COMP 1245

Business Applications

for Information Technology

Course Objectives

- Prepare you to work in IT "real world"

  – Understand what IT's roles are in an organization

  – Learn how IT is used in and for business

  – Understand how and why businesses function

- **NOT** a pure technical course

  – Learning and applying concepts

Course Information

- Textbook

  - *M: Information Systems, 6^h ed*., Baltzan

    - ISBN 9781265373931

  - Other materials (incl. today's lecture) available o

- Class starts promptly on the hour

  - One break somewhere in the middle

- No attendance taken

Course Information

- Course Outline:
  – Lecture schedule
  – Marking policy
  – Contract between us
- Evaluation
  – Online quizzes, **optional** final exam
  – 10 Quizzes - one for each chapter
  – Multiple choice
  – Be prepared – 2 attempts to deal with technical issues
  – Quizzes/exams to be your own work
  – Zero grade for cheating, plagiarism

Course Information

- **NO** make-up for missed work without valid reason <u>and</u> email in advance ggorsline@georgebrown.ca :
  - Medical for you or a family member
  - Work schedule
  - Child care
  - Visa or citizenship matters
  - Unusual personal situation
- Documentation may be requested
- Excuses that are not accepted:
  - I overslept
  - I hadn't finished breakfast/lunch
  - I was doing a lab/studying for an exam/… for another course
  - I wasn't in class

Course Information

- Lectures are recorded

- Lectures are interactive

- Use chat to ask questions

- Address to everyone so all can see.

- Respectful dialog please.
  - Harassing or other similar comments may be grounds for disciplinary action by the College.
  - Remember our international audience

- I will disagree with the text as appropriate.
  - For testing, the text is right.
  - For the real world, my experience tells me I'm right.

Instructor

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Chapter 0

Business and Business Information Systems

Business Characteristics

- A business is an individual or an organization that tries to earn a profit by providing products that satisfy people's needs

- A product is a good or service (some add "or idea") with tangible and intangible characteristics that provide satisfaction and benefits

    - Tangible: can see, hear, touch

    - Intangible: radio waves, ideas, promises of service

Business Characteristics

- Profit is the excess of revenues (the proceeds from the sale of goods and services) over expenses (the costs incurred to earn the revenues) for a period

- Profits motivate individuals to engage in business activities

- Profit = Revenue – Expenses   P=R-E

- Businesses can do with their profits what they want, within legal limits

Non-profit businesses

- Non-profit organizations
  - Government
  - Education
  - Charities and other non-profit organizations (NPO)
- Still run like a business
  - Success measured in other ways
    - Services delivered, efficiency, positive outcomes
  - Managing is same as for-profit, except "bottom line" is zero   P=R-E = 0

Business Characteristics

- To many businesses, success is more than profit

- Social responsibility

  - Environmentally responsible

  - Community service – employee release time

  - Part of profit for charity

- Builds reputation and differentiates from competition

  - Customers may choose based on "good" over price

  - Improves employee morale and job satisfaction

Business Characteristics

- For a business to succeed it needs:

  - Equipment and raw materials to turn into products to sell

  - Employees to make and sell the product

  - Financial resources to purchase additional goods and services, pay employees, and generally operate the business

Managing a Business

- Management is a process designed to achieve an organization's objectives by using its resources effectively and efficiently in a changing environment

- Managers are those individuals in organizations whose job it is to make decisions about how resources are used by planning, organizing, leading, and controlling the organization's activities to reach its objectives

Four Management Functions

- There are four management functions:

  - Planning

  - Organizing

  - Leading

  - Controlling

1. Planning

- Planning is the process of determining the organization's objectives (goals) and deciding how to accomplish them

- The plan for reaching a goal is a "strategy"

Purpose of Setting Goals

- Provides direction, guidance and motivation

- Assists in allocating resources

- Helps to define corporate culture

- Helps managers assess performance

Setting Business Goals

- Goals are performance targets

- Goals should be **SMART**

  – **S**pecific

  – **M**easureable

  – **A**ctionable

  – **R**ealistic

  – **T**ime-framed

Mission Statement

- Mission is the statement of an organization's fundamental purpose, basic philosophy and values

- Mission statement describes how the organization will achieve its purpose

- Clarifies who the organization serves, what it offers, and how it will be delivered

Star Trek's *Enterprise* Mission Statement:

"Space: the final frontier. These are the voyages of the starship *Enterprise*. Its continuing mission: to explore strange new worlds, to seek out new life and new civilizations, to boldly go where no one has gone before."

