



# HUBUNGAN RANTAI PASOKAN DAN LOGISTIK

An understanding of the concept is especially important when planning for any aspect of distribution and logistics. A simple, practical example helps to emphasize the point:



*A company produces plastic toys that are packaged in cardboard boxes. These boxes are packed on to wooden pallets that are used as the basic unit load in the warehouse and in the transport vehicles for delivery to customers.*

*A study indicates that the cardboard box is an unnecessary cost because it does not provide any significant additional protection to the quite robust plastic toys and it does not appear to offer any significant marketing advantage. Thus, the box is discarded, lowering the unit cost of the toy and so providing a potential advantage in the marketplace.*

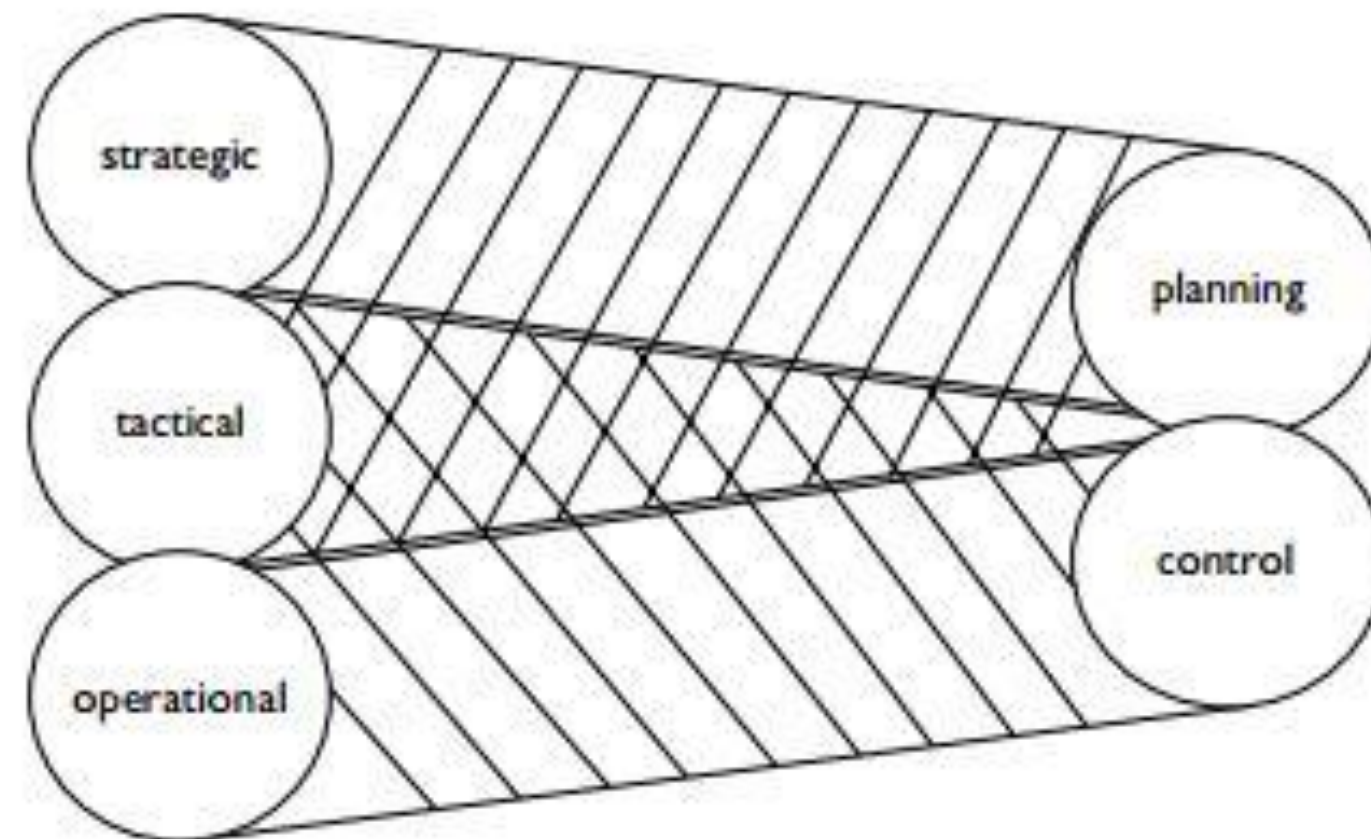
*One unforeseen result, however, is that the toys, without their boxes, cannot be stacked on to wooden pallets, because they are unstable, but must be stored and moved instead in special trays. These trays are totally different to the unit load that is currently used in the warehouse and on the vehicles (ie the wooden pallet). The additional cost penalty in providing special trays and catering for another type of unit load for storage and delivery is a high one – much higher than the savings made on the product packaging.*



