Organizations

Organization

- Definitions
  - (simple) group of people intentionally organized to accomplish an overall, common goal or set of goals
  - (Formal, Daft)
    - social entity
    - guided by objectives
    - designed to perform structured and coordinated activities
    - interacting with the environment (open system)

Organization vs. person

- Goal
- Made of parts, concurring (or not) to achieve the goal(s)
- Lifecycle (birth, life, death)
  - Person: 70 years average life
  - Organizations: around 10yrs average life
    - Catholic church, chinese dynasties: 1000 yrs
- Tradition, culture, habits
  - Resistance to change
- Adaptation and evolution

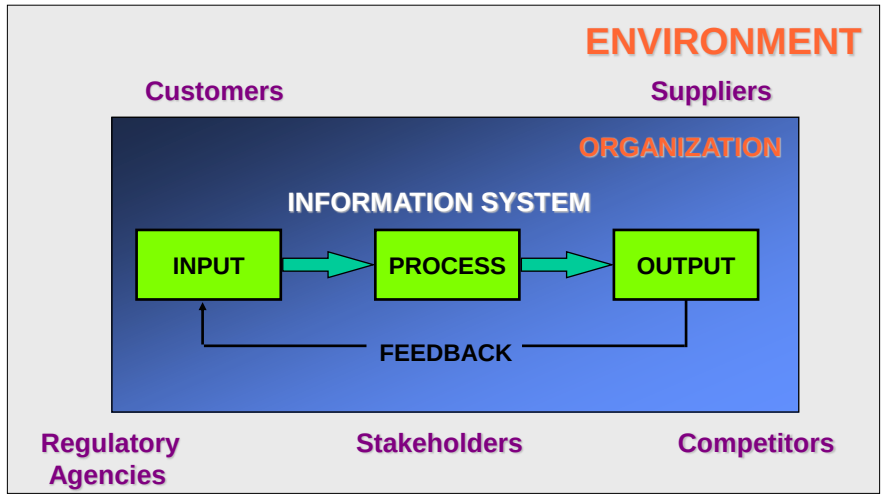
3

Organizations

- Very few before industrial revolution
  - Army, church, states and bureaucracies
- Many more after
  - Companies, trade unions, ministries,
  - Profit, no profit
  - Development of related studies
    - Management science
    - Sociology, economics, psychology, anthropology

4

An Open System



5

Characteristics (Org. var.)

- Size
- Goal type, goal and strategy
- Culture
- Environment
- Technology / IT Technology
- Structural
  - Dimension (Size in staff, org units, geo sites)
  - Organizational structure
- Formalization/specialization/hierarchy
- Organizational types

6

Organizational variables

- All characteristics of an organization can be seen as organizational variables (or parts of organization to be defined/changed) in organization design

7

Organizational design

- Define organizational variables of an organization

8

Change

- In most cases an organization exists, and has a certain design (organizational variables are defined)
- Organizations need to change (== change their organizational variables) to react to changes around and inside them
- Organizations are more or less resistant to change

9

Change and lifespan

- Average life expectancy of all companies (Japan, Europe)
  - 12.5 years [1996, Stratix Consulting Group]
- Average life expectancy of S&P500 companies
  - 40-50 years
  - 1/3 of S&P500 companies in 1970 disappeared by 1983
  - Of S&P500 companies in 1919, only 10% exist today

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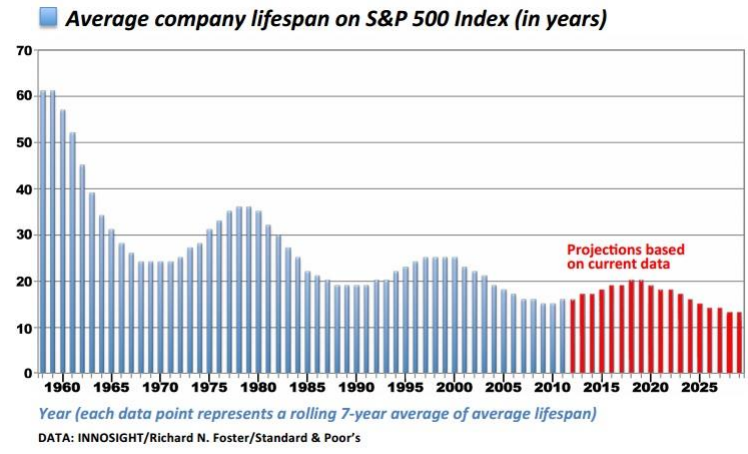

11

Standard & Poor 500

- 500 most valuable companies traded on US Stock exchange

- Oldest: General Electric (1926)
- New entrants: Google, Amazon, Netflix
- Out: Kodak, NYTimes, Palm, Compaq, ..
  - Bankrupt or acquired/merged

12

"It is not the strongest of the species that survives, nor the most intelligent that survives. It is the one that is the most adaptable to change.
In the struggle for survival, the fittest win out at the expense of their rivals because they succeed in adapting themselves best to their environment."