Plans

- Strategic
  - Multi-year
  - Directional
- Operational
  - Current budget year
  - Includes
    - Tactical plans (e.g. in October, we'll do these things…)
    - Projects

Strategic Plans

- Strategic plans establish the long-range objectives and the overall strategy or course of action by which a firm fulfills its goals

- Strategic goals

  – Long-term goals based on the mission statement

- Strategic plans often cover the next five years

  – Operational plans define the year-by-year implementation of the strategic plan

  – Strategic plans are usually "rolling" – each year the plan is updated

Operational Plans

- Operational plans are shorter-term, usually one budget year

- Operational plans specify what actions individuals, work groups, or departments need to accomplish in order to achieve the tactical plan and ultimately the strategic plan

- Operational plans often describe what needs to be accomplished at a detail level: monthly, weekly, daily

Tactical Plans

- Tactical plans are specific and short term
  - Replace server as it's running out of capacity
  - Hire additional person for call centre at the time call volume exceeds x

- Tactical plans are needed to ensure Operational plans include necessary resources ($$$)

- Tactical plans often based on assumptions of growth or change

Crisis Management or Contingency Planning

- Crisis management or contingency planning deals with potential disasters such as product tampering, oil spills, fire, ice storm, earthquake, computer viruses, or airplane crashes

Contingency Planning

- Expecting the unexpected

- Unexpected events may require quick action

- A "back-up" plan in case the firm's environments change

- Considers all reasonably possible scenarios to develop potential responses

  - What's not considered possible today may become tomorrow's crisis

2. Organizing

- Organizing is the structuring of resources and activities to accomplish objectives in an efficient and effective manner

- Organizing deals with jobs employees have

- Jobs are arranged within a structure that creates an efficient task system within the firm

3. Leading

- Leading is the motivating and guiding employees to achieve organizational objectives

- Guiding subordinates to complete the tasks necessary to reach organizational objectives

- Managers have various responsibilities with regard to their employees

  - The authority to provide direction and give orders

  - The ability to guide employees

  - The power to motivate subordinates

4. Controlling

- Controlling is the process of monitoring, evaluating and adjusting activities to keep the organization on course – to execute the plan

- Managers monitor the firm's performance
  - Determine if goals have been met
  - Determine what actions were most effective in achieving goals
  - Understand what has changed and adjust accordingly
  - Problem solving: identify incorrect/unexpected events, develop corrective actions, and ensuring that it does not reoccur

- Establish standards
  - Measure performance
    - Does performance meet desired standard/goal?
      - Yes
        - Continue current activities

      - No
        - Adjust performance or change standards

What are Information Systems?

- Businesses use information systems to collect, organize, and analyze relevant data to:

  – Understand what the business is doing

  – Forecast what it could do

  – Identify strengths and/or limitations

  – Improve profitability (NPO: increase services)

- Used to give a company a competitive edge by understanding customer wants and spending patterns

Information Systems Components

- Information systems include:
  - Technology
    - Hardware
    - Software
    - Networks
    - Data storage
  - Data: structured and unstructured
  - Processes: in the business units
  - Policies and procedures on how to use these

Trends in Information Systems

Three important roles of IT in a business:

- Provide secure storage and access to corporate data

- Support decision making by both managers and workers

- Provide the means to give the business a competitive advantage

Business Impacts

- IT is now embedded into people's personal lives
  - Access to IT is integral to daily life for many
  - IT literacy – at a level - is assumed
- Physical boundaries are no longer constraints
- Communicating with customers and employees is increasingly more complex
- Security of company information is more difficult and complicated
- Employees no longer accept what corporate IT says is good when they have better at home
- Instant access to everything now expected
  - Older systems not easily interfaced with the Internet

Strategic Uses of IT

- Support efficient everyday operations
  - Web presence, sales, service

- Use strategically as a competitive differentiator
  - identify needs for products, services, and capabilities that would give the company a major advantage in the market in which it competes or to find a new market

- To use IT as their means of production
  - Web sales, publishing, distribution, manufacturing

Enabling the Customer-Focused Business

- Companies that consistently provide customers with the best quality are those that:
  - Keep track of individual customer preferences
  - Keep up with market trends
  - Supply products, services and information anywhere, anytime, and
  - Provide customer services tailored to individual needs
- Social media and traditional channels

