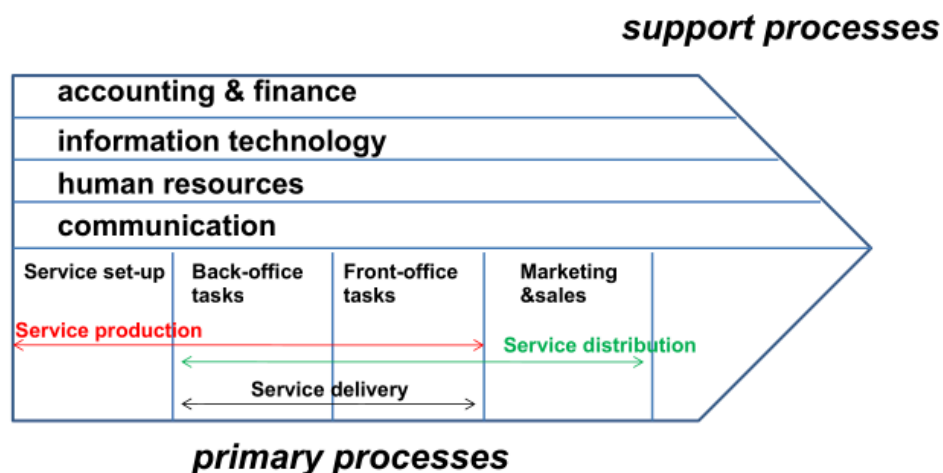


03.Operational Portfolio Services

Manufacturing companies produce tangible products, service companies produce intangible products:

- Services are made of “bits”, made of information
- Manufacturing products are made of atoms
- In service companies, IT is a production technology, a managerial technology and a distribution channel
- Services are produced while they are delivered
- In services, IT is simultaneously a production technology and a distribution channel

Services value chain (Porter revisited)



In service companies, the overlap between production and distribution is called service delivery.

Services value chain – definitions

4 phases:

- **Service set-up:** all the tasks that are needed to set up the production capacity of the company (e.g. for a bank, opening a new branch, or defining contracts with external data entry services). It is the first step.
- **Back-office tasks:** production activities that are performed without the physical/virtual presence of the client, upon a client's order
- **Front-office tasks:** production activities that are performed with the physical/virtual presence of the client, upon a client's order
- **Marketing and sales:** tasks needed to advertise the company's services, attract prospect customers, and sign service contracts with new customers

- Order management: it manages the information regarding orders from order check in to post-sale services.
- Knowledge management: it manages the new information on customers acquired during service production and distribution by transforming into knowledge that can be used to in future production and distribution activities to improve customer satisfaction

Order management and operations management coincide. Materials management is replaced by knowledge management. Service customization is a fundamental driver of customer satisfaction. Service customization requires knowledge about (individual) customers. Knowledge about customers is acquired during service production and distribution, but usually it is unstructured. Knowledge management processes gather this unstructured information and transform it into structured information and related customer service processes. Knowledge management is a continuous learning process. The environment changes (environmental uncertainty), therefore organizational processes must change through continuous learning.

We need knowledge management to achieve services personalization, main driver of choice, it wants to improve services personalization.

It is an ongoing process. Multiple way of interest.

Very often it happens that new technology goals evolve and there is a gap in technology reaching maturity, but the solution is continuing to sell for much years so it has to change and adapt implementing new technologies.

Horizontal and vertical IT integration in service companies

1. Horizontal integration: integration of systems along operating processes (Porter's primary processes) leads to Personal Computers(In mid 90s as technology can support operational works at the lower level of hierarchy).
2. Vertical integration: integration between the operational portfolio and the executive portfolio leads to Client-Server architecture

Start on the assumption that the end user will be more specialized as a consequence of PC but the reality is the opposite and people became less specialized with the advent of PCs.

It is not automation but support of office works becoming less specialized. Information technologies lead to jobs requiring people with imagination and capabilities to use the technologies as they were more needed. Jobs changes and we need to figure out how they are going to change. You need an expertise.