Leon Meggiston
(on the shoulders of Charles Darwin)

13

Creative destruction
(Joseph Schumpeter)

process of industrial mutation that incessantly revolutionizes the economic structure from within, incessantly destroying the old one, incessantly creating a new one

14

Change and IS

- Information systems (and changes to IS) are one of the key factors (with employees) to be considered in the evolution of an organization

15

Change management

- Discipline that studies issues and techniques for supporting changes in organizations

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Size

- Number of employees
  - Full time
  - Part time
  - Close collaborators
- Turn over
- #sites

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Size

- Definitions by European Commission

	staff	Turnover
Large		
Medium	<250	< 50M Euro
Small	<50	< 10M
Micro	<10	< 2M

- SMEs (Small Medium Enterprise) are the majority of companies (90% +) and employ the majority of employees

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Size – FTE

- Full time equivalent
  - Unit of measure: one employee working one working day
  - Important when companies use part time employees
  - Ex 2 employees working 50% part time make 1 FTE

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Ex. 2015

	Google	Amazon	Toyota	Ford
Employees	57K	230K	345K	200K
Turn over (US$)	74B	107B	240B	150B
Profit (US$)	16,3B	0,6 B	17,3 B	7B
Profit / turnover	22%	0,5%	7,2%	5%
Brand value (US$)	23B	63B	29B	13B

20

Goal type

- Coercitive goal
  - Prison
- Utilitarian goal
  - Business
    - For clients / stakeholders / public
- Normative goal
  - University, religious groups

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Goal and strategy

- See strategy chapter

22

Culture

- (written or unwritten) assumptions about goals and products
- Companies
  - Engineering vs marketing
    - HP vs. Microsoft
    - Motorola vs. Nokia
  - We are the best
    - IBM, MS, Google ..
  - Blue collar earn less than white collars
  - (Blue collar work less prestigious than white collar work)
  - Working more is better (no leave before 8pm)
  - Working too much is bad (no leave after 5pm)
  - Working is fun / working must be a pain

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Culture

- University
  - Dressing codes
  - Access (sex, race, religion)
  - Behaviour codes
    - Students want to learn
    - Profs know more than students
- Culture is both unifying factor and restraint on change (especially on IT)

24

Politics

- People cover different roles
- They have different points of views, objectives, interests
  - Personal career, influence, compensation
- Resources are scarce, struggles, competition, conflict are the rule
- Conflict resolution must be ongoing

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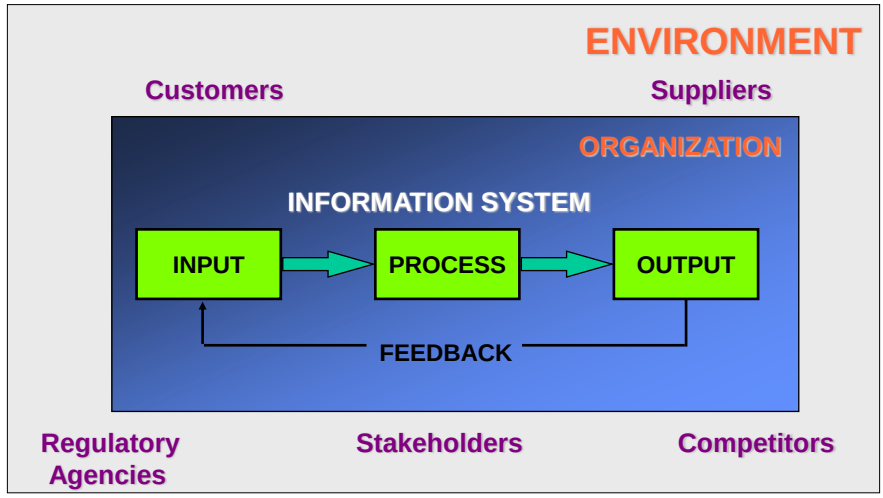
Environment



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Environment

- Resources and constraints
  - cost of labour, currency
- Governments/ regulatory agencies
  - Rights of employees/power of trade unions, taxation, pollution laws, freedom of trade
- Competitors
- Financial institutions
- Knowledge
  - Access to skilled personnel or consulting

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Environment

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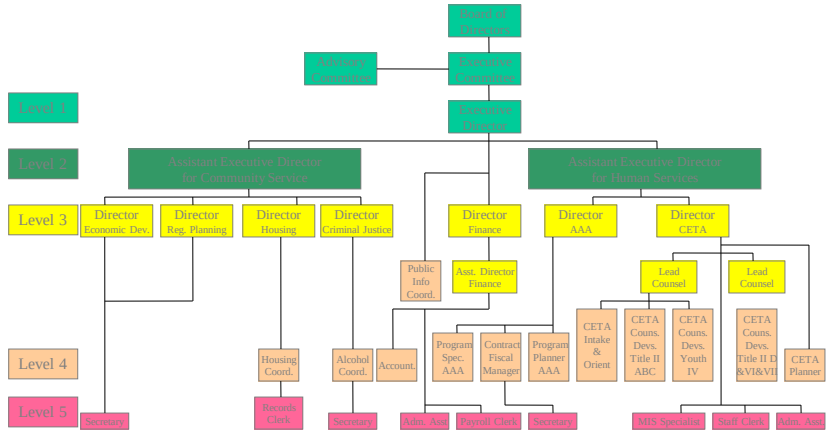
Structure



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Formalization

- Level of description of an activity
  - Full formalization = algorithm
    (also called SOP Standard Operation Procedure)
  - No formalization = loose description

30

	More formalization	Less formalization
Efficiency	more	Less
Flexibility (management of exceptions, capability to decide)	less	More
predictability	more	Less
Resistance to change	more	less

- More formalization is typically linked with IT support

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SOP

Standard Operating Procedures

- Precise rules, procedures and practices to cope with virtually all expected situations
- (sometimes rules of thumb)

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Centralization

- Where, in the hierarchical levels, to allocate decision power
  - Centralized organization: decision power only at higher levels
  - Decentralized organization: decision power also at lower levels

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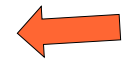
Bank