Enabling the Customer-Focused Business

- Analytics and the Internet are the means to understand and shape customer needs and expectations

  - Groupon, flash sales, location based offers

- Customer relationship management (CRM) and other e-business applications profile buying habits and tailor messages to each customer

- Interactive communications:
  - Internet
  - Intranet (company staff only)
  - Extranet (company and partners)

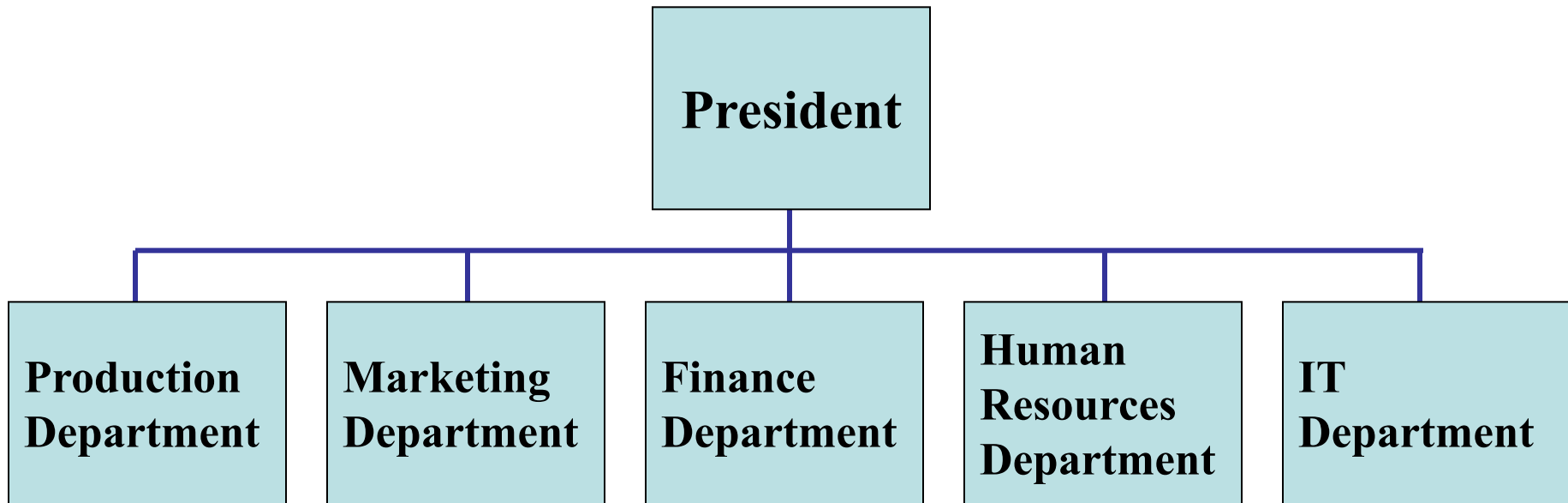# Organizational Structure

- The specification of the jobs to be done within a business and how those jobs are related to one another

  – Each organization develops a structure that meets its specific needs

- Organization charts illustrate the company's organizational structure

  – Shows employees' positions and how they relate to each other

  – Demonstrates the flow of decision making

Developing Organizational Structure

- Specialization
  - Identify the tasks required
  - Identify the employees to complete the tasks
  - Job specialization uses employees with special expertise to perform specialized tasks (e.g. IT)

- Departmentalization groups jobs into logical units
  - Increases efficiency through division of labour
  - Allows for better control & coordination
  - Improves management's performance monitoring

