This topic introduces you to the notion of core business processes within today's organisations. The topic uses Porter's Value Chain as a means of illustrating to you that every organisation is different from other organisations. Although today's firms can be extremely complex, common business processes exist throughout all types and sizes of organisations.

This topic will first distinguish between primary and support activities. It will then define the scope of the three core processes that can be found in all organisations. Finally, you will learn more about these concepts with reference to three different real-life cases.

Objectives:

Upon completion of this topic, you should be able to

- differentiate between an organisation's primary activities and its support activities
- explain the three core business processes
- explain how re-engineering a process may require additional process changes and/or re-organisation

2. Primary and Support Activities

While it may seem that organisations have literally hundreds of processes and large organisations may have many more, three core processes are common to all organisations. These processes may be identified by examining the value chain structure of organisations. The value chain model of organisations identifies specific activities in the business and views the organisation not as a collection of functional areas, but as a chain of activities.

- Primary activities are those most directly related to the production and distribution of a firm's products and services. These include inbound logistics, operations, sales and marketing, services and outbound logistics.
- Support activities are those that are necessary to make the delivery of the primary activities possible. These include activities such as administration and
management, human resource management and procurement. The following is an illustration of a typical value chain.

**Firm's Value Chain**

Primary activities include inbound logistics, operations, sales and marketing, services and outbound logistics. Support activities include administration and management, human resources, technology and procurement.

Multiple functional areas are involved in each activity. For example, an area such as financial planning may directly affect each activity. Also, marketing may be involved in the production and planning process so that requirements are appropriately incorporated in production planning.

The following exercise will help you distinguish between primary and secondary processes in the context of the business of different organisations. Click the link given below to proceed.

**Primary or Secondary – What's Your Point of View?**

**Primary or Secondary – What's Your Point of View?**

The following examples will help you distinguish between primary and secondary processes in the context of the businesses of different organisations.

You will be presented with different statements. For each statement, reflect upon the business that the organisation is in and determine whether the process outlined in the statement is a primary process or a secondary process.

**Statement 1**
In an eLearning company that creates web-based content, a team of 10 instructional designers, 8 graphic designers, and 5 programmers are engaged in creation of training material.

Q. Will you classify this activity as primary or secondary?

If you identified the answer as primary, you identified correctly. For the eLearning organisation, the creation of training or other learning material constitutes the core process – operations. Thus, the team is engaged in a primary activity.

**Statement 2**
In the Human Resources and Training Department of a manufacturing company, a similar team is engaged in creation of training material for their operations department.

Q. Will you classify this activity as primary or secondary?
If you identified the answer as secondary, you identified correctly. The team that is working for the training department of a manufacturing company is working to perform a support activity.

Statement 3
The Security department of a huge alloy steel plant employs 320 security guards to ensure the safety of the steel plant.

Q. Will you classify this activity as primary or secondary?

If you identified the answer as secondary, you identified correctly. Despite employing a higher number of security guards, the Security department of the steel plant is part of the administrative function and performs a support activity.

Statement 4
An organisation is engaged in providing security services to various companies that are located in a particular industrial area. It employs 72 security guards, who are stationed at 18 factories.

Q. Will you classify this activity as primary or secondary?

If you identified the answer as primary, you identified correctly. The organisation that deals in providing security has the security function as part of operations. In this case, security is a primary business function.

Statement 5
Q. The built-up area of a steel plant machine shop is 20,000 sq. metres, and it has machines gears, shafts and other mechanical parts to ensure smooth functioning of the plant. Will you classify this activity as primary or secondary?

If you identified the answer as secondary, you identified correctly. The machine shop in the steel plant performs the maintenance function.

Statement 6
Q. An automobile transmission box manufacturer has a machine shop with a similar built-up area as the steel plant machine shop. The machine shop at the machine shop manufacturer's manufactures gears, shells, gaskets and other parts that are used in transmission gearboxes. Will you classify this activity as primary or secondary?

If you identified the answer as primary, you identified correctly. The machine shop in the steel plant and the one in the automobile transmission box manufacturer's are almost equal in size. However, they exist for different purposes. In this case, the machine shop fulfils the main or operations function.

