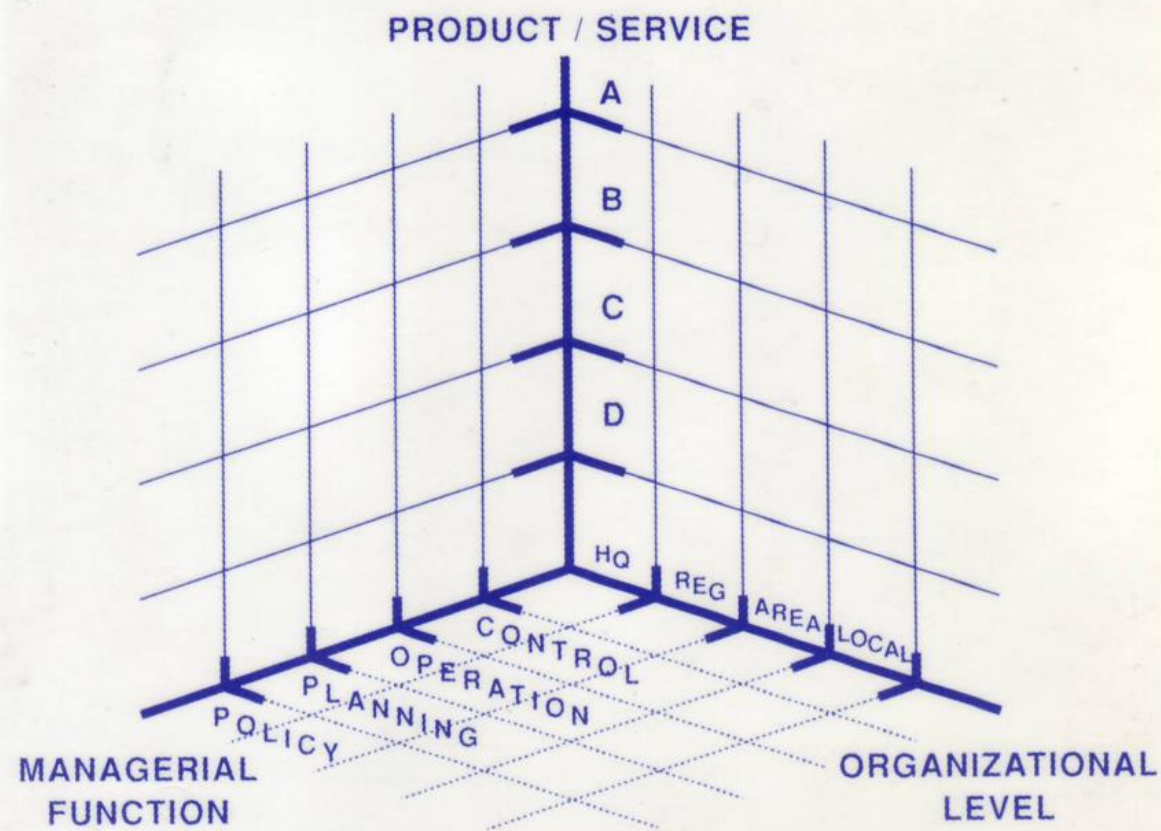


ORGANIZATION STRUCTURE

A SYSTEMIC APPROACH



SAEED RAHNEMA

Approaches to the Study of Social Organizations

- Mechanistic:** comparing human behaviour with a machine.
- Organic:** “ “ “ “ an organ.
- Social/systemic:** “ “ “ social beings.

A machine is consisted of parts with a particular structure and functions..... Each part performs exactly the way the designer has determined... The piece cannot change its status.....External elements cannot affect the performance.

At a higher level of analysis, there came the comparison with organisms. An organ has interaction with its environment... but its place in the larger organic structure is fixed....They function on the basis of pre-programmed designs.

At a higher level, there is a comparison of humans with bees or termites...

Systemic perspective:

System defined: An integrated whole consisted of interrelated parts.

Systems perspective: studying social phenomena as an **integrated whole; holistic approach.**

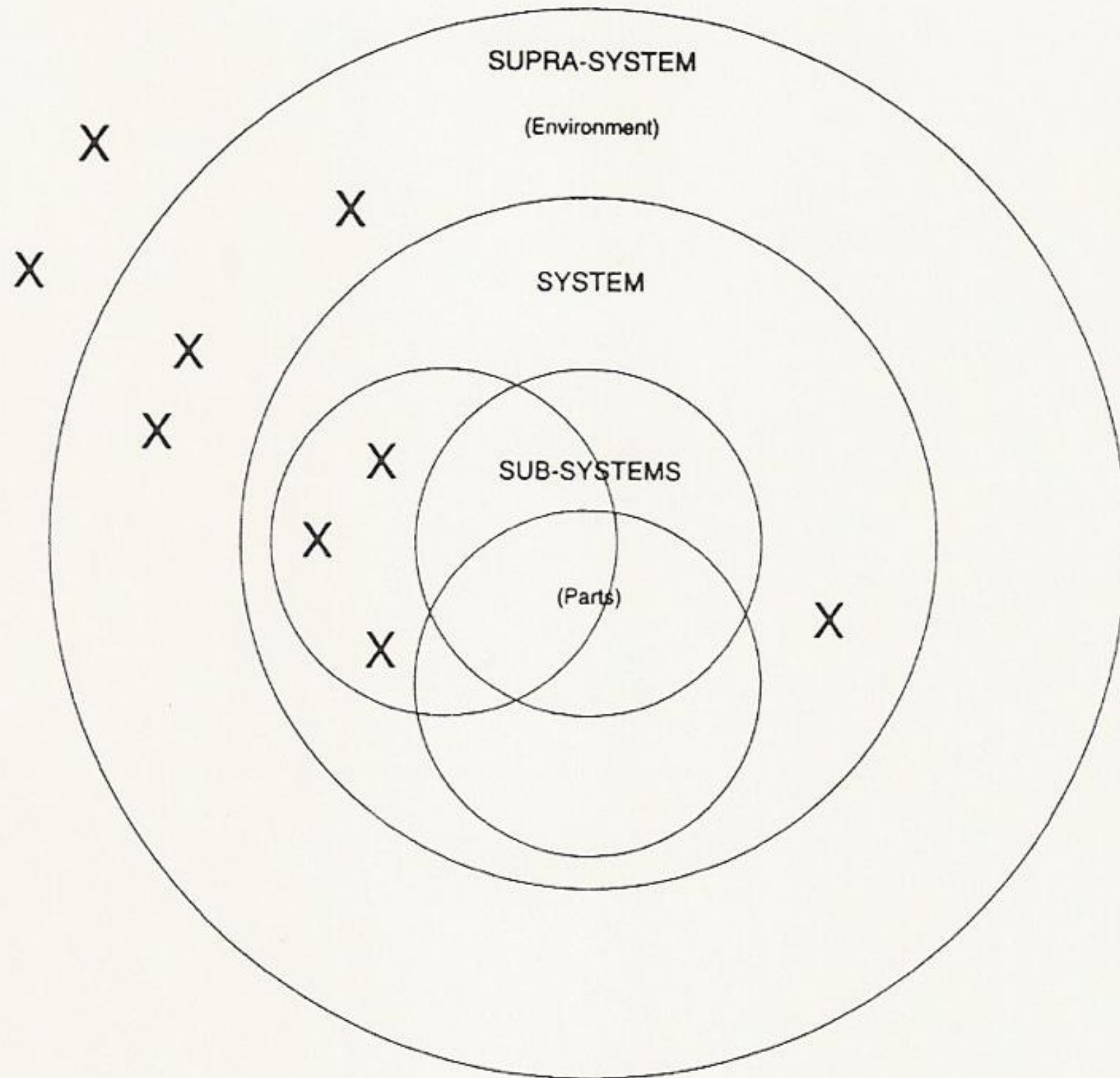
-Earlier perspectives were either inductive, or deductive. Systems approach while deductive, it considers the synergic effects of the parts:

-In the systemic perspective, in an endless continuum of matter, energy and information, wholes are consisted of parts, and themselves are a part of larger wholes and totalities.

Table 1: Characteristics of Closed and Open Systems

CLOSED SYSTEM	OPEN SYSTEM
<ul style="list-style-type: none">-Tendency toward disorder, entropy/equilibrium/static.-Equifinality: final status determined by initial position.-The whole equals the sum total of the parts.-The system's parts are linked with the exchange energy.	<ul style="list-style-type: none">-Tendency toward order neg-entropic/dynamic.-Final status determined from different initial status and vice versa.-The whole is different than the sum total of the parts.-The system's environment and parts are linked with the exchange of information.