Departmentalization

- Bases of departmentalization

  - Functional

  - Product

  - Geographic

  - Customer

Functional Departmentalization

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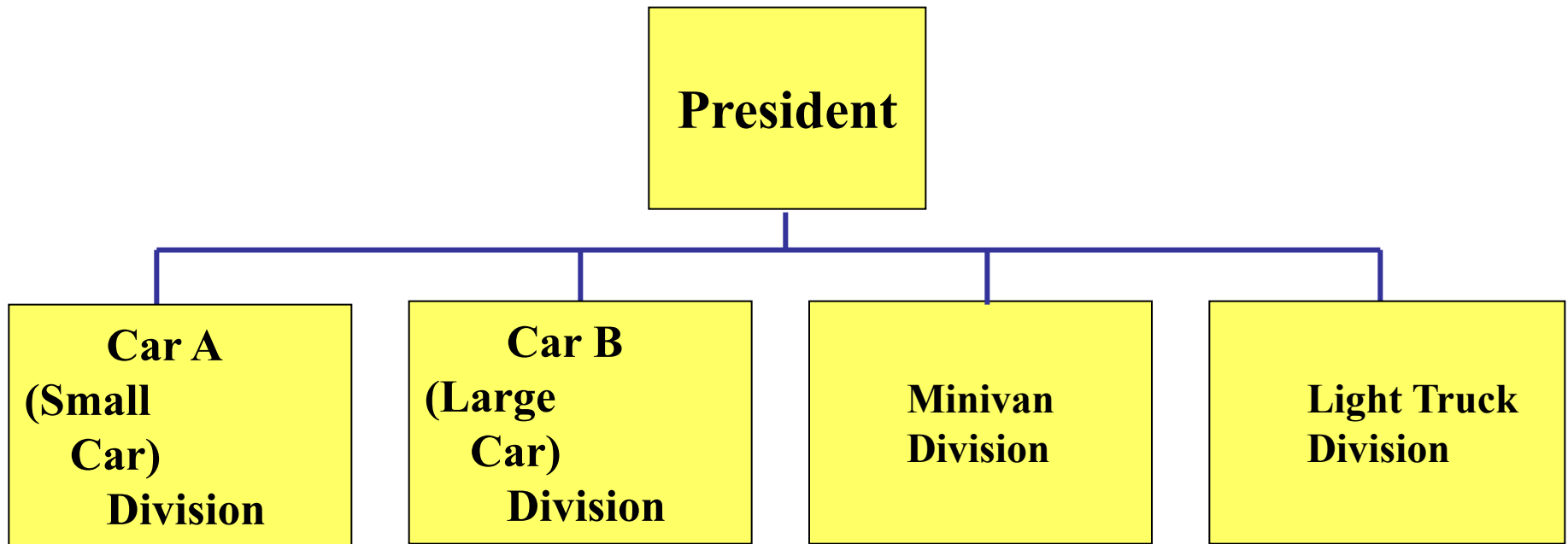
Functional Departmentalization

- Functional departmentalization groups jobs that perform similar functional activities: finance, manufacturing, marketing, and human resources

- Each function is managed by an expert in that work

- A significant disadvantage is that it emphasizes departmental units rather than the organization as a whole, slowing down decision making
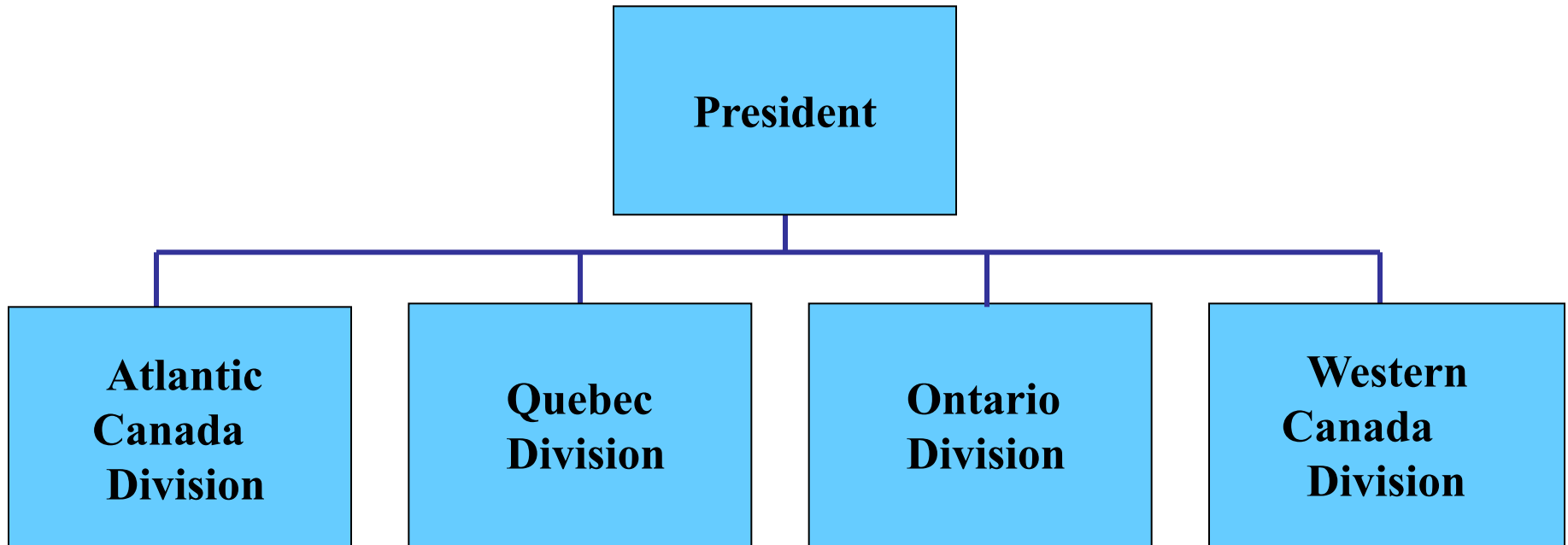
Product Departmentalization