- Activity: mortgage allocation
  - decide amount given
- Levels
  - Main branch
    - Director
    - Financial services director
  - Agency (100)
    - Director
    - Employees (1000) – open dossier (sop)



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Centralization

- More
  - Pros: homogeneity
  - Cons: bottlenecks, slow response times
- Less
  - Pros: better response times
  - Cons: no (less) homogeneity, risks of fraud

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Specialization

- Level of detail of activities and level of specificity of employees

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Bank

- Option 1 – less specialization
  - Activity: mortgage allocation
- Option 2 – more specialization
  - Activity1 : mortage for industrial activities
  - Activity2 : mortgage for homes, first
  - Activity3: mortgage for homes, vacation

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- Specific activities are assigned to specialized roles (employees) in the organization
  - Specialist in industrial mortgages
  - Specialist in home first mortgage
  - Specialist in home vacation mortgage

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Specialization

- More
  - More formalization (efficiency, no flexibility)

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Bureaucracy 官僚主义

- High level of formalization
- High level of specialization
- High centralization (no decision power at lower levels)

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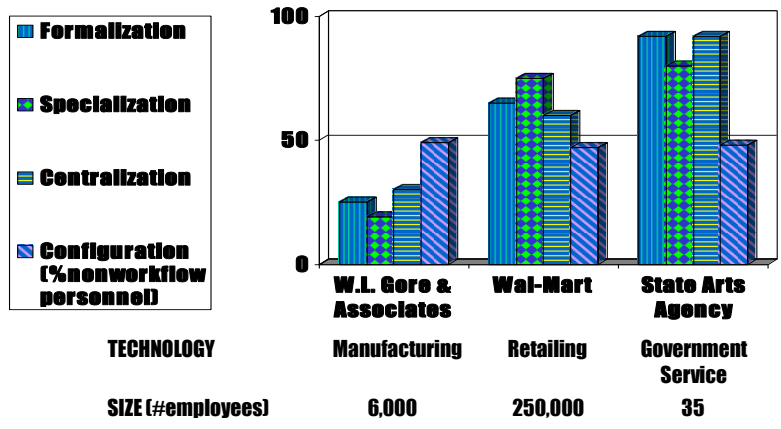
Ex.: Characteristics



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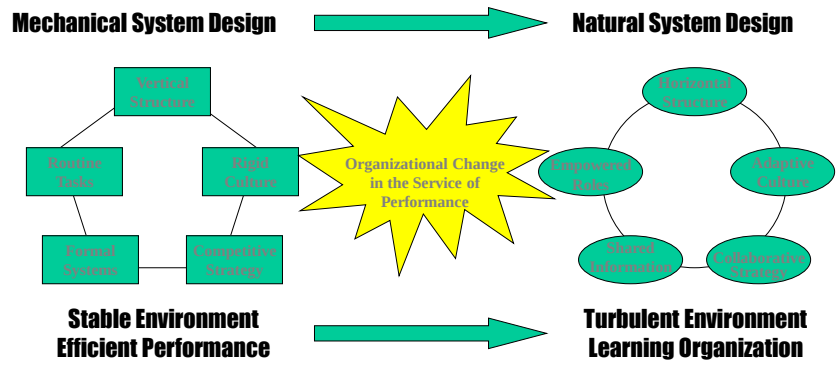
Org Design Approaches



Source: Adapted from David K. Hurst, Crisis and Renewal: Meeting the Challenge of Organizational Change (Boston, Mass.: Harvard Business School)

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Org designs

Mechanical / hierarchical

- Follow order from the top
- Predict and control
- Jobs (activities of a worker are fixed)

Learning / reactive

- Autonomy and self organization
- Sense and react
- Roles (worker can change roles / activities)

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Organizational types

- Entrepreneurial: Startup business
- Machine bureaucracy: Mid-sized manufacturing firm
- Divisionalized bureaucracy: Fortune 500
- Professional bureaucracy: Law firms, hospitals
- Adhocracy: Consulting firm

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Organizational structures

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Organizational structure

- Node: organizational unit, as group of people or other organizational units
- Link: formal dependency
- Depicted in organization chart

- Structure must be completed by mechanisms to support
  - Communication
  - Coordination
- Vertical and horizontal flow of information and control

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Organizational unit

- Called in many ways
  - Function
  - Unit
  - Business unit
  - Branch
  - Office
  - Direction
  - Area
  - Group

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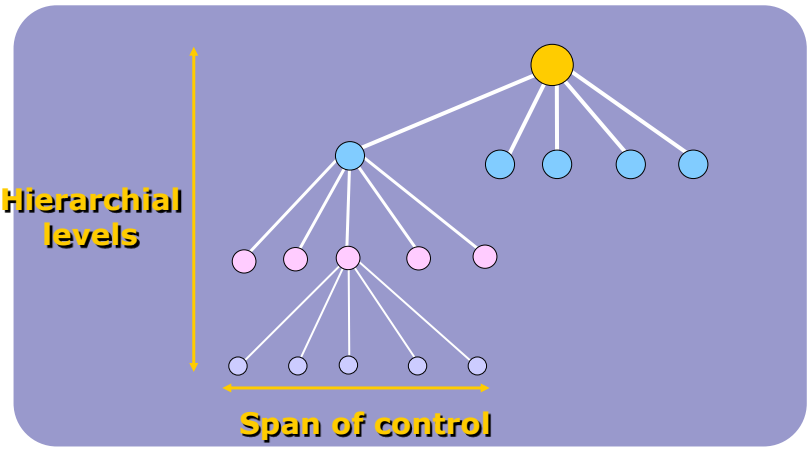
Dimensions