Figure 1: Systemic Hierarchy for Analysis



Planning, General Introduction

- Planning: is designing a desired future.
- -Every social system has to fulfill a set of **needs** (social, econ, cultural, etc)
- -For which it has to mobilize its **resources** (human, financial, material – natural, infrastructural.
- -The main question is that **needs are unlimited**, but **resources are limited**: Thus since resources are not sufficient to fulfill all needs, then there is the question of **priority**.
- -Planning is the process of allocation of resources to fulfill the needs.
- Levels:
- Macro (national, provincial, local),
- Mezzo (industry),
- Micro (corporate),
- Project.

Different Approaches to Macro Planning

- **-Centralized planning:** Socialist or in formerly socialist systems. Former USSR, China
- **-Market-driven,** yet degrees of government involvement with least planning. US, Canada
- **-Indicative planning:** France, Japan
- -In one extreme, government plans everything, problems of such planning unworkable within a gigantic I/O model. Situation changes, plan has to change. Etc
- -The other extreme claims that government should not intervene, and even the name planning is avoided. In reality, governments even in the US have much involvement in the economy: government budget, state regulatory commissions, government procurements, other policies.
- -Indicative planning, a vision without details that somehow shows the direction of the future needed. If everything left to market, corporations only look at their own interests and not national interests.
- -These planning types, depending on the political system, are either:
- -Imperative: must be followed
- -Indicative: Suggests and encourages

Totality of planning:

- **Macro:** sectors, resources, actors, regions, process
- **Micro/corporate:** products/services, resources, regions, process
- **Project:** tasks, resources, process
- Matrices
- -Resources: Human, Financial, Material
- -Time frame: Long-range/strategic; Mid-term; Short-term
- -Process: Preparation, approval, implementation, revision
- **Vision vs mission:**
- Vision defines where organization wants to be in future.
- Mission defines where organization is now at present.

Ends Types

- -Planning is about achieving a desired end. There are three types of ends:
- **Goals:** Those ends that we expect to attain within period covered by the plan.
- **Objectives:** Those ends that we do not expect to attain within the period, but which we hope to attain later.
- **Ideals:** Those ends that are unattainable but towards which progress is possible.
- Planning ought to involve all the three types, on the basis of which following planning types are determined:
- **Operational:** Short-term/inactive; consist of selecting means for pursuing goals.
- **Tactical:** medium-range/reactive: selecting means for pursuing objectives.
- **Strategic:** Long-range/pre-active: selecting means for pursuing ideals.

Planning and Policy

- Preparation, approval, implementation, control, revision
- Apart from strategic plan, need to consider policy: “What a government chooses to do or not to do”
- **Policy process:**

Process \ Actors	Policy Formulation	Policy Decision	Policy implementation	Policy Review
Politicians		+		+
Civil Servants	+		+	+
Business	+			+
Labour	+			+
Citizens	+			+
Media				+

Operating principles of planning

- Participative principle: All levels should be involved: teams consisted of 3 levels, lower, same, higher echelons.
- Chart
- Continuity: continuous updating and adjusting, environmental change
- Holistic: totality

CONTROL

- Process of checking the actual performance with the expected or anticipated performance, and prevent deviation.
- **Pre-requisites of control:**
- Planning component: without plan no control is possible.
- Organizational component: Organization structure: should be decentralized
- Organization behaviour: trust, dilemma of delegation.
- **Mechanisms of control:** Inspection, audit. (is reactive), MIS
- **-Cybernetics:** mechanistic automated control
- Two sub-systems, regulator and regulated, linked through signals
- Process: I/O, feedback
- Components of cyb: (**G**) Goal State, (**I**) Immediate State, (**E**) Error detection, (**E***) Effector
- Differences of cyb and its applications for humans and social.

Figure 2: Process of Cybernetic Control

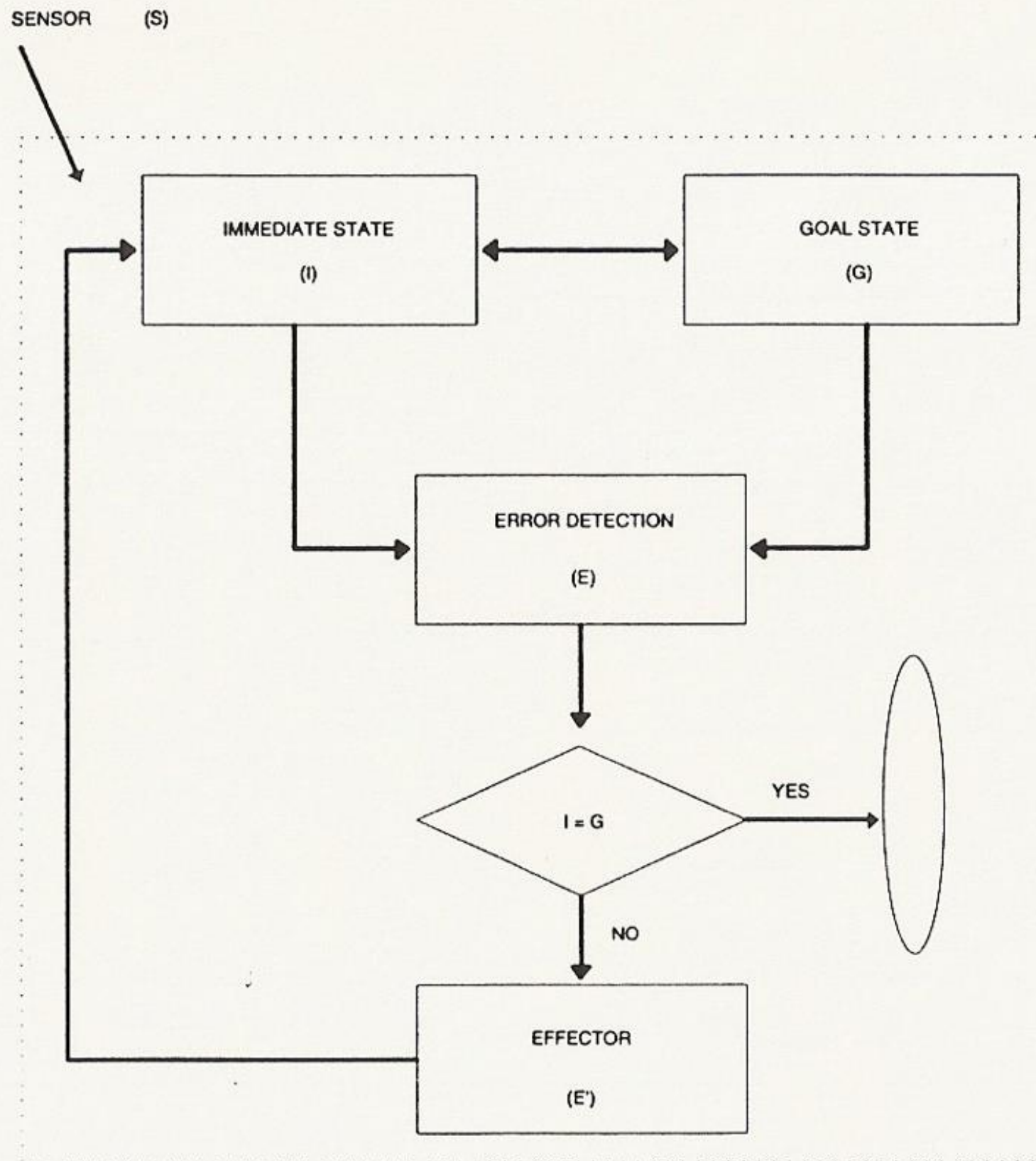


Table 2: Major Aspects of Organization Theories

	Theory	Assumptions	Organizational Concepts	Theoretician
EARLY	Classical	<ul style="list-style-type: none"> -rationality/efficiency -hierarchy -people as constant -Hobbsian view of human beings -external environment as constant -formal structure -rules, regulation -one best way -specialization 	<ul style="list-style-type: none"> -division of labour -functional/scalar principals -line and staff -span of control -unity of command -central coordination -close supervision 	Weber, Taylor, Fayol Mooney, Reilly, Urwick, Gulick
	Neoclassical	<ul style="list-style-type: none"> -motivation -satisfaction -coordination -human relations -informal structure 	<ul style="list-style-type: none"> -classical concepts, -wide span of control -group dynamics -human self-control 	Follet, Bernard, Rethesberger, Phifner, Sherwood, Hermans, Simon, McGregor
MODERN	Systems/Cybernetics	<ul style="list-style-type: none"> -wholes -totalities -open system -environmental change -interrelations among sub-systems -dynamic status -communication and control -feedback 	<ul style="list-style-type: none"> -system/sub-system -integration -adaptation -matrix relations 	Bertalanffy, Laszlow, Beer, Ackoff, Buckley, Wiener
	Contingency	<ul style="list-style-type: none"> -wholes -environmental change -technological change -no one best way -situational nature of management practices 	<ul style="list-style-type: none"> -organizations as information processors -structures depend on type of task, technology and environment 	Woodward, Thompson, Lawrence and Lorsch, Galbraith
	Learning Organization	<ul style="list-style-type: none"> -organization as a product of how people think and interact 	<ul style="list-style-type: none"> -systems -personal mastery -mental models -shared vision -team learning 	Senge et al.