Product Departmentalization

- Product departmentalization is organizing jobs in relation to the products of the firm

- Each division acts like a mini-company, developing its own products and taking corrective actions as necessary

- It simplifies decision-making

- However, some functions are duplicated:

 - Each product line could have its own accounting department, HR, IT, and so on

Geographic Departmentalization

Geographic Departmentalization

- Groups jobs by geographic location: e.g. province, region, country or continent

- Allows for quick response to customers' needs on a local level

- May require a large administrative staff to coordinate operations

- Tasks may be duplicated in every region

Customer Departmentalization
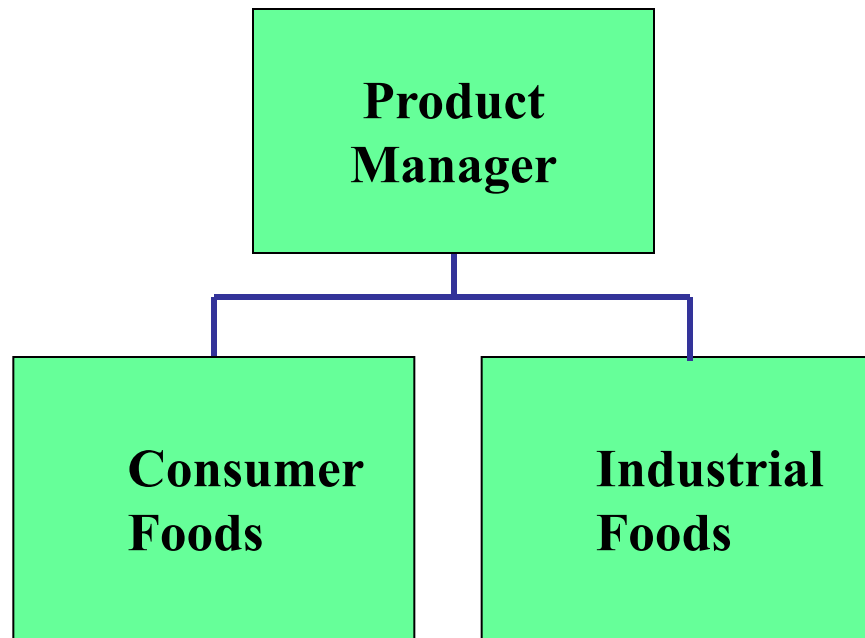
Customer Departmentalization

- Jobs arranged around the needs of various types of customers

  - commercial banking versus consumer banking

- Products and services better matched with customers

- May require a large administrative staff to coordinate operations

- May be duplication of tasks

Functional Units

- Human Resources

- Finance and Administration

- Sales and Marketing

- Operations and Manufacturing

Ownership Models

- Sole proprietor

- Partnership

- Share corporation

Ownership - Sole Proprietor

- Single individual as owner / investor

- Usually the sole employee / manager

- Owner bears full risk

  – Debt often secured by both business and personal assets

- May be incorporated

  – Limits liability – protects personal assets

  – Additional government reporting

Ownership - Partnership

- Several owners
  - Not all may be active in company
  - "Sweat equity" v. silent partner
- Partnership agreement
  - Percentage of investment and profit
  - Decision making process
- Incorporated

Ownership - Share Corporation

- Incorporated, professional management

- Owners are investors (shareholders)

  – Company issues shares

  – Ownership determined by number of shares owned

- Board of Directors

  – Hire and oversee management

  – Set policy

  – Elected by shareholders to protect their interests