Trade-off		Finance	Production	Distribution	Marketing
Longer production runs		Lower production unit costs	Lower production unit costs	More inventory and storage required	Lower prices
Fewer depots		Reduced depot costs (though transport costs likely to increase)	No impact	Less complicated logistics structure	Service reduction due to increased distance of depots from customers
Reducing stocks of finished goods		Reduced inventory costs	Shorter production runs so higher production unit costs	No need to expand storage facilities	Poorer product availability for customers
Reducing raw material & component stocks		Reduced inventory costs	Less efficient production scheduling due to stock unavailability	Lower stock-holding requirements	No direct impact
Reducing protective transport packaging		Reduced packaging costs	No impact	Reduced transport modal choice	Increase in damaged deliveries
Reducing warehouse supervision		Cost savings through lower headcount	No impact	Reduced efficiency due to less supervision	Lost sales due to less accurate order picking

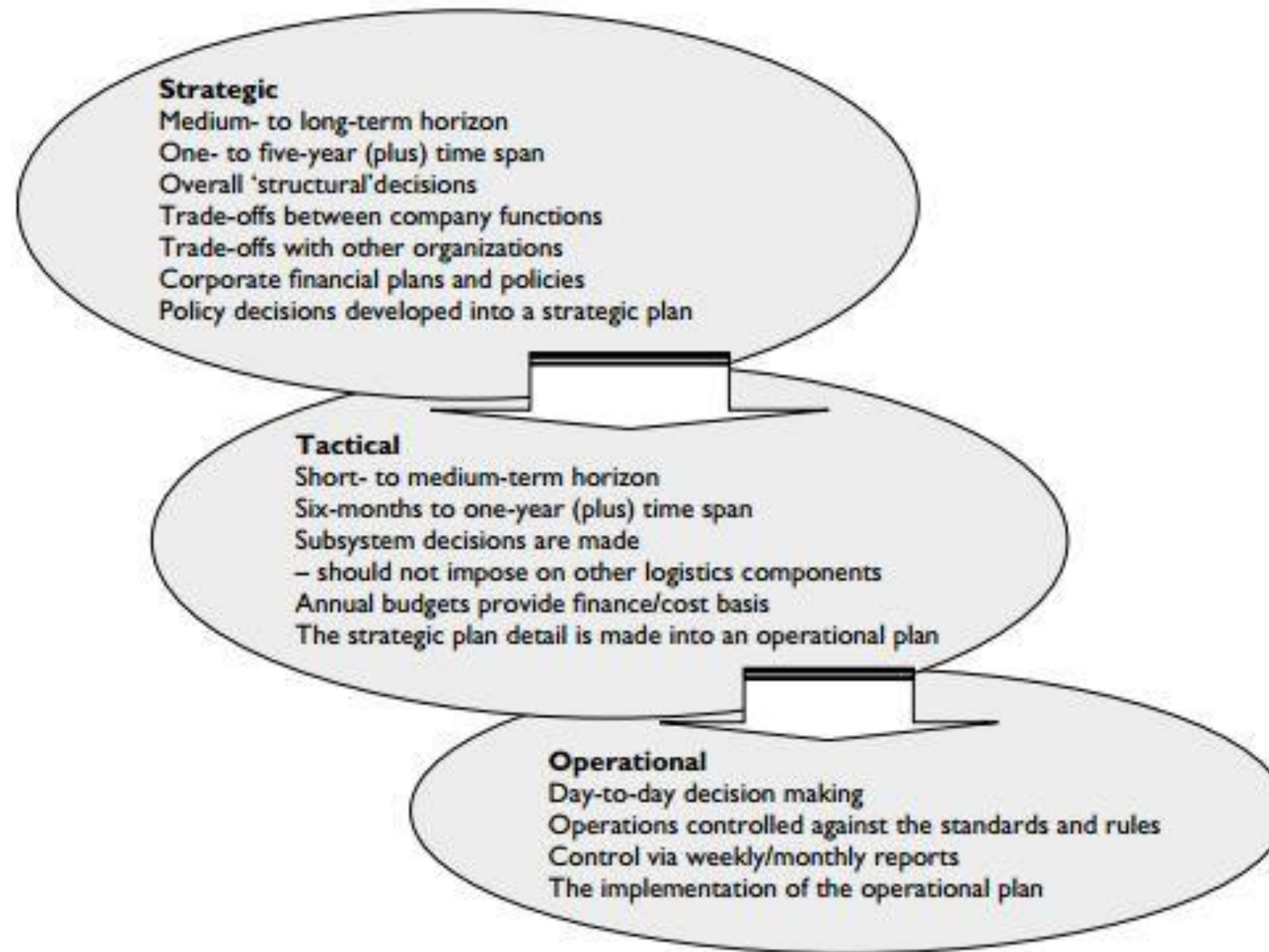
**Figure 2.1** Some potential trade-offs in logistics, showing how different company functions might be affected

