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Office Solutions Development

Topic 1:
Application Software and Business Processes

Scope and Coverage

This topic will cover:

- How a wide range of application software supports various business processes and functions

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Learning Outcomes

By the end of this topic, students will be able to:

- Identify and discuss types of business processes and functions

- Broadly define application software

- List the range of application software available

- Discuss how application software supports business processes and functions

- Evaluate the role of application software in business and describe how it can enhance and/or improve business processes and functions

Terminology

- Terminology will be explained in the lecture, tutorial and seminar. You should take notes!

- A glossary of the key terms will also be provided.

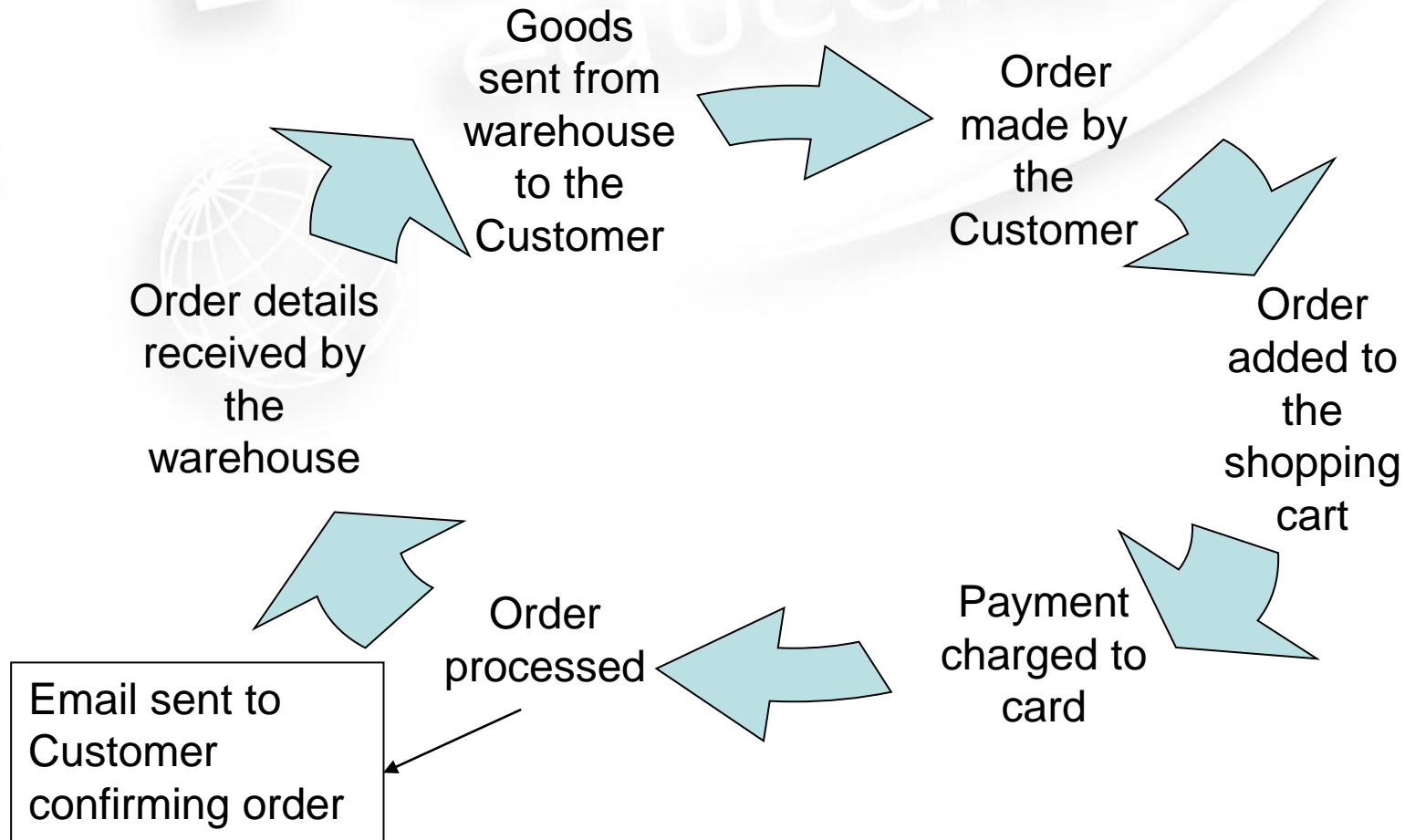- Ask questions if you do not understand.

What are Business Processes and Functions?