Figure 3: Horizontal and Vertical Expansion
of an Organization

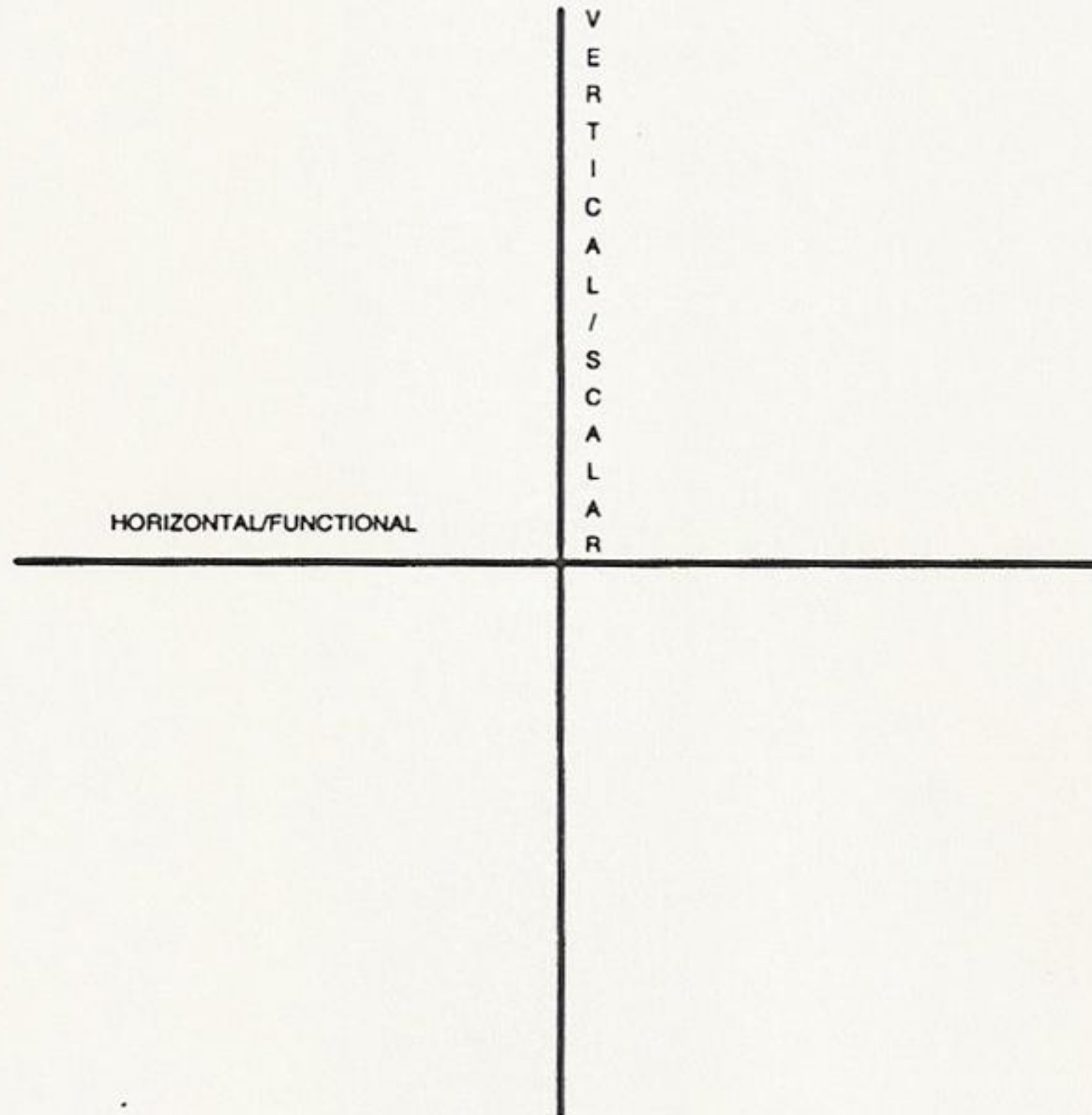


Figure 4: Factors Determining Typology of Structure

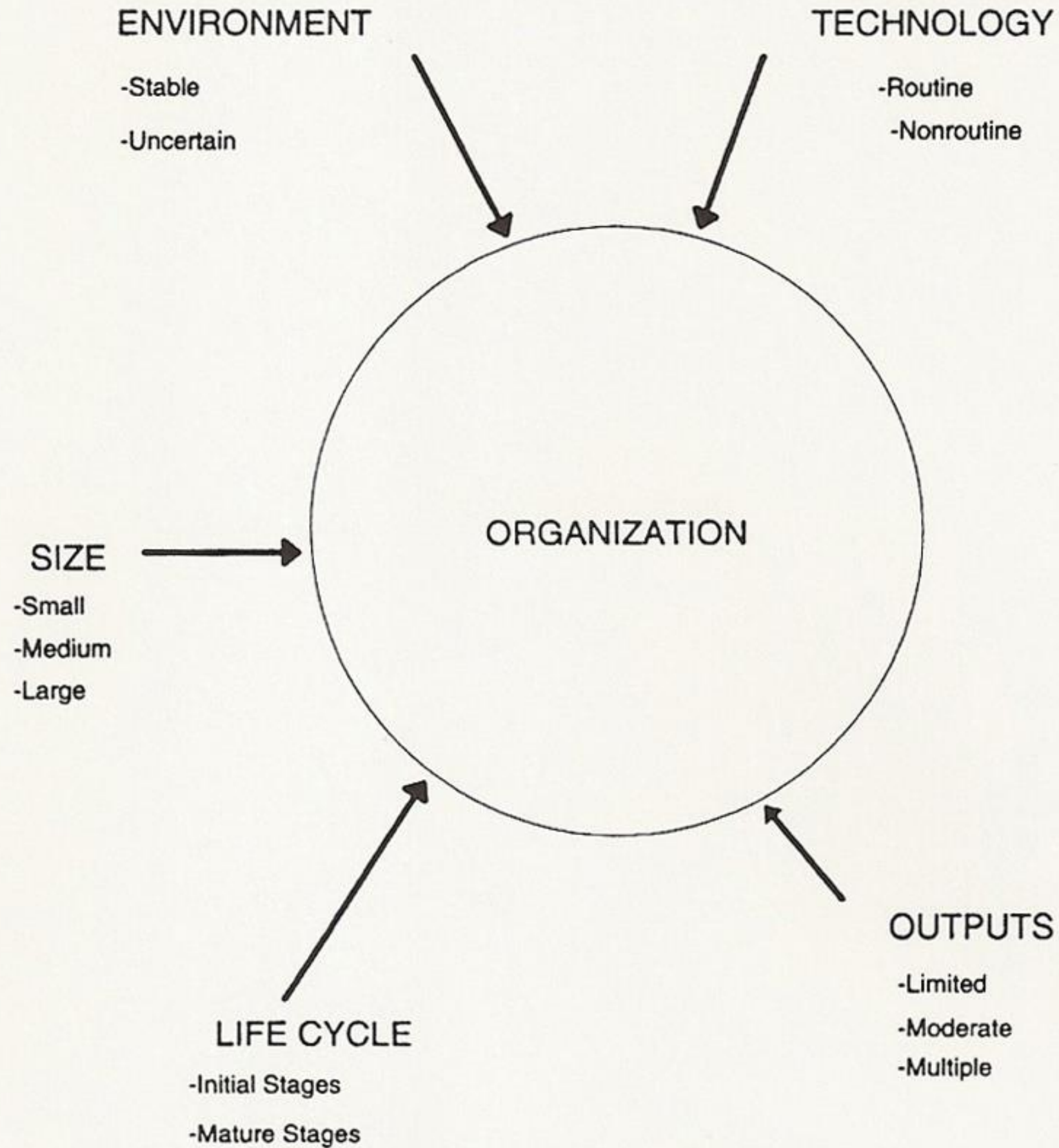


