decisions
- Most Expensive
- Difficult to maintain secrecy
- Compromise



Boundaryless organization Structure

Problems with traditional organizational structures:

- Slow/poor in responding customer requirement.
Failure to get things to done.
- Customer/vendor has a hard time dealing with the organization.
- Lack of flexibility to changing mission needs/rapidly changing World

Boundaryless organization Structure

What are the boundaries?

- **Vertical:** Boundaries between layers within an organization.
- **Horizontal:** Boundaries which exist between organizational departments.
- **External:** Barriers between the organization and the outside world (Customers, suppliers other govt. committees).
- **Geographic:** Barriers among organization units located in different countries.

Boundaryless organization Structure

What is boundaryless organization?

- It may be defined as an organization structure that can avoid all the barriers
- Boundaryless organization allows free flow of ideas / information / resources throughout the organization and into others
- As the name indicates, a boundaryless organization eliminates internal boundaries among subsystems and external boundaries with external environment
- It is a combination of team and network structures with the addition of temporariness
- The key features of boundaryless organization include knowledge-sharing, absence of hierarchy and bureaucracy
- Creativity, quality, timeliness, increase in speed and flexibility are the benefits the boundary less organization yields

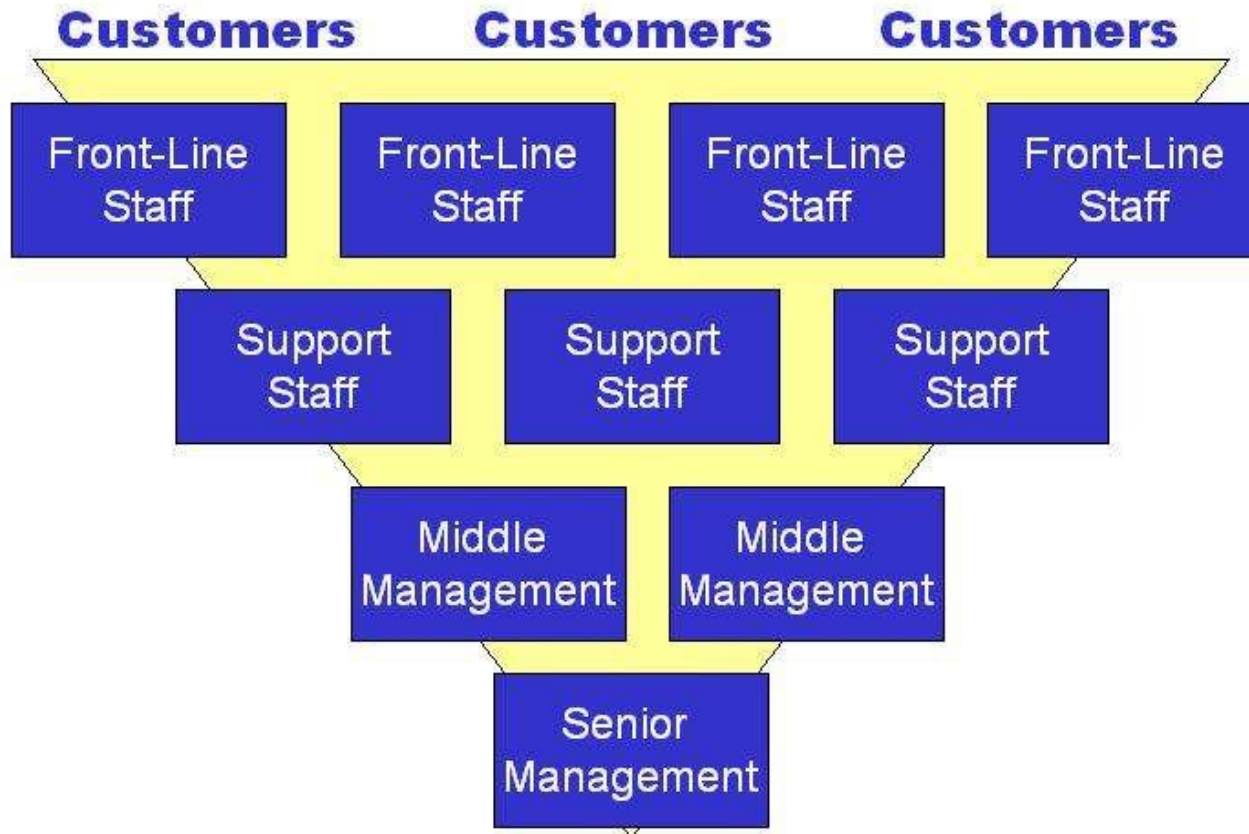
Team organization Structure

- A structure in which the entire organization is made up of work groups or teams is known as “team structure”
- Team structures are both permanent and temporary in nature as situation demands
- “We report to each other” is the main feature of team structure
- It leads to boundaryless organization in a borderless world
- In team structures, we find cross-functional teams meant for improving lateral relations, solving problems, completing special projects and accomplishing routine tasks
- A cross-functional team comprises members from different functional departments such as marketing, finance, HR, production, etc.
- Here employees are more involved and empowered because of reduced barriers among functional areas

Inverted Pyramid organization Structure

- This is an alternative to the traditional chain of command.
- This is a structure, which is narrow at the top and wide at the base.
- For instance, sales people and sales support staff sit on the top as the key decision makers for all the issues related to sales and dealing with the customers.
- Since the sales staffs are in touch with the customer and aware of the requirements of the customers, they are given all the freedom to follow their own best judgment at all levels.

Example: Inverted Pyramid organization Structure



Inverted Pyramid Organizational Structure

Virtual organization Structure

- It facilitates competitiveness in the global markets
- There can be alliance & partnership with other organizations
- It is a flexible organization remove all traditional boundaries
- It is a temporary network of companies that come together quickly to exploit fast changing opportunities
- It is bigger than traditional organizations
- It requires strong IT platform
- It is going to eliminate & avoid all boundaries for the business purpose

Cellular organization Structure

- Organizations structured around the units/cells that complete the entire assembly process are called cellular organizations.
- In cellular organizations, workers manufacture total product or sub-assemblies in teams (cells)
- Every team (cell) of workers has the responsibility to improve or maintain the quality and quantity of its products
- Each team is free to recognize itself to improve performance and product quality
- It is both a lean and flat structure.
- These cells comprise self-managed teams