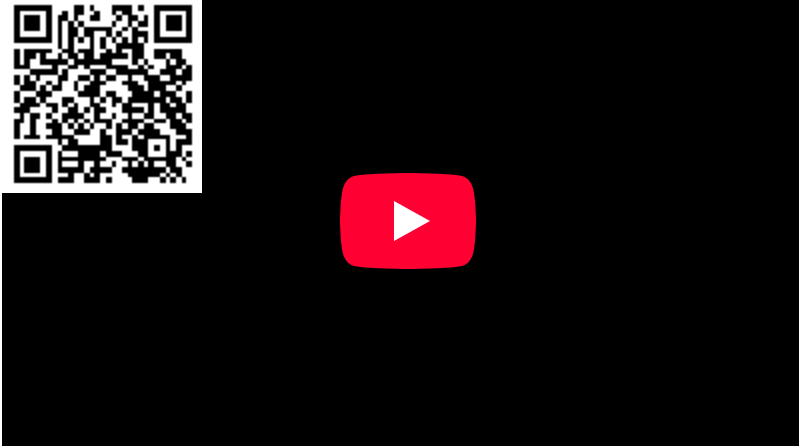


1.2: Transformation Process



A **transformation process** is any activity or group of activities that takes one or more inputs, transforms and adds value to them, and provides outputs for customers or clients. Where the inputs are raw materials, it is relatively easy to identify the transformation involved, such as when milk is transformed into cheese or butter. Where the inputs are information or people, the nature of the transformation may be less obvious. For example, a hospital transforms ill patients (the input) into healthy patients (the output).

✓ Examples of Transformation Processes

- Changes in the physical characteristics of materials or customers
- Changes in the location of materials, information or customers
- Changes in the ownership of materials or information
- Storage or accommodation of materials, information or customers
- Changes in the purpose or form of information
- Changes in the physiological or psychological state of customers

Often all three types of **input** – materials, information and customers – must be transformed by a single organization. For example, withdrawing money from a bank account involves information about the customer’s account, materials (such as checks and currency), and the customer. Treating a patient in hospital involves not only the “customer’s” state of health, but also any materials used in treatment and information about the patient.

As Figure 1.2.1 demonstrates, transformation processes can be categorized into four groups: manufacture (the physical creation of products, e.g. automobiles), service (the treatment of customers or storage of products, e.g. hospitals or warehouses), supply (a change in ownership of goods, e.g. retail), and transport (the movement of materials or customers, e.g. taxi service).

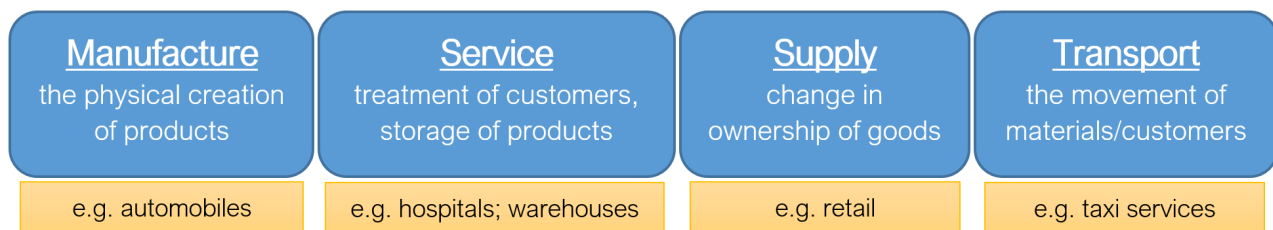


Figure 1.2.1: Categories of transformation processes.

Several different transformations are usually required to produce a good or service. The overall transformation can be described as the **macro operation**, and the more detailed transformations within this macro operation as **micro operations**. For example, the macro operation in a brewery is making beer (Figure 1.2.2). The micro operations include:

- milling the malted barley into grist
- mixing the grist with hot water to form wort
- cooling the wort and transferring it to the fermentation vessel
- adding yeast to the wort and fermenting the liquid into beer

- filtering the beer to remove the spent yeast
- decanting the beer into casks or bottles.

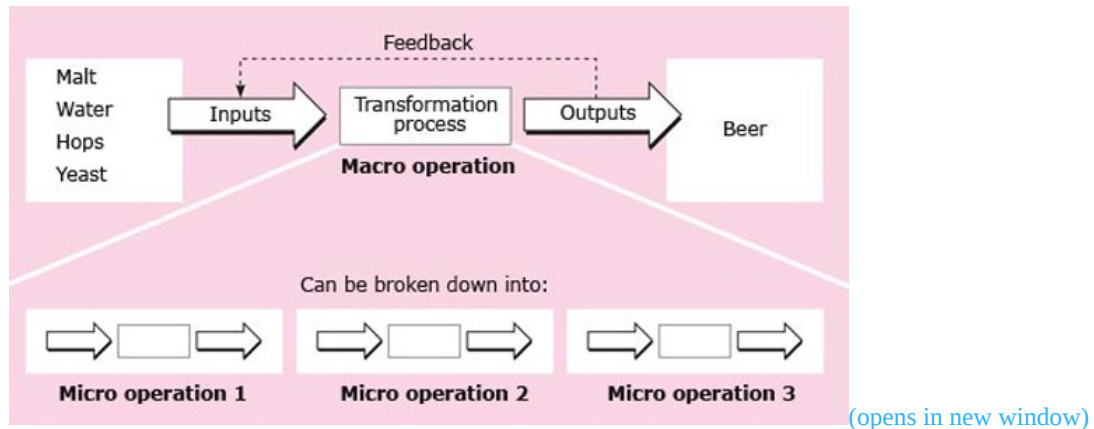


Figure 1.2.2: Macro and micro operations (transformation processes); Credit: The Open University / open.ed

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