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Dimensions – 2

- Given the same size
  - Lower depth
    - Faster reaction
    - Higher load on upper levels – or more delegation
  - Vertical organization: more depth
    - Army: general, major, colonel, captain ….
  - Horizontal organization: less depth
    - Catholic church: Pope, Bishop, Priest

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- 1000 people
- 3 levels: 333 people in lowest unit
- 10 levels: 10 people in lowest unit

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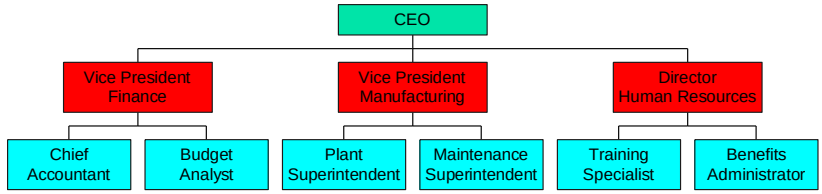
A Sample Organization Chart



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Links

- Link: control, communication, coordination channel
- Vertical
- Horizontal

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Links

- Vertical links: to control
  - Employees at lower level must perform activities coherent with goals set at higher level
  - Managers at higher level must know activities and results of lower level
- Horizontal links: to communicate
  - Employees in different units must share information and coordinate themselves

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Hierarchy

- Given level i in the structure
  - Capability / possibility to decide
  - Capability to access information
  - Capability to control level i+1

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Vertical links

- Command chain
  - Problem that cant be solved at level x is reported at level x-1
- Rules/procedures
  - Standard way of solving problem/performing activity
- Plans
  - Ex budget
- Vertical IS
  - To define and diffuse reports and internal memos, kpis and other measures

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Horizontal links

- IS
  - Knowledge base of personnel
  - Data base of product information
- Direct contact
  - Liaison person: charged of contact with other unit
  - Temporary colocation of employees from different units
- Full time integrator role
  - Project manager, product manager, brand manager
- Task force
  - Temporary group of employees from different units
- Team
  - Same as task force, but permanent

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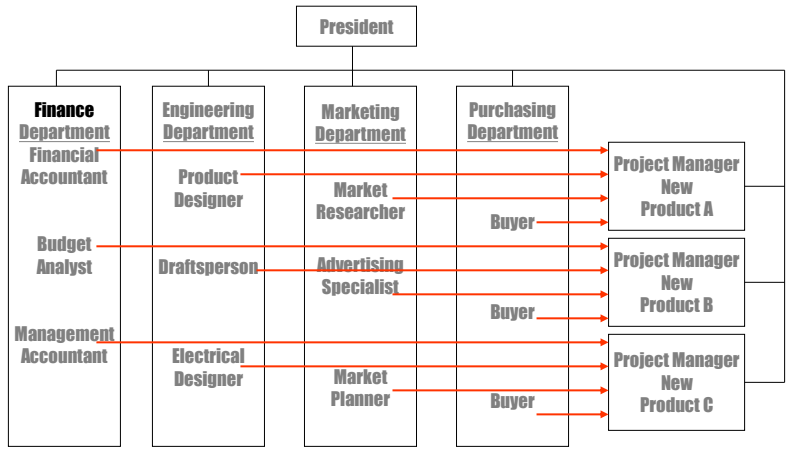
Project Manager



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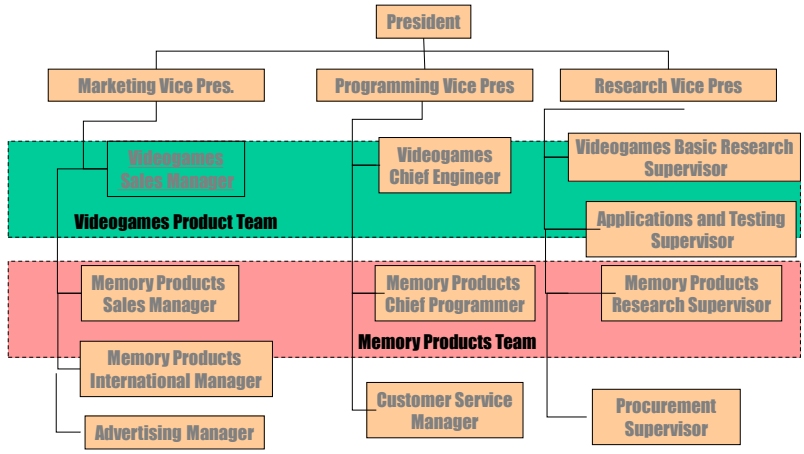
Teams at Wizard Software Company



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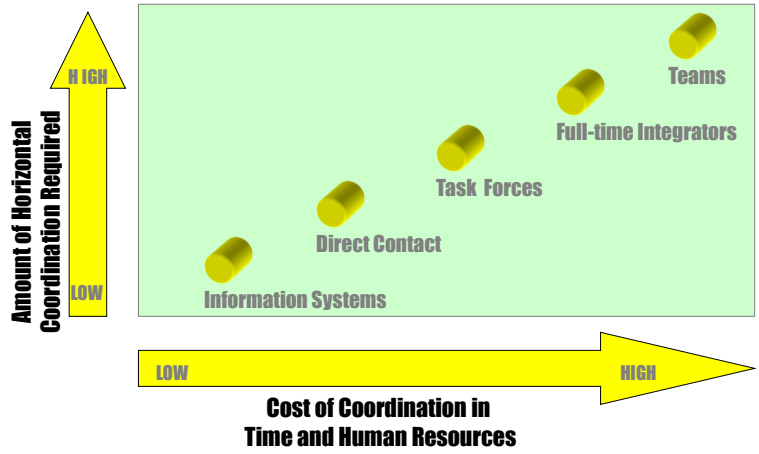
Mechanisms for Horizontal links