# Planning for logistics

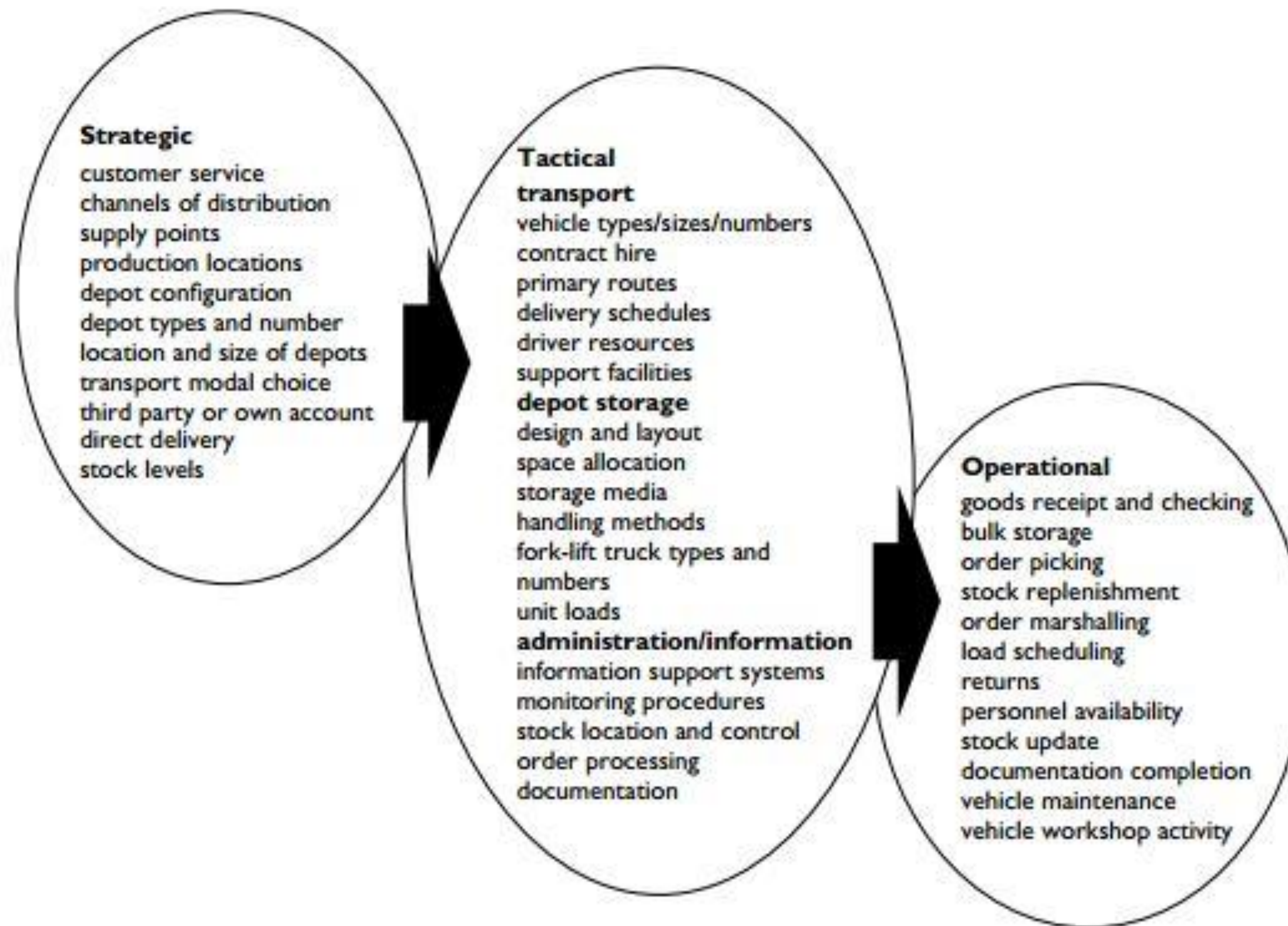


**Figure 2.2** Logistics planning hierarchy