Obstacles to IT integration in service companies

The knowledge management process requires

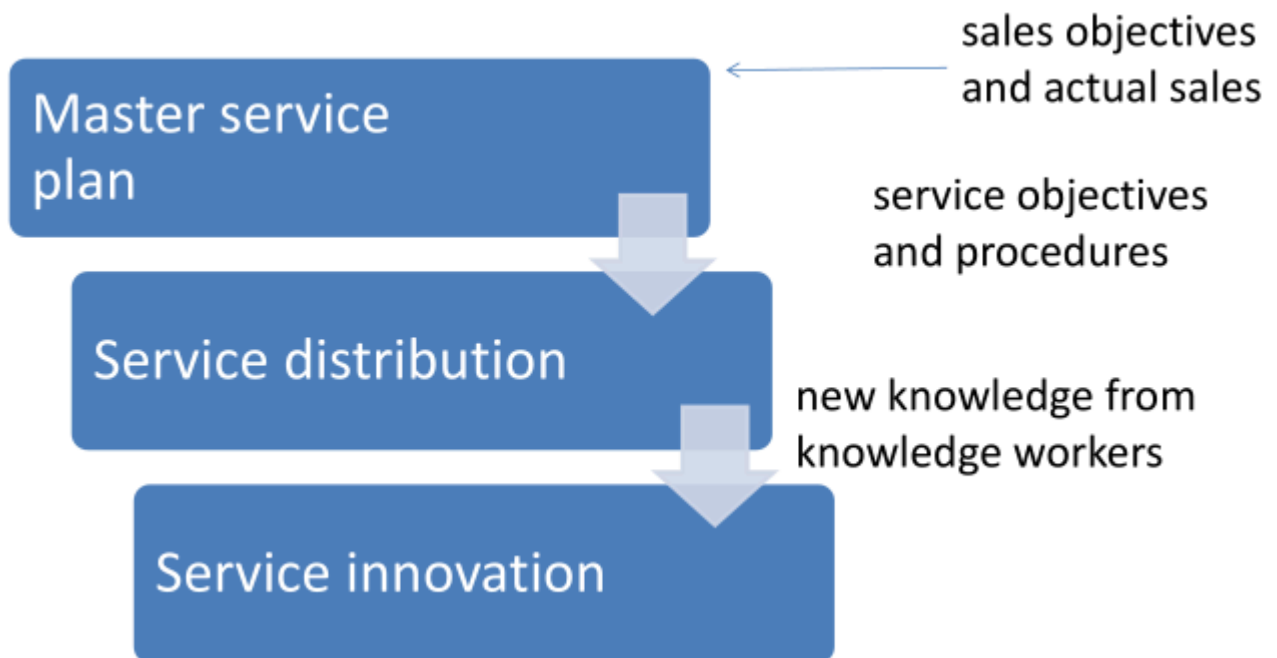
- the extraction of new knowledge on customers from knowledge workers,
- the transformation of this knowledge into structured information to be stored in the mainframe,

- the design of new procedures to use this knowledge to obtain greater service customization

This learning process is more difficult than the MRP planning process à it is a knowledge management process

The information shared between companies and customers is often not structured, it's chit chat.

Knowledge management is a mix of production planning and service R&D(called service innovation)



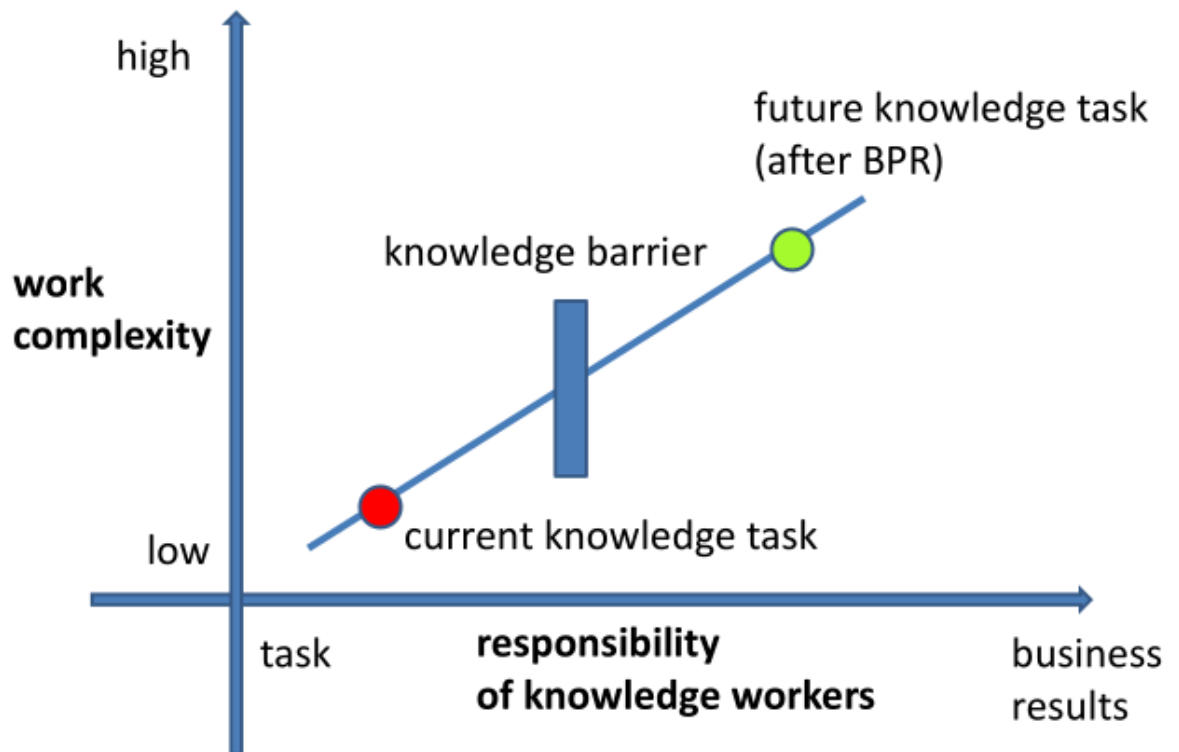
Business process reengineering(BPR)