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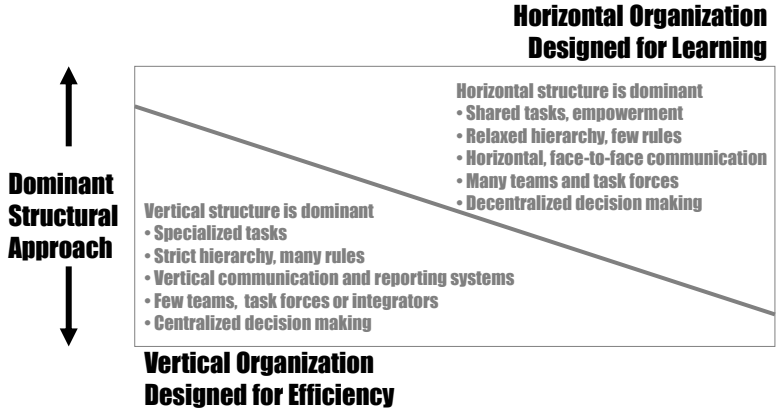
Org Design to Efficiency vs. Learning



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Structures

- Functional
  - Employees grouped according to similar functions, skills (ex all RD together, all manufacturing together)
  - Functions are NOT repeated
- Divisional
  - Employees grouped by product (ex car division, truck division)
  - Functions are repeated in each division/per product
- Geographic
  - Functions are repeated per geographical area
- Matrix/multifocused
  - Grouping by more than one criterion
- Process /horizontal
  - Employees grouped by process

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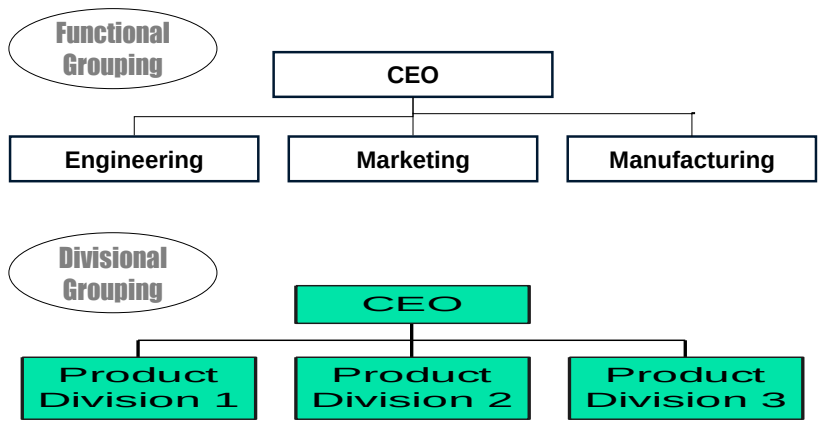
Functional, divisional



Source: Adapted from David Nadler and Michael Tushman, *Strategic Organization Design* (Glenview, Ill.: Scott Foresman, 1988), 68.

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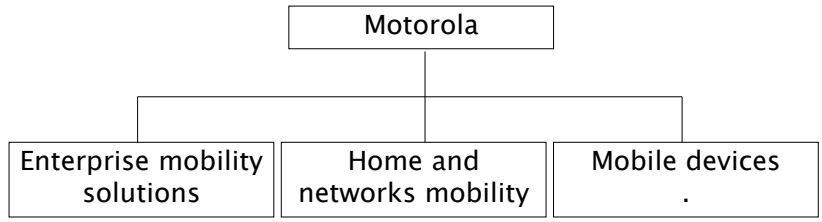
Ex. Divisional



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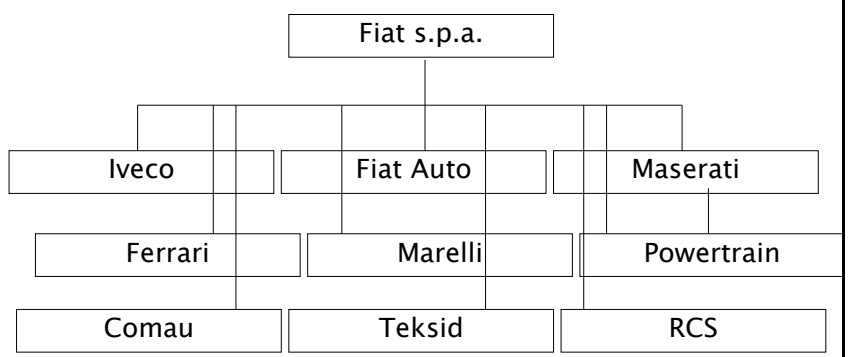
Ex. divisional



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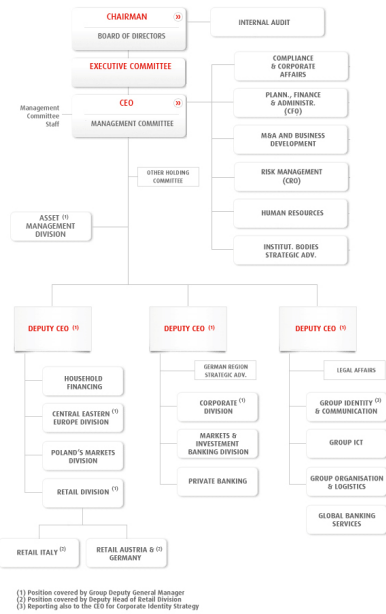
Ex. Unicredit



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Functional Structure

- STRENGTHS:
  - Allows economies of scale within functional departments
  - Enables in-depth knowledge and skill development
  - Enables organization to accomplish functional goals
  - Is best with only one or a few products
- WEAKNESSES:
  - Slow response time to environmental changes
  - May cause decisions to pile on top, hierarchy overload
  - Leads to poor horizontal coordination among departments
  - Results in less innovation
  - Involves restricted view of organizational goals

Source: Adapted from Robert Duncan, "What Is the Right Organization Structure? Decision Tree Analysis Provides the Answer," *Organizational Dynamics* (Winter 1979): 429.