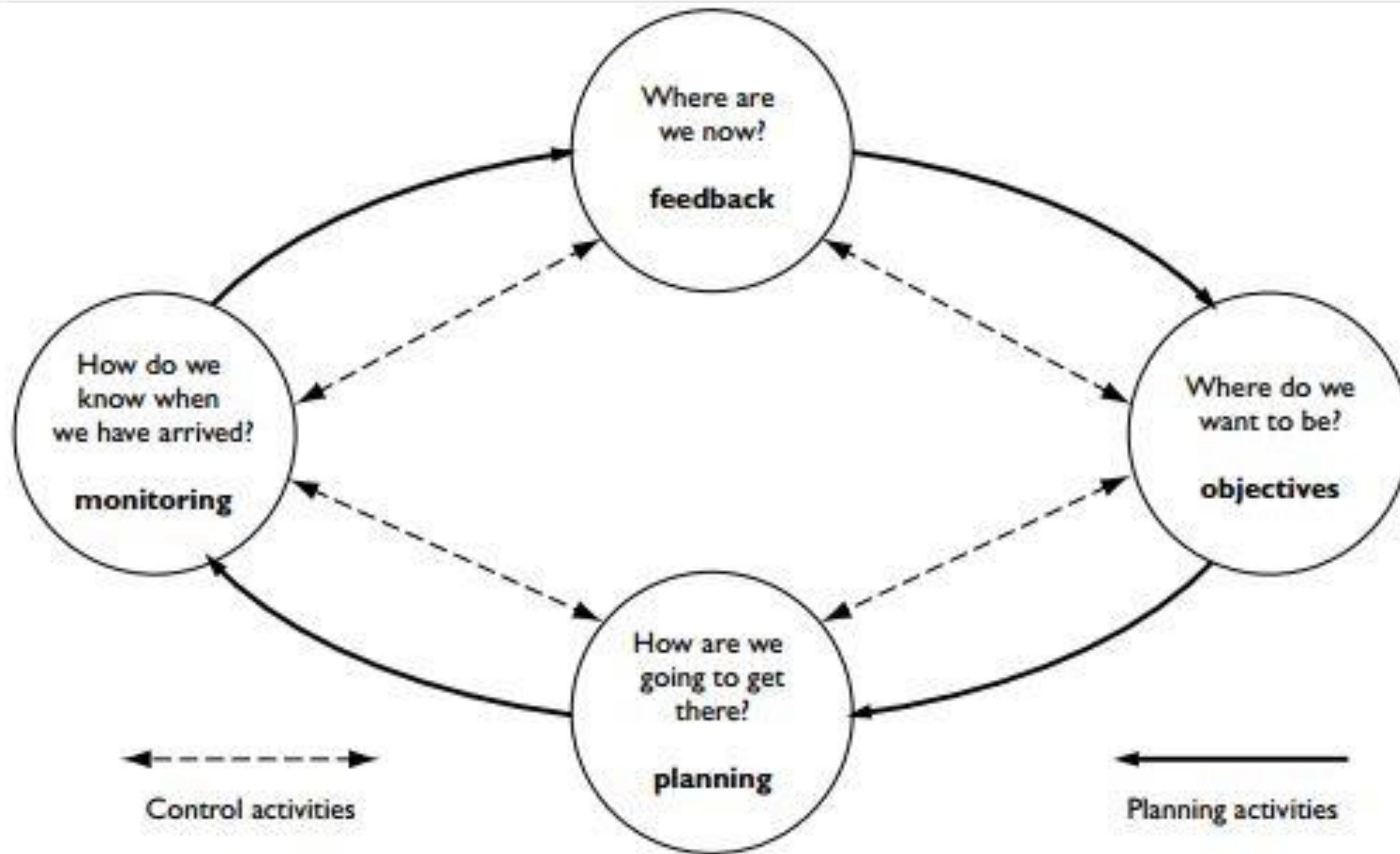


**Figure 2.3** The major functions of the different planning time horizons