Statement 7
Q. A software multinational owns, maintains and runs a luxury hotel to ensure that its guests and employees are comfortable when they are invited to the corporate headquarters. Will you classify this activity as primary or secondary?

If you identified the answer as secondary, you identified correctly. The software multinational is in the business of developing software. The hotel is owned and run to make the employees comfortable. In other words, this is part of utilities making it a secondary function.

Statement 8
Q. A hotel chain maintains a hotel of the same size for tourists and business travellers. Will you classify this activity as primary or secondary?
If you identified the answer as primary, you identified correctly. The hotel is in the business of hospitality and is, therefore, engaged in primary activities. Compare this with the software multinational's hotel which was run with the sole purpose of providing good facilities for its employees as part of the utilities.

The practical examples just discussed helped you reflect on and differentiate between the two kinds of activities. This understanding will further provide the basic framework, through which you will develop the concepts of three important business processes.

- Primary activities have a direct relationship with the production and distribution of a firm's product and service.
- Support activities help the firm ensure delivery of primary activities. These activities run through the organisation, supporting logistics, operations, sales and marketing.

### 3. Three Core Processes

The following are the three core processes (in no particular order):

- **Customer-to-Cash (C2C) Process**
- **Purchase-to-Pay (P2P) Process**
- **Purchase-to-Build (P2B) Process**

These three processes map very closely to activities inherent in sales and marketing, purchasing and production in that order.

However, an examination of the value chain above makes it clear that different business processes overlap with functional activities. The following presentation will provide you with a short summary of these three core processes. Click the link given below to proceed.
Purchase-to-Pay or P2P Process:
This process comprises activities that relate to supply chain management at the purchasing end. It comprises sending the purchase order, receiving the goods and sending the payment. To achieve this objective, the process engages both inbound logistics and operations.

Purchase-to-Build or P2B Process:
One of the most critical processes, the P2B process connects activities such as inventory allocation, manufacturing and inventory transfer. It, thus, spans inbound logistics, operations and sales and marketing.

Customer-to-Cash or C2C Process:
This process comprises activities that define sales and marketing, services provided to the customer and payment made by the customer for the goods and services. A closer inspection will reveal that the C2C process is the exact opposite of the P2P process.

To summarise, this explanation provided an overview of the three core processes. Let us summarise the activities that these processes comprise, along with the primary functions they impact.

The activities for the Purchase-to-Pay or P2P Process are:
- Sending the purchase order
- Receiving the goods
- Sending the payment

The associated primary functions are:
- Inbound logistics
- Operations

The activities for the Purchase-to-Build or P2B Process are:
- Inventory allocation
- Manufacturing
- Inventory transfer

The associated primary activities are:
- Inbound logistics
- Operations
- Sales and marketing

The activities for the Customer-to-Cash or C2C Process are:
- Services provided to the customer
- Payment made by the customer

The associated primary activities are:
- Sales and Marketing
- Service
- Outbound Logistics

Let us review these three processes in detail:

Customer-to-Cash (C2C) Process
The C2C process is the interaction of activities and functional areas that facilitate the inflow of a customer order and its fulfilment through the organisation. It is a revenue-generation process, a generic version of which is given in the following animation and discussed using the example of a tyre-manufacturing company. Click the link given below to proceed.

The C2C Process

The Customer-to-Cash, or C2C, process today forms an important part of the value chain. Let us review a generic version of the C2C for a better understanding.

The various steps involved in this process are as follows:

**Customer sends order**
The C2C process is set into motion when the customer places an order.

**Order received and verified**
The order is received by the organisation and verified. It is then sent to the production department.

**Order filled**
The production department schedules production, produces the merchandise as per the order, checks its quality and makes it ready for dispatch.

**Order shipped**
The order is then shipped and the customer is informed.

**Customer billed**
Simultaneously, the customer is billed for the order.

**Payment received**
The customer receives the bill and makes the payment.

You reviewed a generic customer-to-cash process. A comprehensive example of this process could take place in an organisation engaged in the manufacture of automobiles.

