

Do it in house

Q: quality problem usually easier to trace in house and improvement can be more immediate but can be some risk of complacency.

S: can meansynchronized schedules which speed throughput of materials and information, but if the operation has external customers, internal customers may be low priority

D: easier communications can help D, but if the operation also has external customers, internal customers may receive low priority

F: closeness to the real needs of a business can alert the in house operation to required changes, but the ability to respond may be limited by the scale and scope of internal operations

C: in house operations do not have to make the margin required by outside suppliers so the business can capture the profits which would otherwise be given to the supplier but relatively low volumes may mean that it is difficult to gain economies of scale or the benefits of process innovation.

Buy it in outsourced supply

Q: supplier may have specialized knowledge and more experience, also may be motivated through market pressures, but communication more difficult

S: S of response can be built into the supply contract where commercial pressures will encourage good performance, but there may be significant transport/ delivery delays

D: late delivery penalties in the supply contract can encourage good delivery performance, but organizational barriers may inhibit in communication

F: outsource suppliers may be larger with wider capabilities than in house suppliers and more ability to respond to changes, but may have to balance conflicting needs of different customers

C: probably the main reason why outsourcing (activities, cash, personnel, activities, equipment) is so popular, outsourced companies can achieve economies of scale and they are motivated to reduce their own costs because it directly impacts on their profits, but costs of communication and coordination with supplier need to be taken into account.

Layout types, volume and variety characteristics of layout types

Layout involves the relative positioning of transformed resources within operations and the allocation of tasks, which together dictate the flow of transformed resources, Layout – lecture room, flow – you coming in take a seat (customer), materials too

Layout types:

- 1) Fixed layout: + very high product and mix flexibility, product and customer not moved, variety of tasks for staff. – very high unit cost, scheduling space and activities can be difficult. transforming resource is fixed, eg. Everything moving around it. In a fixed position layout, personnel, supplies, and equipment are brought to the site where the product will be assembled, rather than the product being moved through an assembly line or set of assembly stations. Very high customization, designed for specific transformed resources, high flexibility, can change the whole process according to customers requirement, high unit cost, scheduling can be difficult
- 2) Functional: + high product and mix flexibility, relatively robust in the case of disruptions, easy to supervise. – low utilization, can have very high WIP, complex flow.