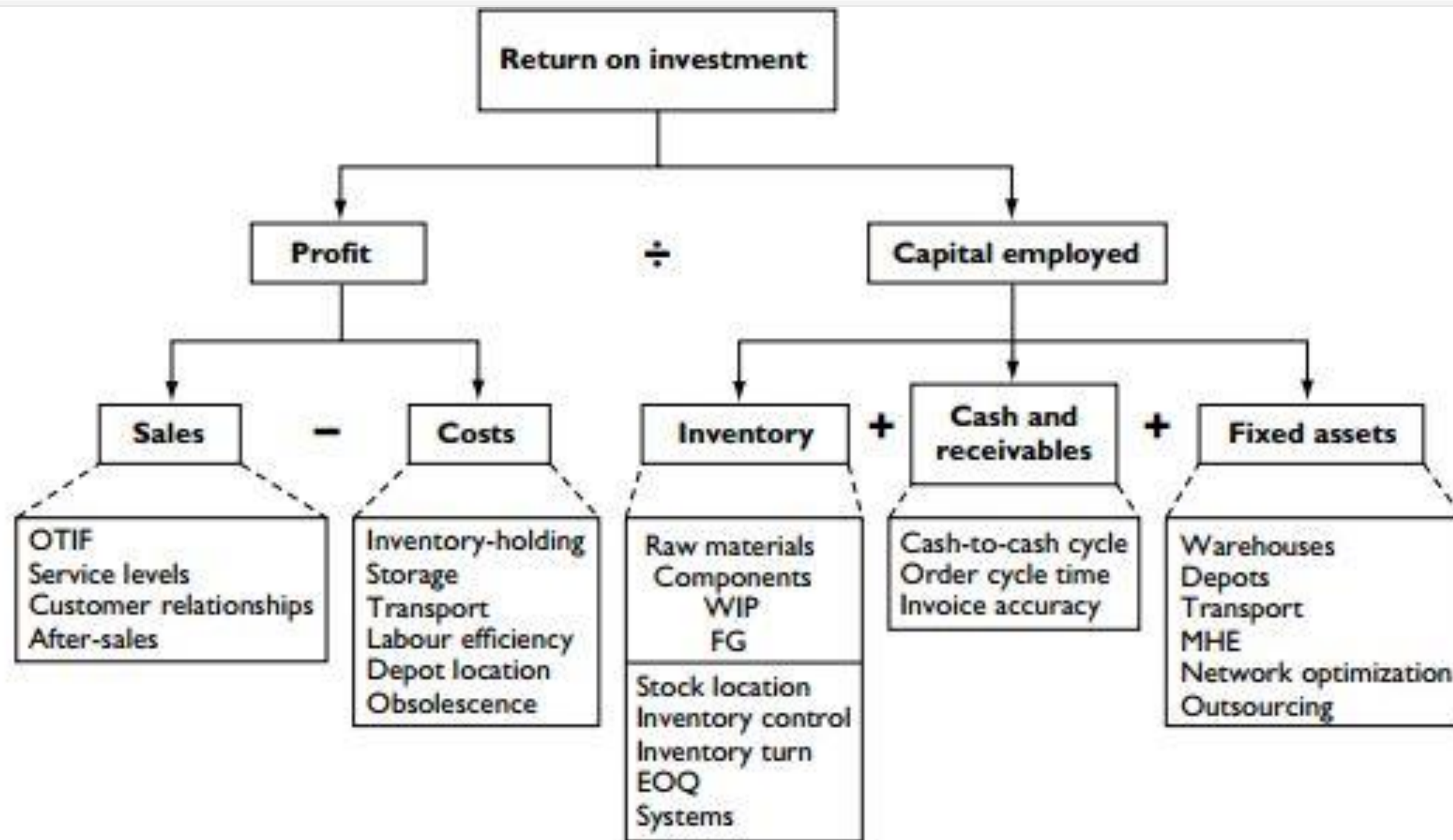
**Figure 2.4** Some of the main logistics elements for the different planning time horizons