Figure 5: Interrelated Dimensions of Organization 1

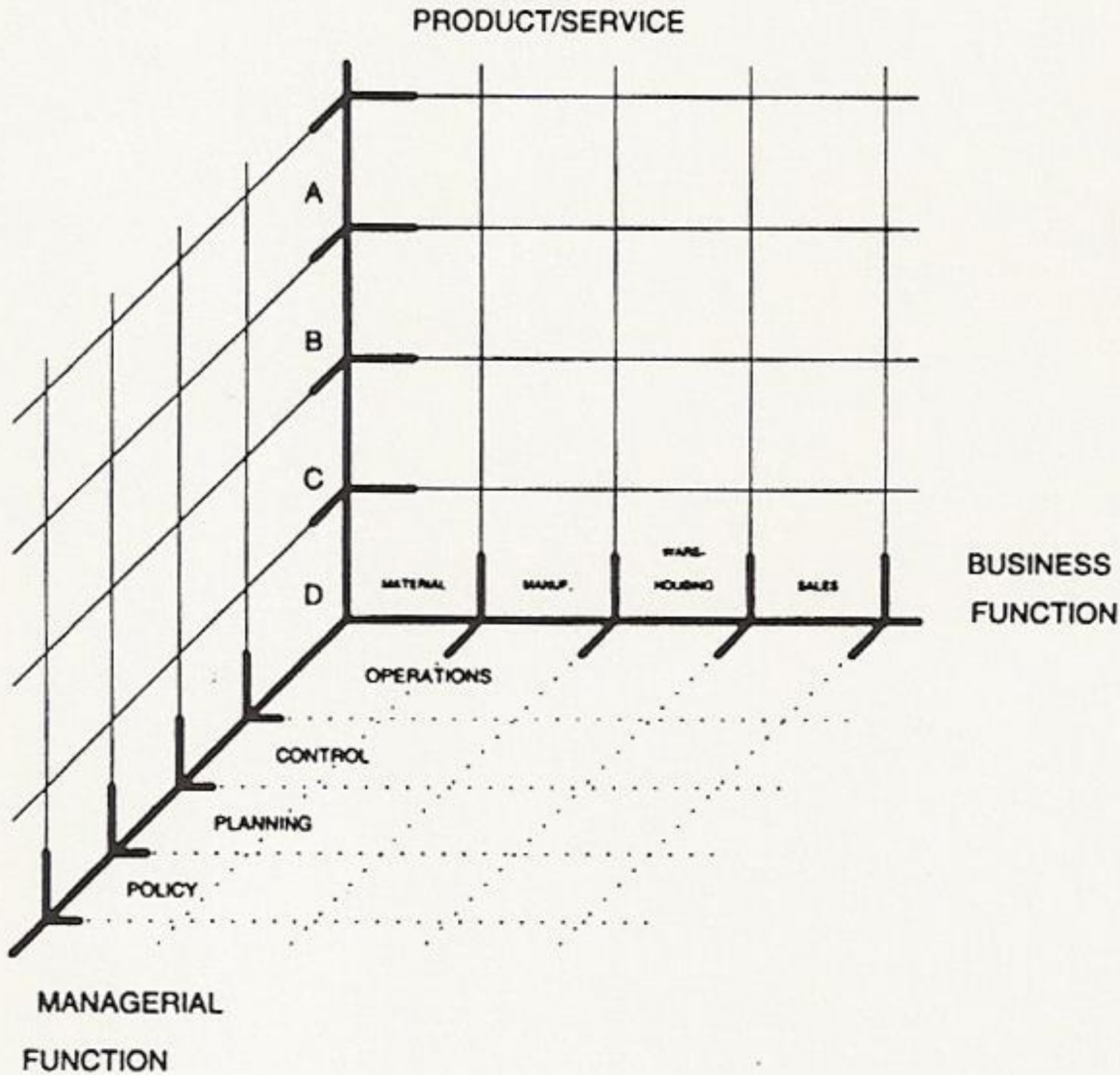


Figure 6: Interrelated Dimensions of Organization 2

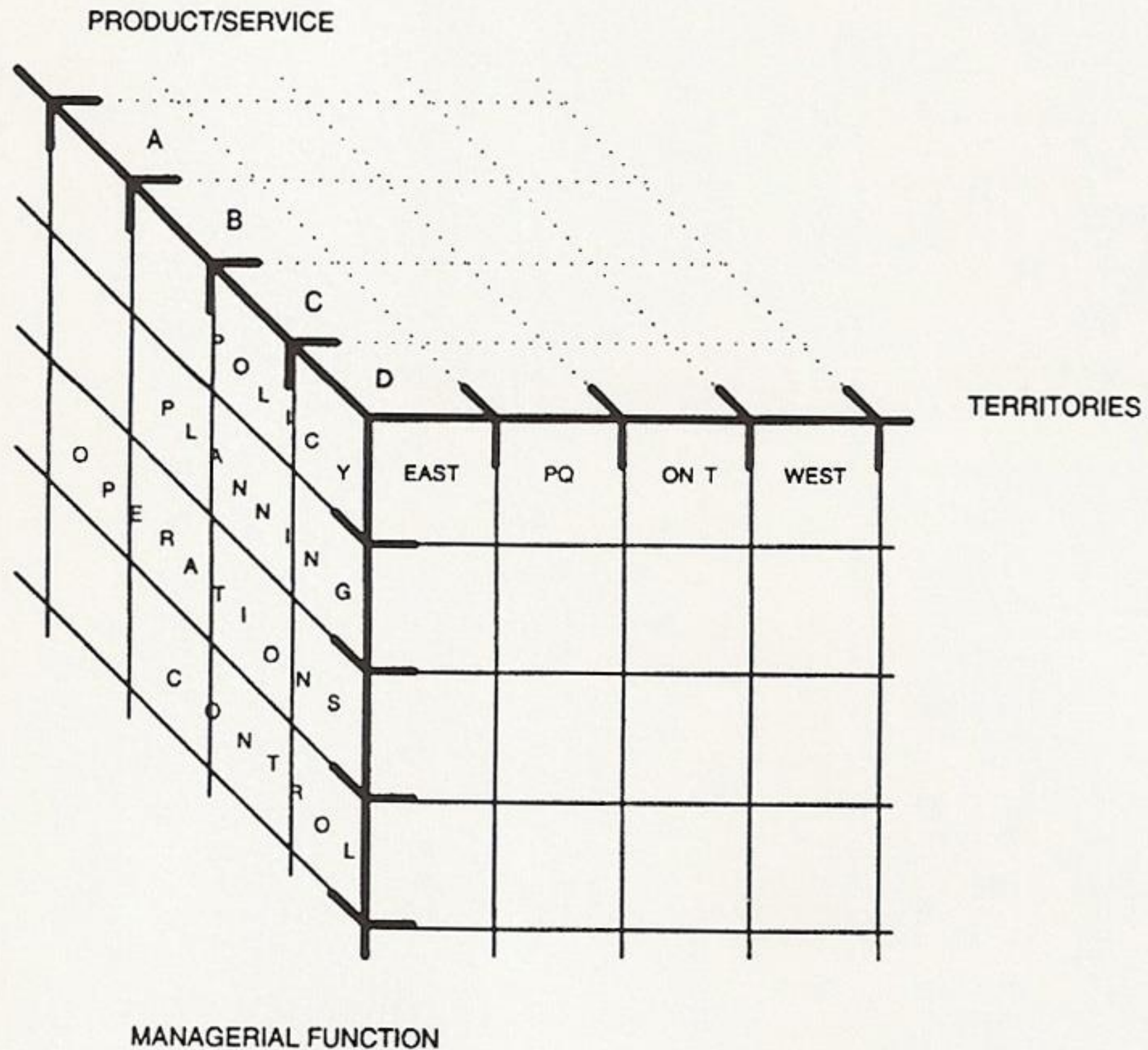


