

- Operations processes can also be classified as make-to-order and make-to-stock. The make-to-order process is set in motion by customer orders and geared to delivery performance. The make-to-stock process is geared to the replenishment of inventory; it does not respond to specific customer orders. Make-to-stock operations are measured by use of capacity, inventory levels, and stockout performance.
- The combination of product flow with type of customer order yields six types of operations processes. Selection from among these processes is made by considering capital requirements, market conditions, labor, management skills, raw materials, and technology. These factors are evaluated by conducting marketing and economic studies, but the process selection decision is always strategic in nature.
- The process-product matrix describes stages in the life cycles of products and processes. A firm should define its distinctive competence in terms of both process and product by selecting a patch on the matrix. The matrix helps relate process selection decisions to product decisions and the market.
- Vertical integration defines the ownership question in process selection. Forward integration extends ownership of the process forward toward the market. Backward integration extends ownership of the process backward toward suppliers. Both types of integration involve economic considerations; however, backward integration is concerned with reliability of supply, while forward integration is concerned with reliability of demand. All vertical-integration decisions should be viewed in a strategic context.

QUESTIONS

1. Classify the following types of processes as line, intermittent, or project:
 - a. Doctor's office
 - b. Automatic car wash
 - c. College curriculum
 - d. Studying for an exam
 - e. Registration for classes
 - f. Electric utility
2. Why are line processes usually so much more efficient but less flexible than intermittent processes? Give three reasons.
3. The rate of productivity improvement in the service industries has been much lower than in manufacturing. Can this be attributed to process selection decisions? What problems would be involved in using more efficient processes in service industries?
4. The project process is typically used for skyscraper construction. Does this lead to higher costs? Could more efficient processes be used? If so, how?
5. Several industries—including those that produce furniture, houses, sailboats, and clothing—have never progressed down the diagonal of the process-product matrix to become highly standardized and efficient. Why do you think this is so? Is this a serious problem?
6. Compare the expensive restaurant, fast-food restaurant, and cafeteria in terms of process characteristics such as capital, product type, labor, planning, control systems, etc.