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Divisional Structure

- STRENGTHS:
  - Suited to fast change in unstable environment
  - Leads to client satisfaction because product responsibility and contact points are clear
  - Involves high coordination across functions
  - Allows units to adapt to differences in products, regions, clients
  - Best in large organizations with several products
  - Decentralizes decision-making
- WEAKNESSES:
  - Eliminates economies of scale in functional departments
  - Leads to poor coordination across product lines
  - Eliminates in-depth competence and technical specialization
  - Makes integration and standardization across product lines difficult

Source: Adapted from Robert Duncan, "What Is the Right Organization Structure? Decision Tree Analysis Provides the Answer," *Organizational Dynamics* (Winter 1979): 431.

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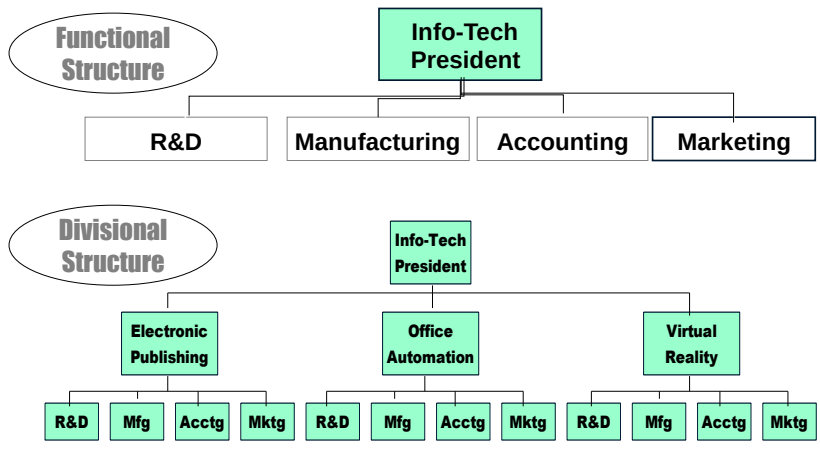
From Functional to Divisional



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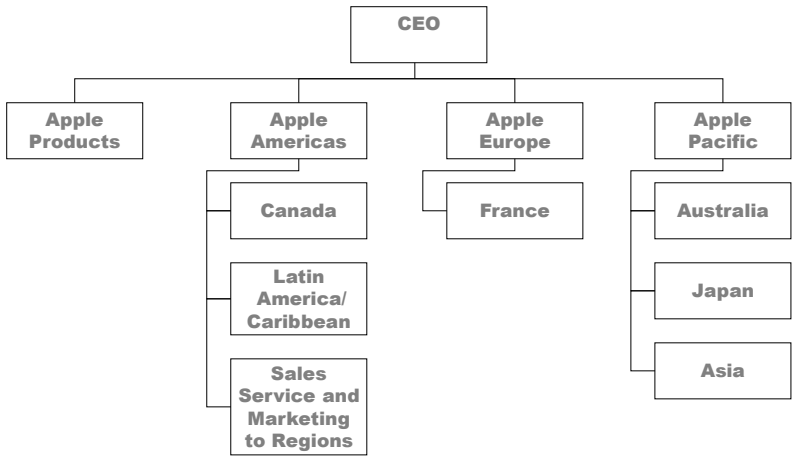
Geo Structure Apple Computer



Source: www.apple.com

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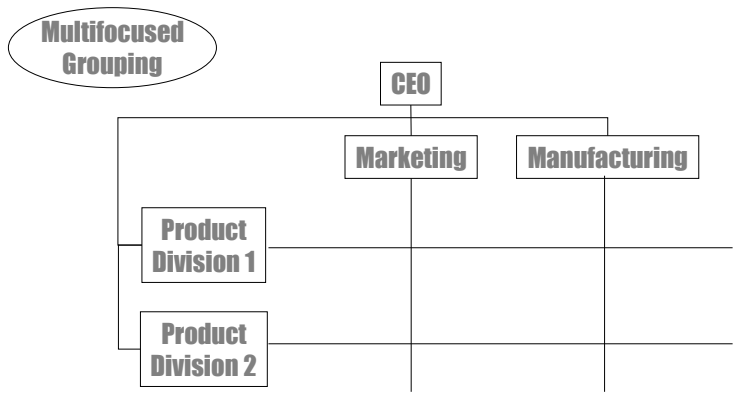
Matrix /Multifocused structure



Source: Adapted from David Nadler and Michael Tushman, *Strategic Organization Design* (Glenview, Ill.: Scott Foresman, 1988), 68.