Figure 7: Interrelated Dimensions of Organization 3

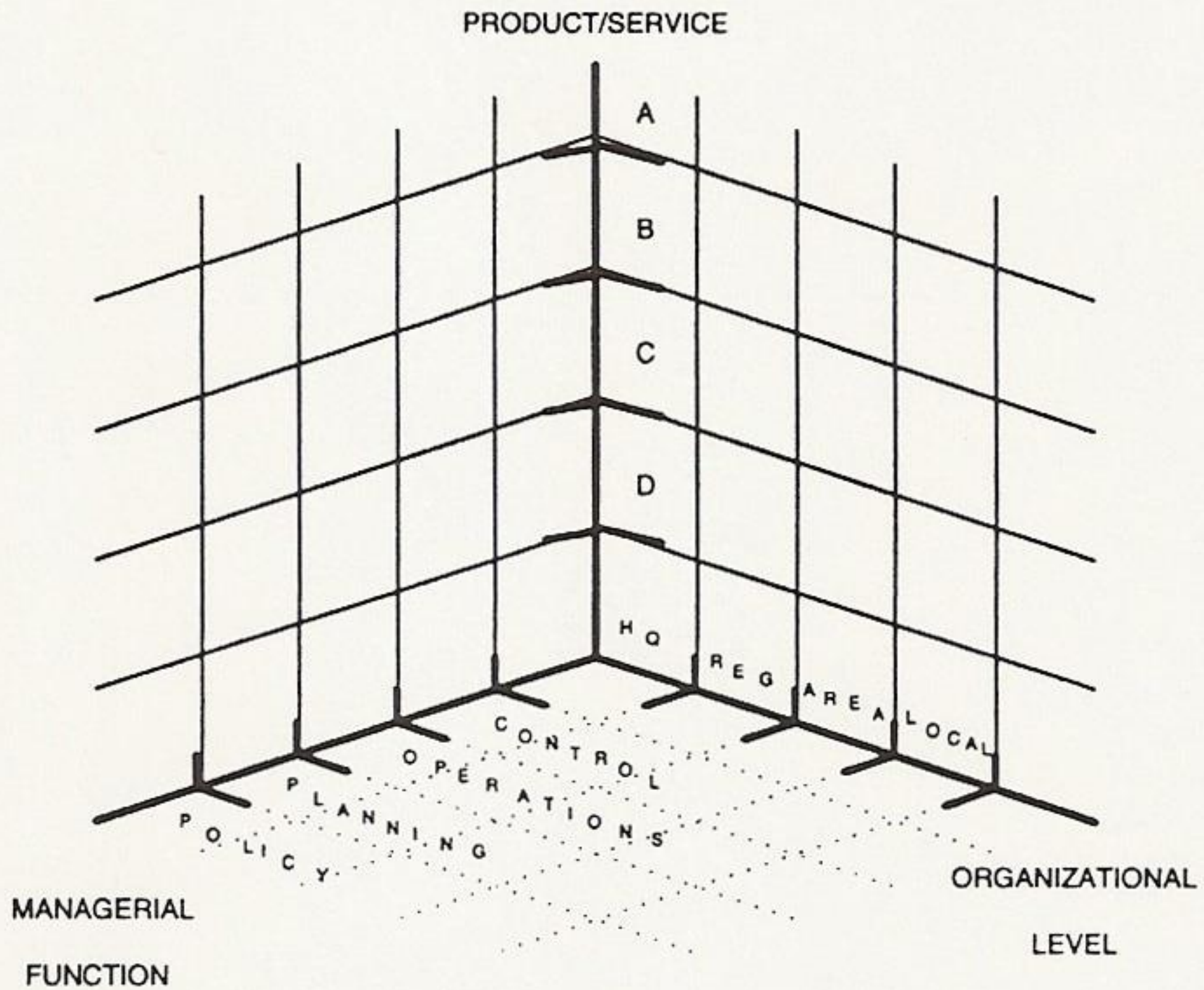


Figure 8: Departmentation by Function

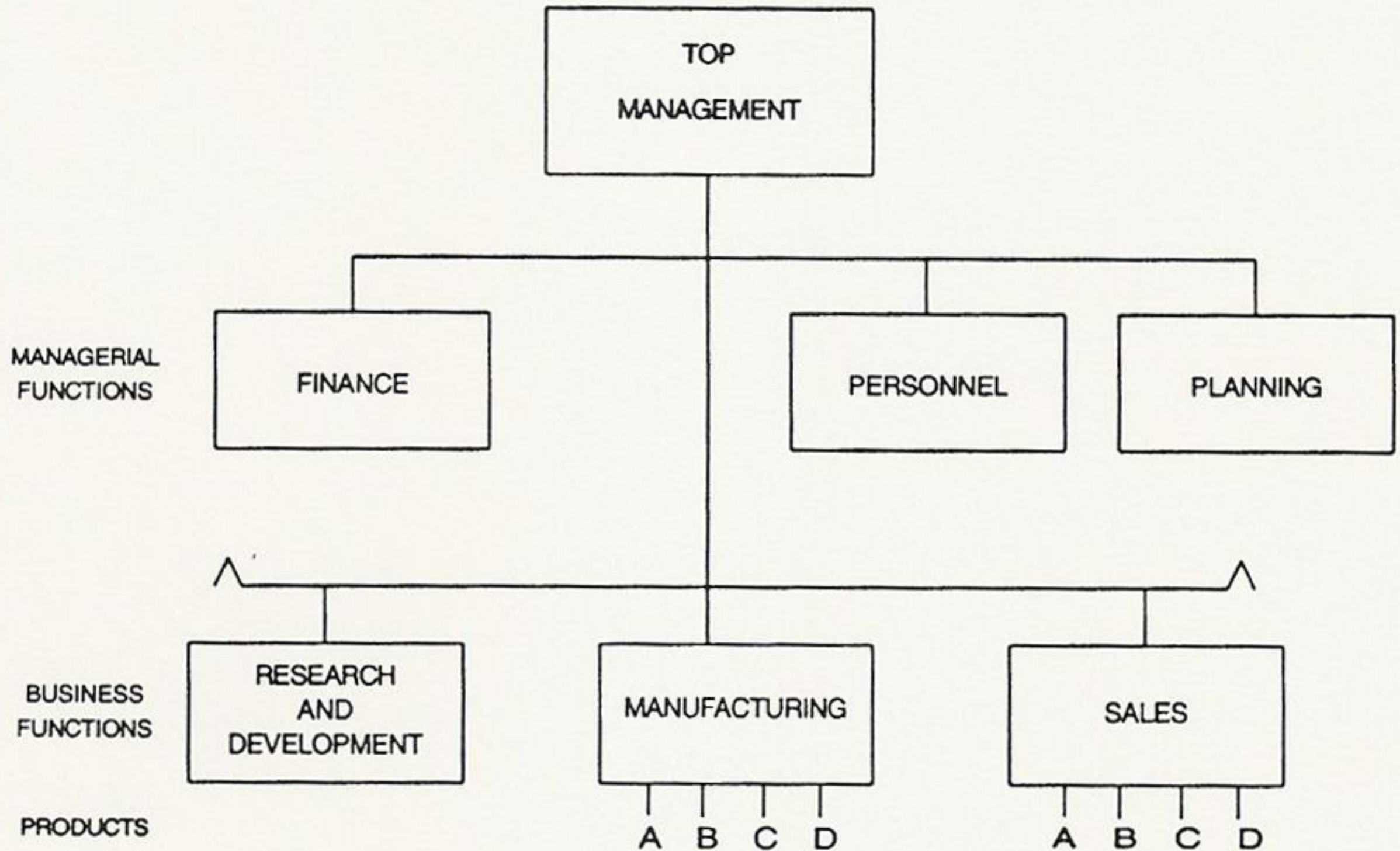