The following are the steps in this process:

- Customer sends order
- Order is received and verified
- Order is filled
- Order is shipped
- Customer is billed
- Payment is received
Different functional areas that support this process may be sales, credit, shipping, marketing, warehousing, advertising, new product development, marketing intelligence, promotion and customer service. The C2C process has been the focus of many re-engineering projects. Consider the case of Grand Metropolitan (GrandMet), a UK-based diversified consumer goods company.

### C2C Restructuring at GrandMet

GrandMet purchased the US-based Pillsbury company for US$5.8 billion in 1989. GrandMet's forward-looking vision quickly imposed a 15% cost improvement (about US$300 million) on Pillsbury's high cost structure. The realisation that the customer supply chain accounted for more than 85% of Pillsbury's operating expenses inspired the organisation to focus on the C2C process as the first BPR target. Further examination revealed that C2C process reengineering would require the following re-organisation:

1. Re-engineer trade planning and analysis to reduce US$24 million in costs.
2. Develop customer-segmentation strategies to increase revenue by US$11 million.
3. Re-engineer customer relationships to make them fact-based. This will lead to a reduction in cost of US$30 million and an increase in revenue by US$11 million.

These results were achieved with an ambitious BPR program.

### Purchase-to-Pay (P2P) Process

The Purchase-to-Pay (P2P) process is the reverse of C2C and comprises activities related to supply chain management, logistics and purchasing. Click the following link to review this general process, using the same tyre and automobile companies' example that you reviewed earlier.

#### The P2P Process

You have reviewed the C2C process. Let us now review a generic version of the Purchase-to-Pay, or P2P, process.

The various steps involved in this process are as follows:

- **Send Purchase Order**
  The organisation that needs to purchase goods sends out the purchase order to the vendor organisation.
Receive and Verify Goods
The vendor dispatches the goods as per the purchase order and these are received by the buying organisation.

Send Payment
The buying organisation now sends the payment to the vendor organisation.

You just reviewed a generic purchase-to-pay process. A comprehensive example of this process could be found in an organisation engaged in the manufacture of automobiles.

The following are the steps in this process:
- Send purchase order
- Receive and verify goods
- Send payment to vendor

Thus, the P2P process is at the buying end of the spectrum and quite the reverse of the C2C process. The P2P process is an interacting structure of activities, functional tasks and groups that govern the inflow of raw material (goods and services) into the organisation. It typically involves departments such as accounts payable, payroll, receiving, purchasing and logistics.

Bristol-Myers Squibb in the US is an example of an organisation that has focused on re-engineering its P2P process.

P2P Re-engineering at Squibb

In 1996-1997, Squibb undertook a single enterprise-wide implementation of SAP’s Enterprise Resource Planning (ERP) software. This initiative made it possible for the company to build a data warehouse – called Business Warehouse – that provides a constant stream of accurate spend data instead of engaging in time-consuming, one-off analyses for sourcing projects.

The company's global sourcing process has delivered US$1.6 billion worth of savings on a total corporate outlay approaching US$10 billion each year. The group has leveraged the company's spending on chemicals, packaging and print, contract manufacturing, lab supplies, equipment and services, IT hardware, software, professional services, facilities maintenance, repair and operations (MRO), creative services and advertising, market research, medical education, events, clinical trials, diagnostic services, telecommunications and consulting services.

These improvements have led to the formulation of a benchmark process in the industry.
The Purchase-to-Build (P2B) Process

The Purchase-to-Build (P2B) process is one of the most critical processes in an organisation and links activities such as inventory allocation, manufacturing and inventory transfer. Click the following link to review this general process, using the same tyre and automobile companies' example that you reviewed earlier.

The P2B Process

The Purchase-to-Build, or P2B, process is the third of the core processes. Let us now review a generic version of the P2B process.

The various steps involved in this process are as follows:

**Inventory Allocation**
The buying organisation allocates inventory to its production processes.

**Inventory Determination**
The inventory requirement is determined by the production and conveyed to the stores.

**Production Schedule**
Production schedules the job and, accordingly, inventory from the stores is transferred to the workstations on the assembly line.