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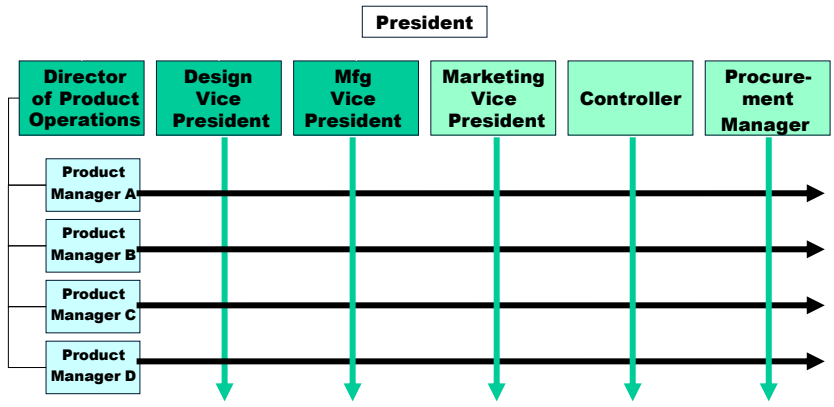
Dual-Authority / Matrix



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Matrix Structure

- STRENGTHS:
  - Achieves coordination necessary to meet dual demands from customers
  - Flexible sharing of human resources across products
  - Suited to complex decisions and frequent changes in unstable environment
  - Provides opportunity for both functional and product skill development
  - Best in medium-sized organizations with multiple products
- WEAKNESSES:
  - Causes participants to experience dual authority, which can be frustrating and confusing
  - Means participants need good interpersonal skills and extensive training
  - Is time consuming; involves frequent meetings and conflict resolution sessions
  - Will not work unless participants understand it and adopt collegial rather than vertical-type relationships
  - Requires great effort to maintain power balance

Source: Adapted from Robert Duncan, "What Is the Right Organization Structure? Decision Tree Analysis Provides the Answer,"*Organizational Dynamics* (Winter 1979): 429.

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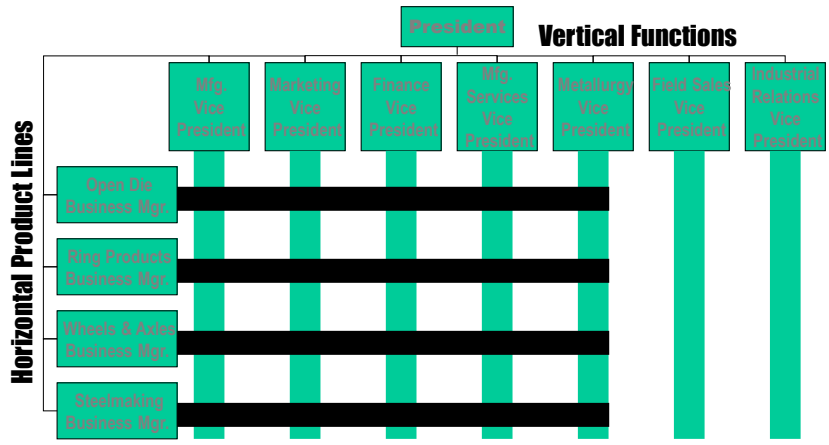
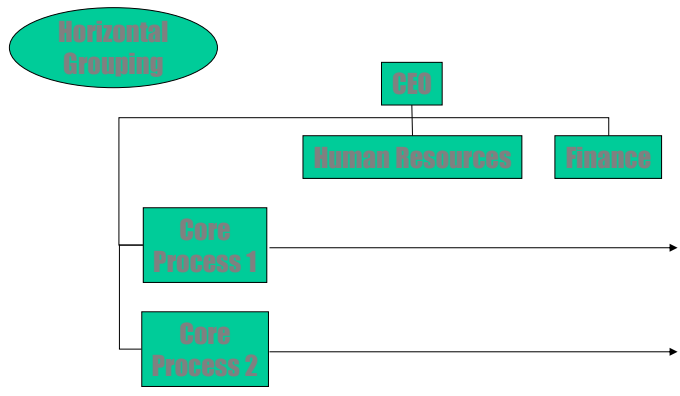
Matrix: Worldwide Steel Company

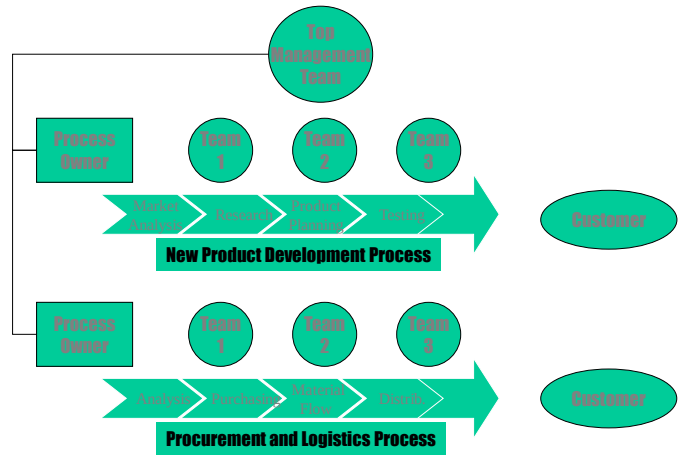


Process /Horizontal



Source: Adapted from David Nadler and Michael Tushman, *Strategic Organization Design* (Glenview, Ill.: Scott Foresman, 1988), 68.

A Horizontal Structure



Sources: Based on Frank Ostroff, *The Horizontal Organization*, (New York: Oxford University Press, 1999); John A. Byrne, "The Horizontal Corporation," *Business Week*, December 20, 1993, 76-81; and Thomas A. Stewart, "The Search for the Organization of Tomorrow," *Fortune*, May 19, 1992, 92-98.