Figure 9: Bases of Functional and Product Departmentation

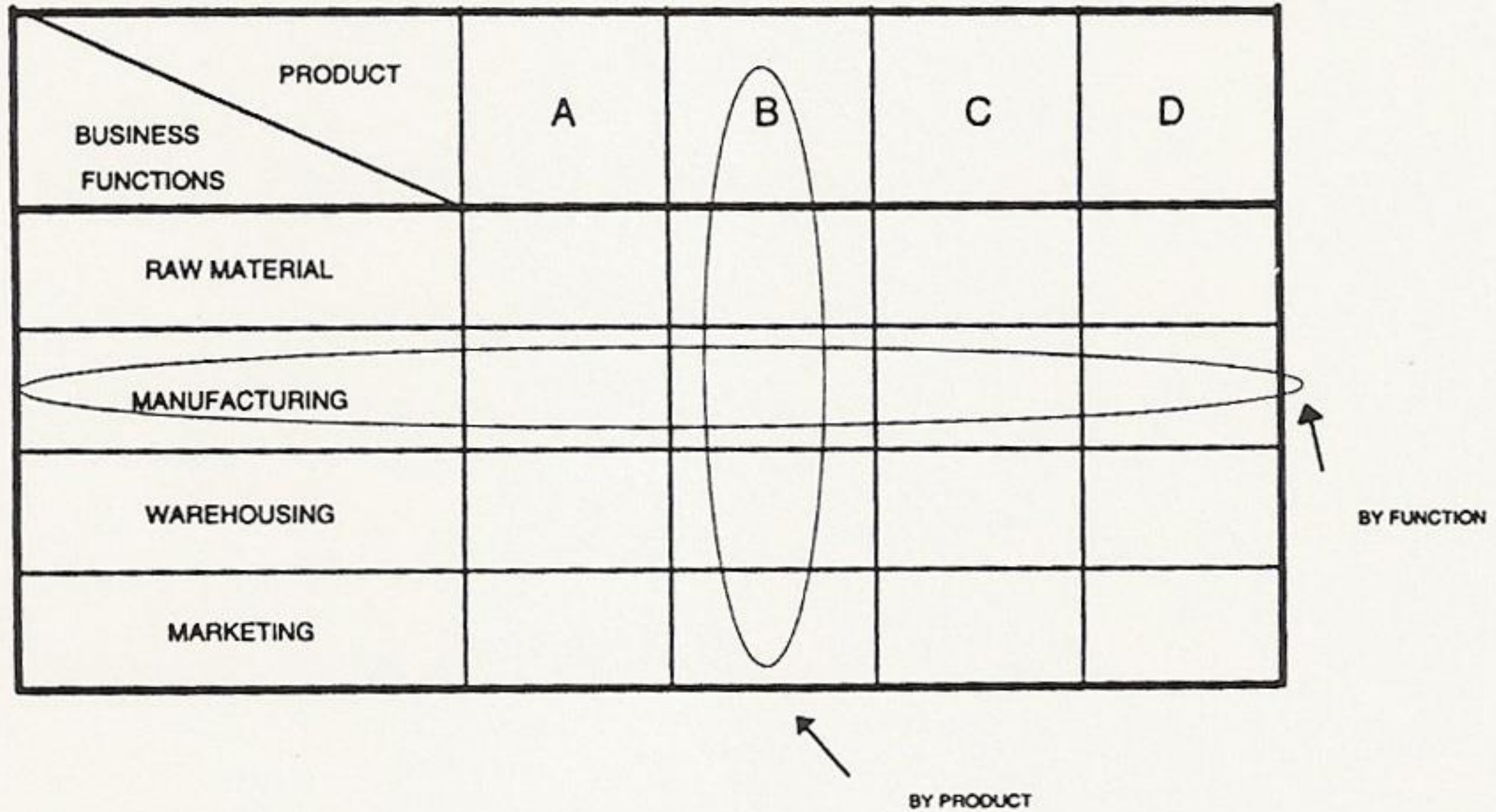


Figure 10: Departmentation by Product

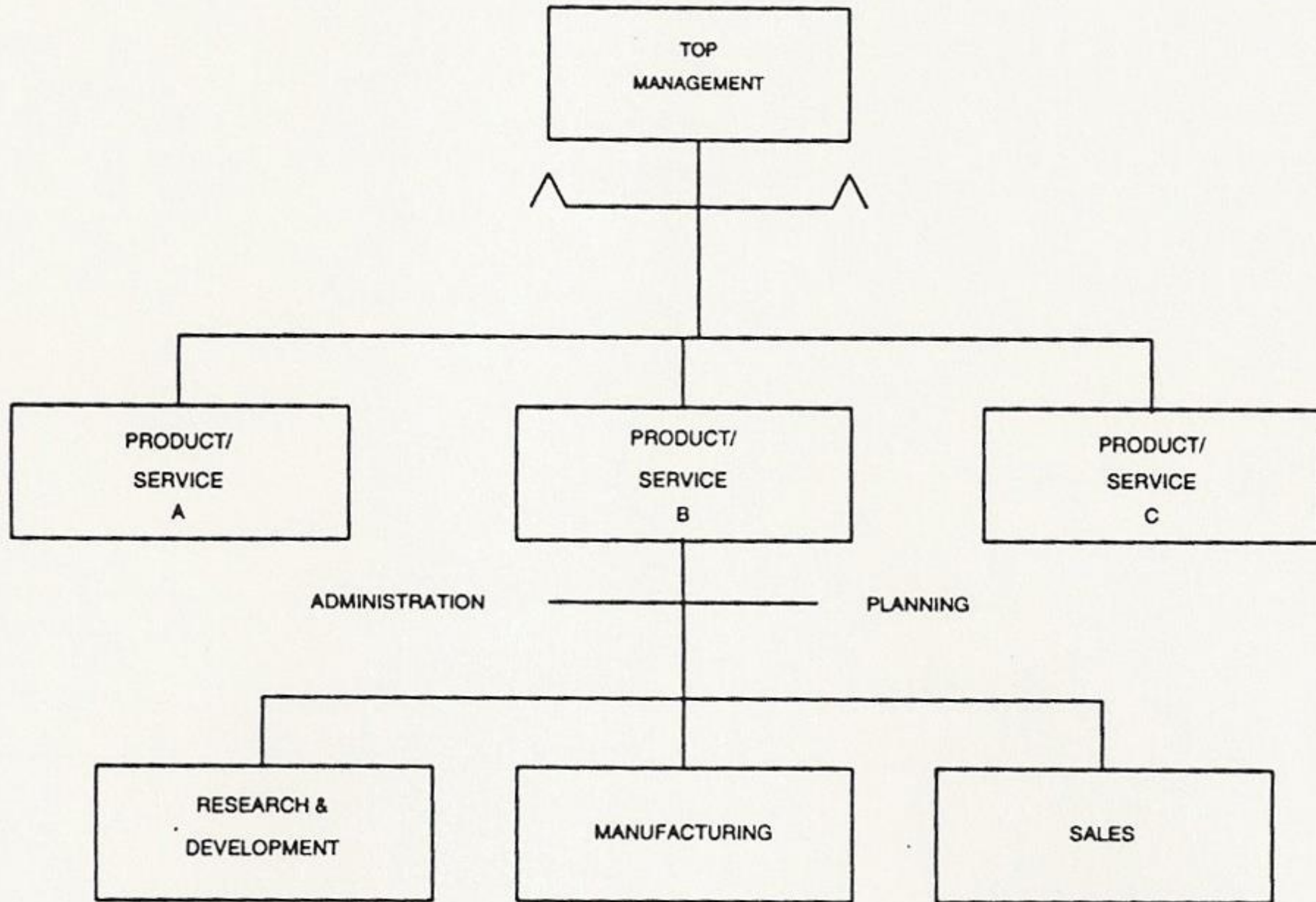
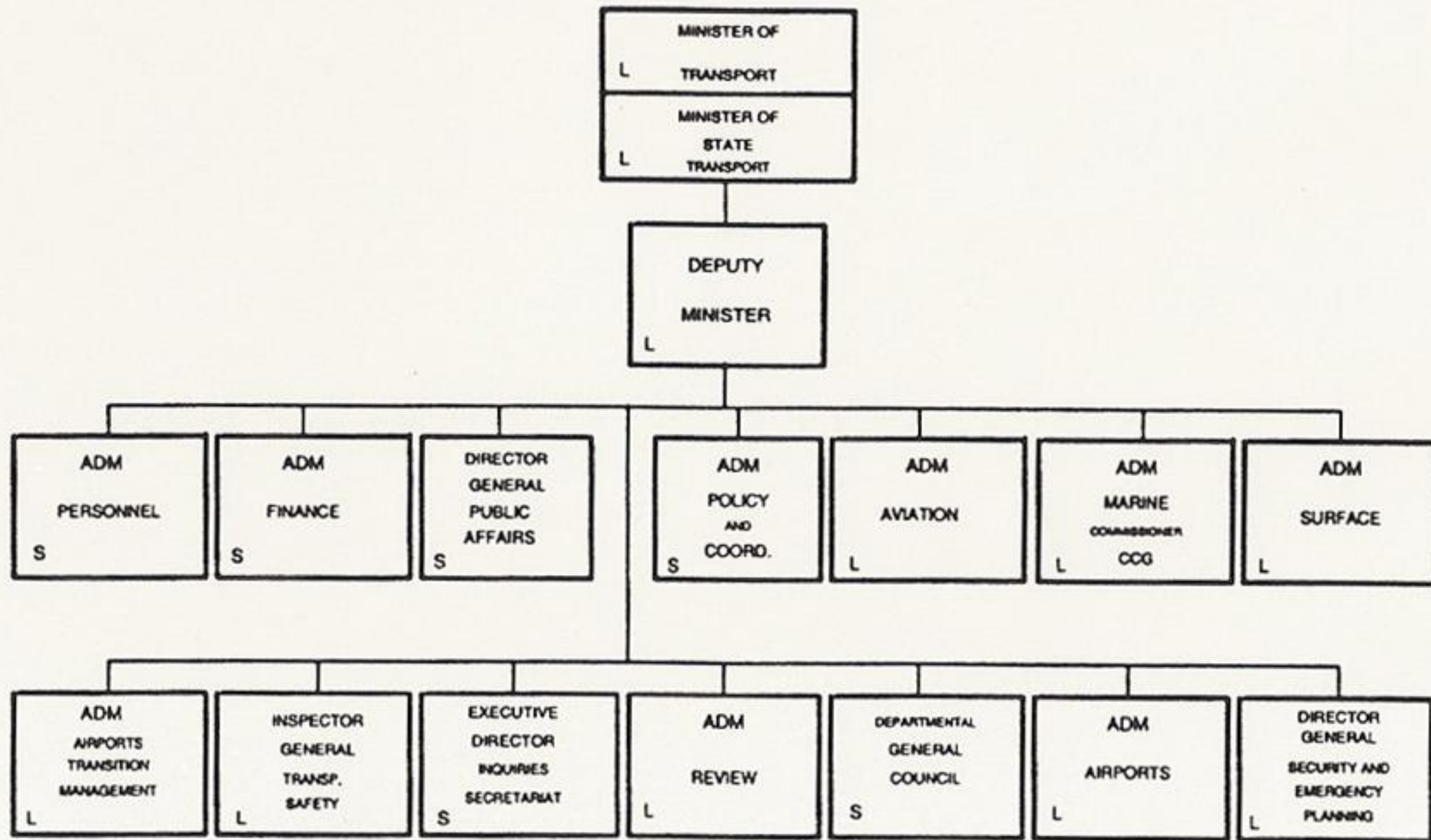