**Inventory manufactured**
The products on the assembly line are now fitted with the procured inventory; thereby the finished goods are made ready.

**Inventory refilled**
The finished goods are then added to the finished goods inventory.

You reviewed a generic purchase-to-build process. A comprehensive example of this process could be found in an organisation engaged in the manufacture of automobiles.

The following are the steps in this process:

- Inventory is allocated
- Inventory is determined
- Production is scheduled
- Inventory is manufactured
- Inventory is restocked

The P2B process has attracted large technology investments resulting in techniques such as MRP, computer-aided manufacturing and LEAN. The focus of these
techniques has invariably been to streamline manufacturing, reduce work-in-process, and lower production costs.

Xerox Corporation and P2B Restructuring

The Xerox Corporation in the US discovered as early as in 1979 that it was losing market share to Japanese organisations because of their significantly lower costs. The company first thought this was due to subsidies from the Japanese government, until it sent a fact-finding team to Fuji, Japan. The team quickly discovered that the lower costs were due to differences between the manufacturing processes of the two organisations. Xerox then benchmarked itself against industry best practices and used the results to push costs down without any decline in quality.

One observation from the above description of processes and the way in which they have been re-engineered should be the obvious use of information technology in the BPR process. In fact, it is rare to find a business process exercise, which does not include the use of an IT application. The following are some software systems used for managing business processes:

- Electronic data interchange (EDI)
- Business-to-business (B2B) market places
- Electronic funds transfer (EFT) networks
- Customer relationship management (CRM) systems
- Material requirements planning (MRP) systems
- LEAN manufacturing

Let us review each of these software systems in brief.

**IT systems for Business Processes**

Let us review the definitions of the IT systems for business processes.

**EDI**
EDI signifies data transfer between different companies over the network. It is a fast and easy way to transmit business-related information.

**B2B market places**
B2B is a term used to describe buying and selling of goods or services between companies. B2B on Internet is also called eBusiness. There are B2B portals that facilitate transactions between buyers and sellers.

**EFT networks**
EFT, as the name suggests, is a process of transferring funds electronically. Transactions over wire are also EFTs. In this process, cash transfers are not required, so it is easy, fast and safe.

**CRM systems**
CRM is a software-based, Internet-enabled system that focuses on the different
aspects of customer-company interactions. CRM helps organisations keep important data about their customers, which can be analysed and used by their sales and marketing personnel to enhance their business.

**MRP systems**
MRP is a software-based system that uses the production schedule to calculate inventory requirements. This process helps requirements and production synchronise with respect to deliveries.

**LEAN manufacturing**
LEAN manufacturing is the concept of reducing all resources, labour, material, and time, used in different manufacturing activities. It reflects Kaizen, Just-in-Time and TQM philosophies and helps organisations move towards reduction in wastage and errors.

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**The role of IT**
Let us review the IT applications that have been used to leverage the core processes.

**Consumer-to-Cash**
- Customer relationship management, or CRM, systems are used by organisations to obtain detailed information on customers and segmentation marketing.
- Data-warehousing applications use sophisticated statistical techniques to develop insights into customer preferences.
- Self-help customer systems use web technologies to allow customers to obtain information and service most simple customer queries.
- Bill-presentation systems are used to streamline the presentation of bills that may be paid by the use of electronic-fund transfer networks.
- Electronic cash is quickly becoming popular as an alternative mode of exchange.

**Purchase-to-Pay:**
- EDI systems connect larger organisations to streamline purchasing.
- B2B marketplaces and exchanges have been developed to reduce transaction costs.
- EFT networks are used to reduce float in the supply network.
- Sophisticated supply chain management systems are used to govern the control of material flow in logistics pipelines.

**Purchase-to-Build:**
- Enterprise Resource Planning systems are used to integrate the entire production process.
- Inventory and demand forecasting systems are used to reduce inventory in the production system.

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**Reading: Information Technology and BPR**
We know that there is an intricate relationship between business processes and the underlying technology. What, however, is the impact of ever-changing information technology on IT groups in organisations? Read the following article to...
know about five companies that demonstrate some of the big changes many business–technology leaders and organisations are battling.