**Figure 2.5** The planning and control cycle

# the financial impact of logistics



**Figure 2.6** The many ways in which logistics can provide an impact on an organization's return on investment





*Profit* can be enhanced through increased sales, and sales benefit from the provision of high and consistent service levels. One of the aims of many service level agreements is to try to achieve OTIF (on time in full) deliveries – a key objective of many logistics systems. On the other hand, costs can be minimized through efficient logistics operations. There are a number of ways that this might happen, including:

- more efficient transport, thus reducing transport costs;
- better storage leading to reduced storage costs;
- reduced inventory holding leading to less cash being tied up in inventory;
- improved labour efficiency, thus reducing costs.

# globalization and integration



One area of significant change in recent years has been the increase in the number of companies operating in the global marketplace. This necessitates a broader perspective than when a national company operates internationally.



# integrated systems



To support the need to develop more integrated operations there have been a number of developments in logistics and distribution systems that have the concept of total logistics as their basis. Thus, quite revolutionary 'trade-offs' are now being practised. The major reason for this explosion of new ideas is twofold.

The first is the realization of the importance, cost and complexity of logistics. The second is the progress made in the field of information technology, which has enabled the development of sophisticated information systems to support and enhance the planning and management of logistics operations

# Just-in-time (JIT)



JIT originated as a new approach to manufacturing and has been successfully applied in many industries such as the automotive industry. It has significant implications for distribution and logistics. The overall concept of JIT is to provide a production system that eliminates all activities that neither add value to the final product nor allow for the continuous flow of material – in simple terms, that eliminates the costly and wasteful elements within a production process. The objectives of JIT are vitally linked to distribution and logistics, including as they do:

- the production of goods the customer wants;
- the production of goods when the customer wants them;
- the production of perfect-quality goods;
- the elimination of waste (labour, inventory, movement, space, etc).





# REFLEKSI



**Informasi penting hari ini**

**Manfaat penting dari informasi penting hari ini**

**Tindak lanjut yang dapat saudara lakukan**





# Thank you!

Any questions?