Figure 11: Example of Line and Staff Units:
Transport Canada



OTHER LINE UNITS OF THE OPERATIONAL GROUPS OF TRANSPORT CANADA

- 222 LAND AIRPORTS
- CANADIAN COAST GUARD (CCG)
- FOUR CROWN CORPORATIONS ENGAGED IN MARINE PILOTAGE
- CANARCTIC SHIPPING CO.
- ST. LAWRENCE SEAWAY AUTHORITY (SLSA)
- 15 MAJOR HARBOURS OF CANADA PORTS CORPORATION

Figure 12: Departmentation by Matrix

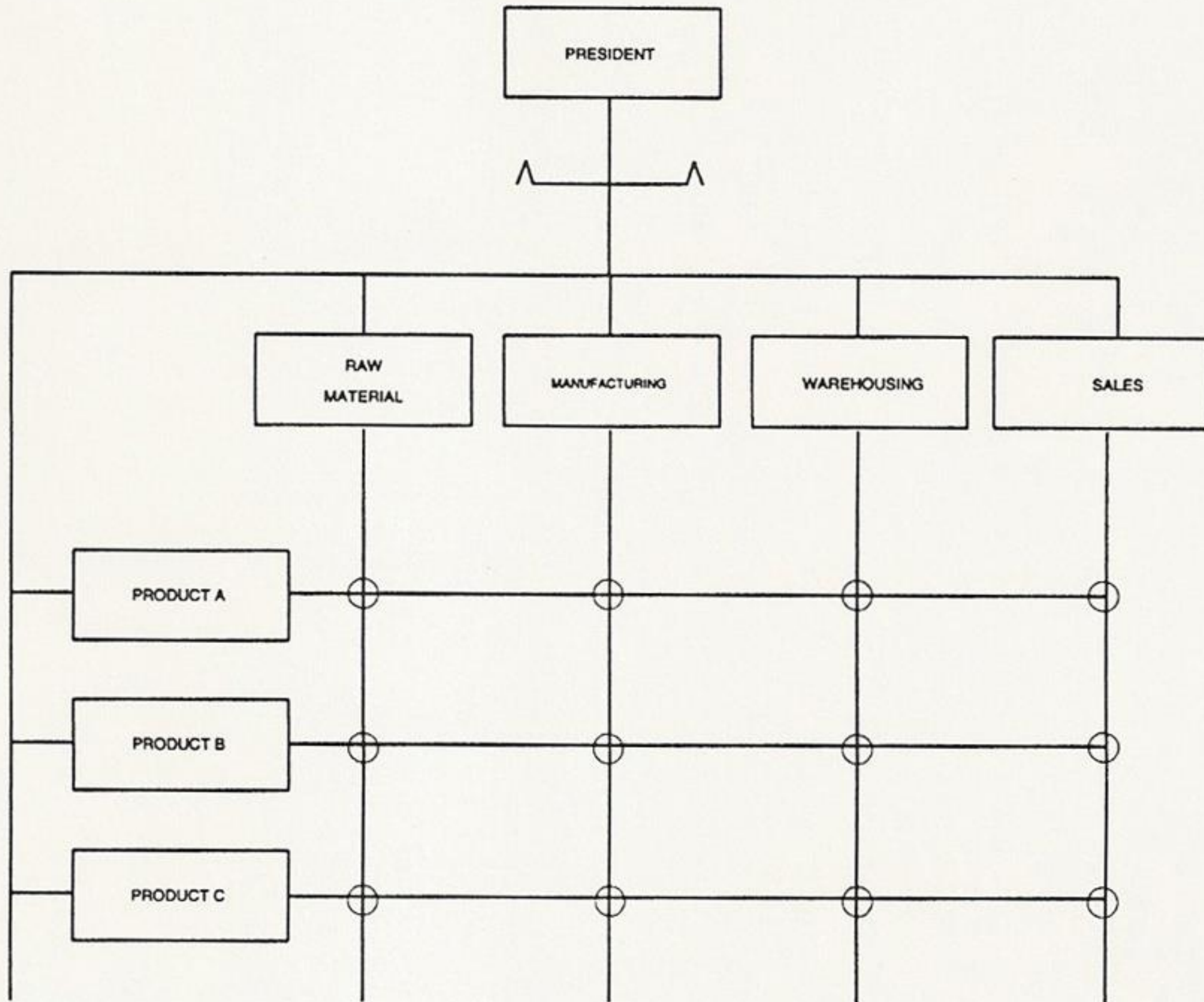


Table 3: Comparing Functional, Product and Matrix Departmentation

Type of Structure	Advantages	Disadvantages	Appropriate for:
Functional (process-oriented)	<ul style="list-style-type: none"> -simple and straightforward -specialization -economies of scale 	<ul style="list-style-type: none"> -less flexible -limited horizontal linkages -divided attention to final products -chain link -unclear accountability -functional competition -limited training opportunities for future top executives 	<ul style="list-style-type: none"> -small to medium size organizations -few outputs -routine technology -low environmental uncertainty
Product (purpose-oriented)	<ul style="list-style-type: none"> -focus on final output -no chain link -clear accountability -quick response to change -provides training opportunities for future top executives 	<ul style="list-style-type: none"> -duplication -less need for horizontal linkages -lack of economy of scale 	<ul style="list-style-type: none"> -large organizations -maximize sub-systemic integration -nonroutine technology -high environmental uncertainty
Matrix	<ul style="list-style-type: none"> -clear accountability -responsive to the needs of the final output -adaptable -shares scarce resource -benefits from specialization -projects can dissolve when work is finished 	<ul style="list-style-type: none"> -conflict as a result of dual hierarchy (two-bosses) -need for continuous meeting -time consuming -demands full cooperation among units 	<ul style="list-style-type: none"> -medium to relatively large organizations -nonroutine technology -uncertain environments