Murphy, C. "Change Agents", Information Week (8 December 2003)

In the mid 1990s, a survey of chief information officers showed that re-engineering projects consistently fall short of their expected benefits. Read the following article for more details:

Moad, J. "Does Reengineering Really Work?" Datamation 39 no.15 (1 August 1993): 22-26

The following is a simple crossword puzzle to help reinforce your understanding of the basics of business process re-engineering and management. Click the link given below to try out the crossword.

Business Process Management Basics

Business Process Management Basics

You have reviewed the basics of business processes, their re-engineering and management. You may now wish to check your understanding of the same.

Review the following case part by part. After reviewing each excerpt you are required to identify the organisational process, activity or system associated with it.

The individuals and events referred to herein are fictional. Any similarity to actual organisations, individuals and events is purely coincidental.

Excerpt 1
Rubrico Italia Inc. is an organisation, which is engaged in mining and retailing of gems. Their mines are mainly located in Africa, and their retail network has a global reach. Most of their high-value customers are celebrities and scions of royal families. They also have an economical range of gems that appeal to the newly rich and the executive class. The retailing policy that they follow for their high-value customers is quite different from the one they follow for the economical range customers.

Q. Identify the organisational process to which this except pertains.

If you identified C2C as the organisational process in this instance, you identified correctly. The customer-to-cash, or C2C, process is an interaction of activities and functional areas that facilitates the inflow of customer order and its fulfilment throughout the organisation.

Excerpt 2
Rubrico’s customers never need to wait because of the management of the planes, safe-vaults, warehouses and personnel.

Q. Identify the organisational process behind these activities.

If you identified P2P as the organisational process in this instance, you identified correctly.
The purchase-to-pay or P2P process comprises activities that relate to supply chain management.

**Excerpt 3**
Rubrico ensures that its safe-vault warehouses are always replete with a base range. The inventories are managed through a software system, which keeps a tab on each gem. In case of an emergency, a small private jet transfers the required gemstone to its destination.

**Q. Identify the system behind these activities.**

If you identified MRP as the system behind these activities, you identified correctly. MRP is a software-supported planning system for determining the requirement of materials.

**Excerpt 4**
By March 2004, the restructuring of the processes was over. Rubrico decided to create management teams for each of their retail regions. The tasks listed for these teams included monitoring inventories, accounts, employee morale and reviewing whether the organisation was able to sustain the changes. They were also required to provide necessary support, if required.

**Q. Identify the activity that Rubrico undertook.**

If you identified BPM as the activity undertaken by Rubrico, you identified correctly. Business process management or BPM ensures that the initiatives taken through business process re-engineering do not degenerate.

**Excerpt 5**
In 2001, Rubrico's top management discovered evidences of theft. Three individuals were found guilty and their confessions indicated that Rubrico's customer-to-cash or C2C process had loopholes. Rubrico decided to review and correct the process by reorganising and replacing certain activities.

**Q. Identify the activity that Rubrico undertook.**

If you identified BPR as the activity undertaken by Rubrico in 2001, you identified correctly. Business process re-engineering or BPR is the re-design and re-organisation of business activities, based on specific objectives.

**Excerpt 6**
In March 2005, when Rubrico's CEO reviewed the annual report, he was pleased to see the improvement in the financial position of the organisation. He convened a short morning meeting in his office, where his opening remarks were,

*If our management teams hadn't ensured that the re-engineered processes worked; the entire exercise would have been a waste! Let's thank the man who first thought of this concept.*

**Q. Who did the Rubrico CEO thank?**

If you identified Taylor as the person acknowledged by Rubrico CEO, you identified correctly. The oldest reference to business process management occurs in Frederick Taylor's Principles of Scientific Management. Taylor's ideas on time and motion studies and sequential activities created the field of industrial engineering. These concepts were refined over the next half century and helped to create efficient work environments and production facilities worldwide.
Excerpt 7
One of the reasons behind Rubrico's success is its state-of-art detection equipment and supporting machinery. The mining equipment is always kept in wonderful shape, and the consumables are never out of stock.