The term refers to the change process involved in IT integration in service companies. It has become a common term to indicate any IT-driven organizational change. In the '90s people were wondering why BPR was impacting on services rather than manufacturing....The term refers to the change process involved in IT integration in service companies.

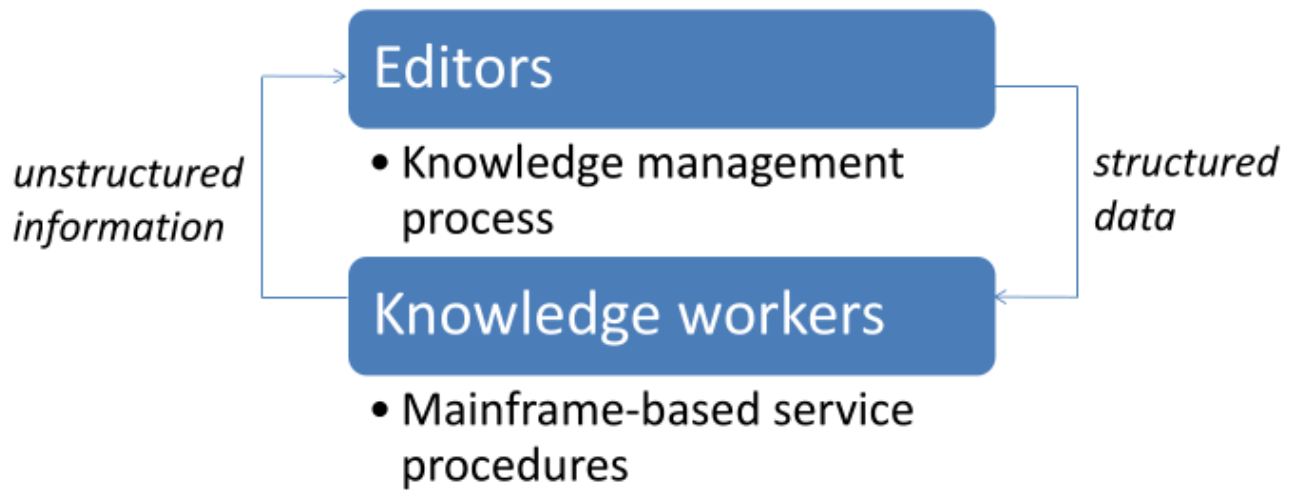
- It has become a common term to indicate any IT-driven organizational change
- In the '90s people were wondering why BPR was impacting on services rather than manufacturing....

Consequence of PC and Clients servers. Big deals for customers but not from manufacturers as they already had these kind of service.

Managerial issues



- Limited ability to personalize services
 - Limited ability to serve niche markets
 - Limited sales ability of sales personnel ("knowledge barrier" leads to bounded rationality)
 - Limited responsibility of sales personnel over sales results
 - You want to serve every client that arrives (Say no to no one)
 - Personnel has to have a high level of responsibility over business result
- BPR as a means to overcome the knowledge barrier:
- Higher degree of delegation
 - Greater complexity of the tasks of sales personnel → service procedures embedded in desktop applications
 - From the sale of services to customer care leads to customer history stored on mainframes



With BPR, knowledge workers become generalists

You can exploit this unstructured information going through all the information and look if you can understand some trends, potential issues and bring back process information to plan new processes to address those issues. Editors and manager will use this structured information with Executive Information.