Table 4: Characteristic Differences of the Old and New Paradigms of Organization

OLD	NEW
<ul style="list-style-type: none"> -Large Units -Inflexible -Process-oriented (input-oriented) -Functionally Dependent -Task Breakdown is Centralized and Autocratic -Rules and Regulations -Unidimensional Grouping 	<ul style="list-style-type: none"> -Small Teams -Flexible/Adaptive -Purpose-oriented (output-oriented) -Self-contained -Multiple Skills -Decentralized and Participative -Employee Creativity -Multifocus Grouping

Figure 16: A 3-D Structure

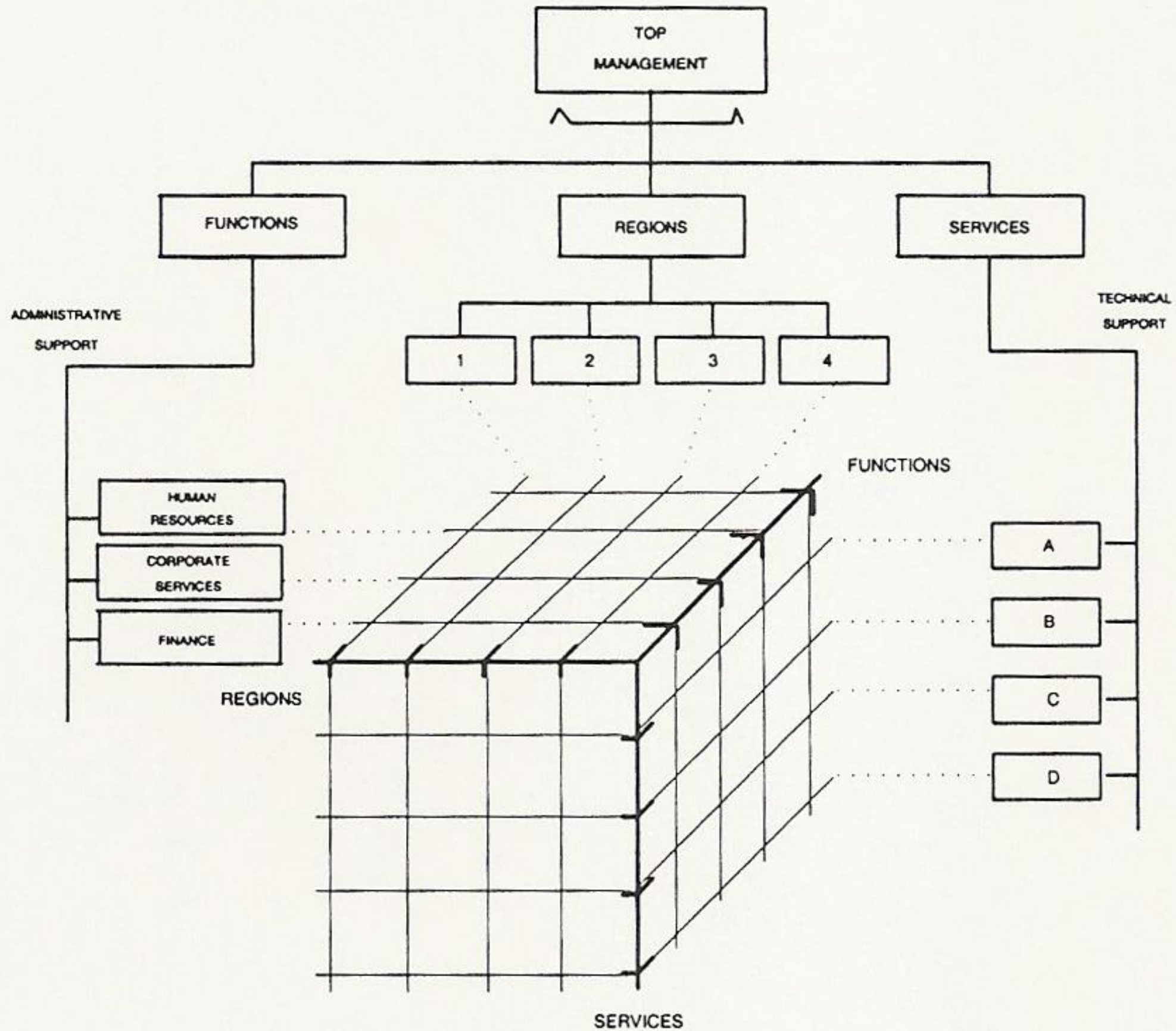


Figure 17: Organizational Components of a Divisional/Matrix Structure

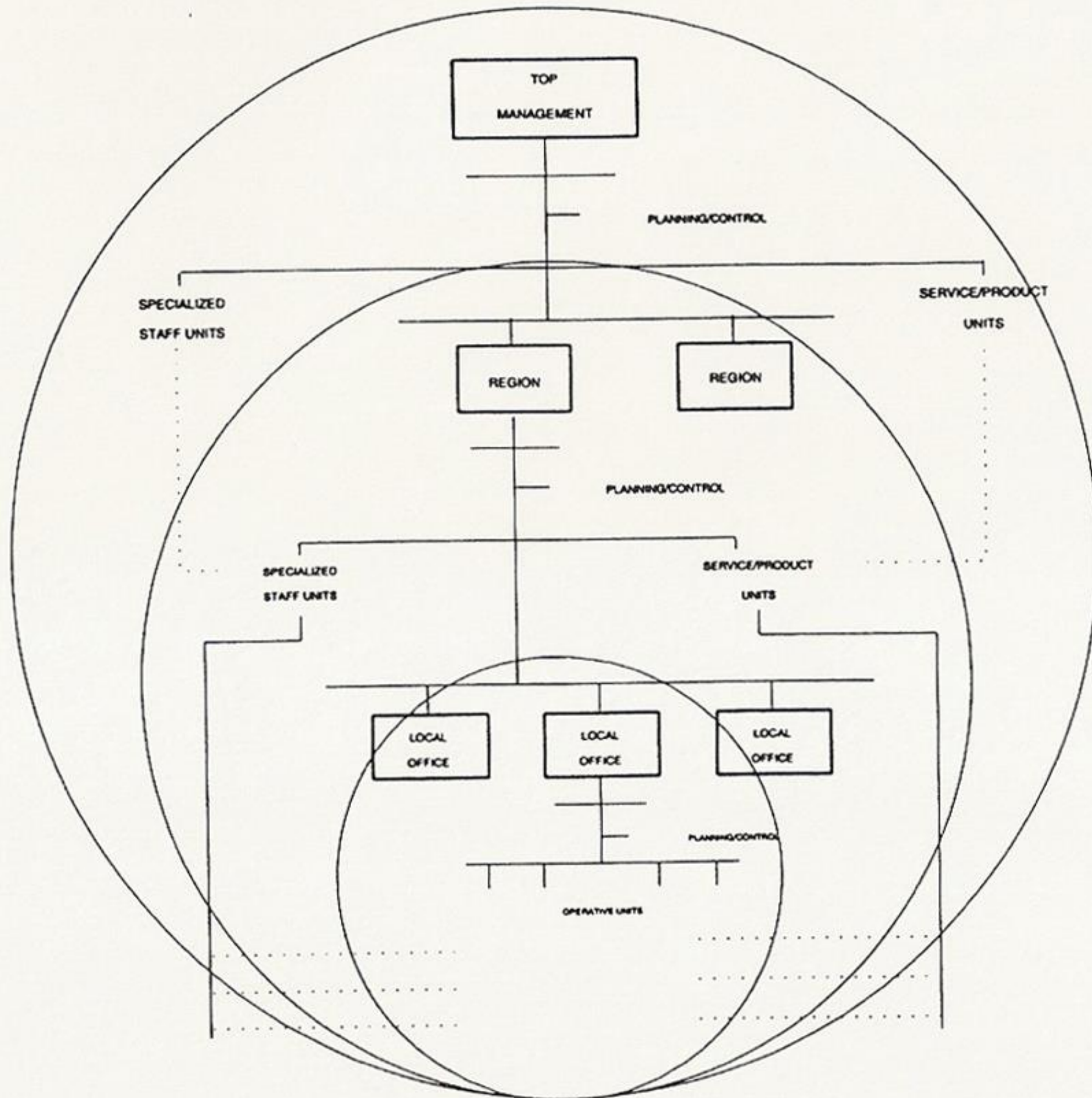


Figure 3: The Interrelated Dimensions of the Ministry of Education