Q. Identify the organisational process that ensures these activities.

If you identified P2B as the organization process that ensures these activities, you identified correctly. The purchase-to-build or P2B process is a highly critical process that links activities such as inventory allocation, manufacturing and inventory transfer.

Excerpt 8
The global Head of Marketing at Rubrico smiled and added that the man who presented the concept of BPM to the modern world was equally important.

Q. Who was the marketing head referring to?

If you identified Hammer as the person being acknowledged by the marketing head, you identified correctly. The modern study of business process management can be attributed to Michael Hammer in the study *Reengineering Work: Don't Automate, Obliterate*.

Excerpt 9
Rubrico's found that its C2C processes were backed by an excellent supply chain, which was its main competitive advantage.

Q. Who gave the theory of competitive advantage?

If you identified Porter as the person who gave the theory of competitive advantage, you identified correctly. Michael Porter proposed the Theory of Competitive advantage.

These questions helped you revisit the basics of process, their re-engineering and their management. You refreshed your understanding of not only the three core processes, but also the main proponents of BPR and BPM.

4. Discussion

**Discussion: Business Processes and the Role of IT**

In this topic, you reviewed the following software systems used for managing business processes:

- Electronic data interchange (EDI)
- Business-to-business (B2B) market places
- Electronic funds transfer (EFT) networks
- Customer relationship management (CRM) systems
- Material requirements planning (MRP) Systems
- LEAN

Now, assume that you are a consultant who has been hired to improve the business processes in an organisation that is trying to streamline its operations.

- Can you think of some other applications that have been used to support the business processes you reviewed in this topic?
- What will you recommend to the organisation?
5. Self-Assessment

Now, try the self-assessment questions to test your understanding of the topic. Click the following link to open the Self-Assessment in a new window. [Self-Assessment]

Q1. Which one of the following activities within a software development company can be categorised as a support activity?
   1. Sales teams undertake marketing research and develop prospective customer database.
   2. Developer teams are placed onsite with the customer for post-development training of client's workforce.
   3. Developer teams are engaged in development of software onshore.
   4. Developer teams are engaged by the Corporate Training department of the software company to create training material.

Q2. At Rainbow Creations Inc., customers book orders through telephone or on their website. The orders are then processed by their Order Booking department, which also analyses the information and sends it to Purchase, Inventory and Production departments simultaneously. Inventory informs Purchase about the shortfall, if any, and Purchase buys the required material. The Production department produces the goods and makes them ready for shipping. Payment is realised upon delivery. Which two of the following are true about the different activities outlined in this scenario?
   1. Booking orders through telephones or the website form part of the P2B process.
   2. Orders processing and sending information to various departments are part of the P2P process.
   3. Informing Purchase of the shortfall and subsequent action by Purchase forms part of the P2B process.
   4. Receiving the order, shipping goods to the customer and receiving the payment constitute the C2C process.

Q3. An organisation went through a re-engineering of its P2B process. Which three of the following measures may have to be undertaken as an offshoot of its P2B restructuring?
   1. Additional restructuring of related processes
   2. Restructuring of its support activities
   3. Addition of new technologies
   4. Change in the mission of the company

6. Summary

This topic covered the following main points:
- Although organisations may appear vastly different on the surface, similarities exist in today's organisations.
- Primary and support activities differ in their relationship with the production and distribution of the firm's products and services.
- Primary activities are directly related. They include inbound logistics, operations, sales and marketing, services and outbound logistics.
- Support activities include activities such as administration and management, human resource management and procurement.
- The following are the three core processes:
  - Customer-to-Cash (C2C)
  - Purchase-to-Build (P2B)
  - Purchase-to-Pay (P2P)
- Re-engineering a process may need further reorganisation of the related processes.
- IT plays an important role in today's organisational processes.

Credits and Disclaimer
Murphy, C. "Change Agents", Information Week (8 December 2003) at http://www.informationweek.com/showArticle.jhtml;jsessionid=Q3QOELTHY32NKQSNDBCSKH0CJUMEKJVN?articleID=16600129 Used with permission.