- The terms **business process** and **business function** refer to various tasks, such as marketing, sales, distribution and accounting, which are performed regularly by a business.

- In medium and large businesses, departments are set up to deal with the requirements of each process and function, e.g. the Marketing Department.

- The activities of each department are interconnected, e.g. the Finance and Sales Departments.

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Examples of Business Processes and Functions

- Advertising
- Distribution
- Finance
- Human Resources
- Logistics
- Management
- Manufacturing

- Marketing
- Production
- Purchasing
- Research and Development
- Sales
- Technical Support

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E-Commerce Business Functions

Goods sent from warehouse to the Customer

Order made by the Customer

Order added to the shopping cart

Order details received by the warehouse

Payment charged to card

Order processed

Email sent to Customer confirming order

What is Application Software?

Application software can be described as:

"A complete, self-contained program that performs a specific function directly for the user. This is in contrast to system software such as the operating system…which exists to support applications programs and utility programs."

(Source: Howe, D. (2010). Free On-Line Dictionary of Computing [Available Online] http://foldoc.org/application+software)

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The Range of Application Software

- Application software is used in many ways such as:
  - storing customer data in e-commerce businesses;
  - helping managers make business decisions;
  - enabling hospital administrators to book people into hospital to receive treatment.

- In Topics 2-12, we will focus on how application software is used and developed in business, but here we will also consider other areas in which application software is used.

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Where is Application Software Used?

- Banks
- Business
- E-commerce
- Education
- Engineering
- Government
- Law
- Media
- Medicine
- Science

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Types of Application Software

- Accounting
- CAD (Computer Aided Design)
- CAE (Computer Aided Engineering)
- CAL (Computer Aided Learning)
- Database
- Data Mining

- Decision Making
- Desktop Publishing
- Email
- Graphics
- Presentation
- Project Management
- Simulation
- Spreadsheet
- Word Processing

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What is Integrated Application Software?

- Several programs for different applications are provided in one 'package' (e.g. database, email, spreadsheet, presentation, word processing) and they share a common interface.

- Microsoft Office and Lotus Suite are examples of integrated software.

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Obtaining Application Software

- There are two main ways for companies/individuals to obtain application software:

    - Buy it: ***commercial software,*** also known as 'off-the-shelf' software

    - Have it written/modified to exact requirements: ***bespoke software****,* also known as custom or tailored software

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Examples of Commercial Application Software

- Adobe Suite

- Microsoft Office

- Sage Accounting software

Where Can Bespoke Application Software Be Used?

- Software written for:

  - Business (e.g. budgeting)
  - Medical applications (e.g. appointments system)
  - Logistics (e.g. route scheduling)
  - Education (e.g. learning a language)
  - Engineering (e.g. production planning)

- See also the two websites referred to on Slide 23.

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Commercial vs. Bespoke Application Software

Advantages

- Commercial application software is generally less expensive than bespoke application software.
- Bespoke application software generally matches
an organisation's requirements exactly.

Disadvantages

- Commercial application software does not always contain facilities and functions required by users.
- It is often complex to use.

Application Software in Business Processes and Functions

- Application Software is available that contains features that allow users to undertake the various tasks required in different business departments, such as the following:

    – Advertising, distribution, finance, human resources, logistics, management, manufacturing, marketing, production, purchasing, research and development, sales, technical support, etc.

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Examples of Application Software in Human Resource Tasks

- A human resources department undertakes various activities, such as:
  - Staff details
  - Recruitment
  - Training

- It uses applications software, such as databases, management information systems, payroll, presentation, time and attendance, and word processing.

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Examples of Application Software in Marketing Tasks

- A marketing department undertakes various activities, such as:

  - Market research

  - Analyses data

  - Reports on feedback

- It uses applications software, such as databases, decision making, spreadsheets, data mining and planning.

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Examples of Application Software in Logistic Tasks

- A logistics department undertakes various activities, such as:

  - Route planning
  - Dispatching goods
  - Loading and delivery tracking

- It uses applications software, such as route planning and calculation, costing and scheduling.

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Improving Business Processes and Functions with Application Software - 1

- Application software can be used to enhance and/or improve business processes and functions:

    - Costs can be reduced due to tasks being automated.
    - Data and information can be exchanged quickly.
    - Customer service is improved, e.g. customers can order online and also check the status of their accounts.

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Improving Business Processes and Functions with Application Software - 2

- Employees work more efficiently (which helps to increase profits).

- Such software often contains advanced features that allows the user to develop/program it in order to make it even more efficient.

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References

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Topic 1 - Application Software and Business Processes

Any Questions?