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Horizontal Structure

- STRENGTHS:
  - Flexibility and rapid response to changes in customer needs
  - Directs the attention of everyone toward the production and delivery of value to the customer
  - Each employee has a broader view of organizational goals
  - Promotes a focus on teamwork and collaboration—common commitment to meeting objectives
  - Improves quality of life for employees by offering them the opportunity to share responsibility, make decisions, and be accountable for outcomes
- WEAKNESSES:
  - Determining core processes to organize around is difficult and time-consuming
  - Requires changes in culture, job design, management philosophy, and information and reward systems
  - Traditional managers may balk when they have to give up power and authority
  - Requires significant training of employees to work effectively in a horizontal team environment
  - Can limit in-depth skill development

Sources: Based on Frank Ostroff, *The Horizontal Organization: What the Organization of the Future Looks Like and How It Delivers Value to Customers*, (New York: Oxford University Press, 1999); and Richard L. Daft, *Organization Theory and Design*, 6th ed., (Cincinnati, Ohio: South-Western College Publishing, 1998) 253.

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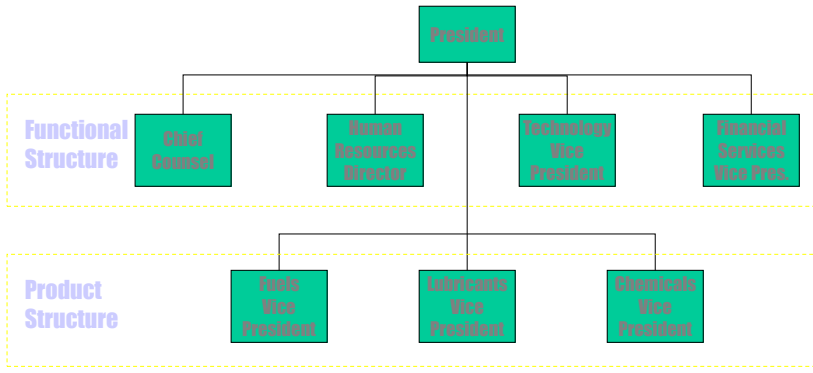
Hybrid: Sun Petrochemical Products



Sources: Based on Linda S. Ackerman, "Transition Management: An In-Depth Look at Managing Complex Change," *Organizational Dynamics* (Summer 1982): 46-66; and Frank Ostroff, *The Horizontal Organization*, (New York: Oxford University Press, 1999), Fig. 2.1, 34.

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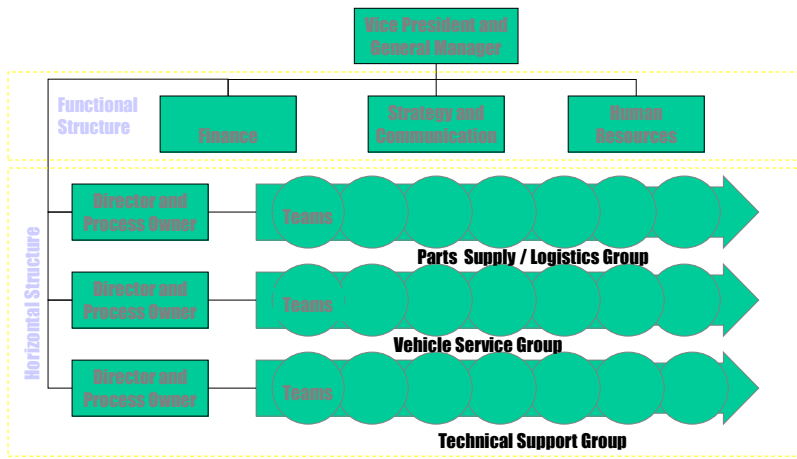
Hybrid Ford Customer Service



Sources: Based on Linda S. Ackerman, "Transition Management: An In-Depth Look at Managing Complex Change," *Organizational Dynamics* (Summer 1982): 46-66; and Frank Ostroff, *The Horizontal Organization*, (New York: Oxford University Press, 1999), Fig. 2.1, 34.

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Structure and other org attributes

- Structure is influenced / influences other organizational attributes
  - Culture
  - Goals and strategy
  - Technology (and IT)
  - Environment
  - Size

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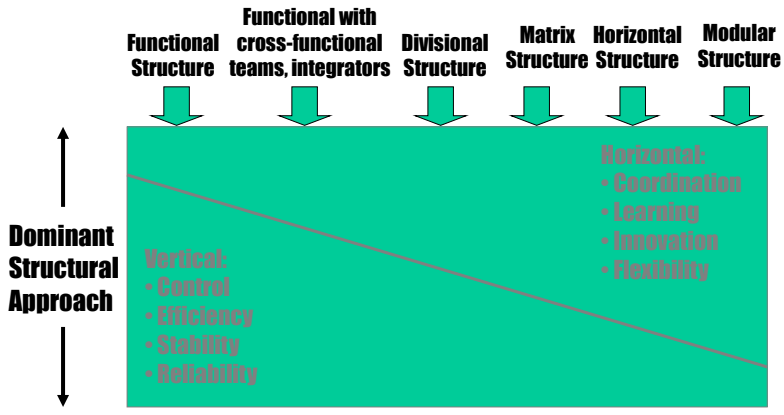
Structure to Efficiency vs. Learning



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Symptoms of Structural Problems

- Decision making is delayed or lacking in quality
- The organization does not respond innovatively to a changing environment
- Too much conflict is evident

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Governance

- Process and roles for taking decisions

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