

# Chapter 7

## **E-procurement**

# Learning outcomes

- Identify the benefits and risks of e-procurement
- Analyse procurement methods to evaluate cost savings
- Assess different options for integration of organisations' information systems with e-procurement suppliers

# Management issues

- What benefits and risks are associated with e-procurement?
- Which method(s) of e-procurement should we adopt?
- What organisational and technical issues are involved in introducing e-procurement?

# How important is procurement?

*'We estimate that for every dollar a company earns in revenue, 50 cents to 55 cents is spent on indirect goods and services – things like office supplies and computer equipment.'*

*'That half dollar represents an opportunity: By driving costs out of the purchasing process, companies can increase profits without having to sell more goods.'* Hildebrand (2002)

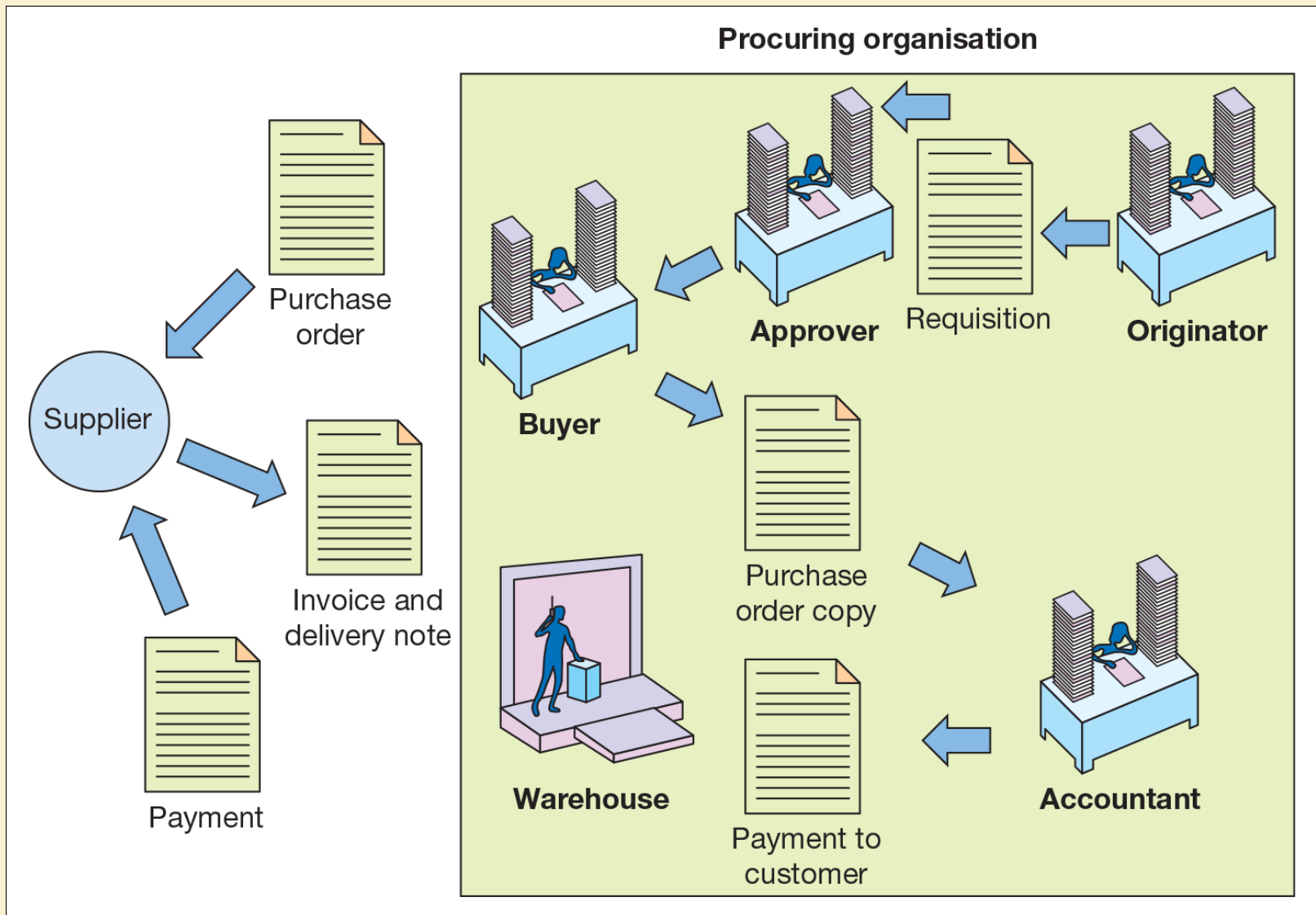


Figure 7.1 Key procurement activities within an organisation

# The 5 rights of purchasing

- At the right price
- Delivered at the right time
- Are of the right quality
- Of the right quantity
- From the right source.

Baily *et al.* (1994)

# Understanding the procurement process

Task description	Chart symbols	Time
1 Search for goods	●⇒□D▽	1 hour
2 Fill in paper requisition	●⇒□D▽	10 min
3 Send to buyer	○→□D▽	1 day
4 In buyer's in-tray	○⇒□D▽	½ day
5 Buyer enters order number	●⇒□D▽	10 min
6 Buyer authorizes order	●⇒□D▽	10 min
7 Buyer prints order	●⇒□D▽	10 min
8 Order copies to supplier and goods-in	○→□D▽	1 day
9 Delivery from supplier	○⇒□D▼	1 day
10 Order copy to accounts	○→□D▽	1 day
11 Three-way invoice match	●⇒□D▽	1 day
12 Cheque payment	●⇒□D▽	10 min

Table 7.1 Process flow analysis for traditional procurement (typical cycle time, 5½ days)

Note: see Table 7.2 on p.302 for key to symbols.

# Process flow analysis

	Chart symbols	Time
1 Search for goods	●⇒□D▽	20 min
2 Order on web	●⇒□D▽	10 min
3 Delivery from supplier	○⇒□D▼	1 day
4 Generate invoice	●⇒□D▽	10 min
5 Cheque payment	●⇒□D▽	10 min
Key to flow process chart symbols		
○ Process		
⇒ Transport		
□ Inspection		
D Delay		
▽ Inbound goods		

Table 7.2 Process flow analysis for new procurement (typical cycle time, 1½ days)



# Drivers and Barriers of e-procurement

## Drivers

- Control
- Cost
- Process
- Individual performance
- Supplier management

## Barriers

- Competition issues
- Negative perception
- Shared benefits
- Catalogue creation
- Culture profile

# Implementing e-procurement

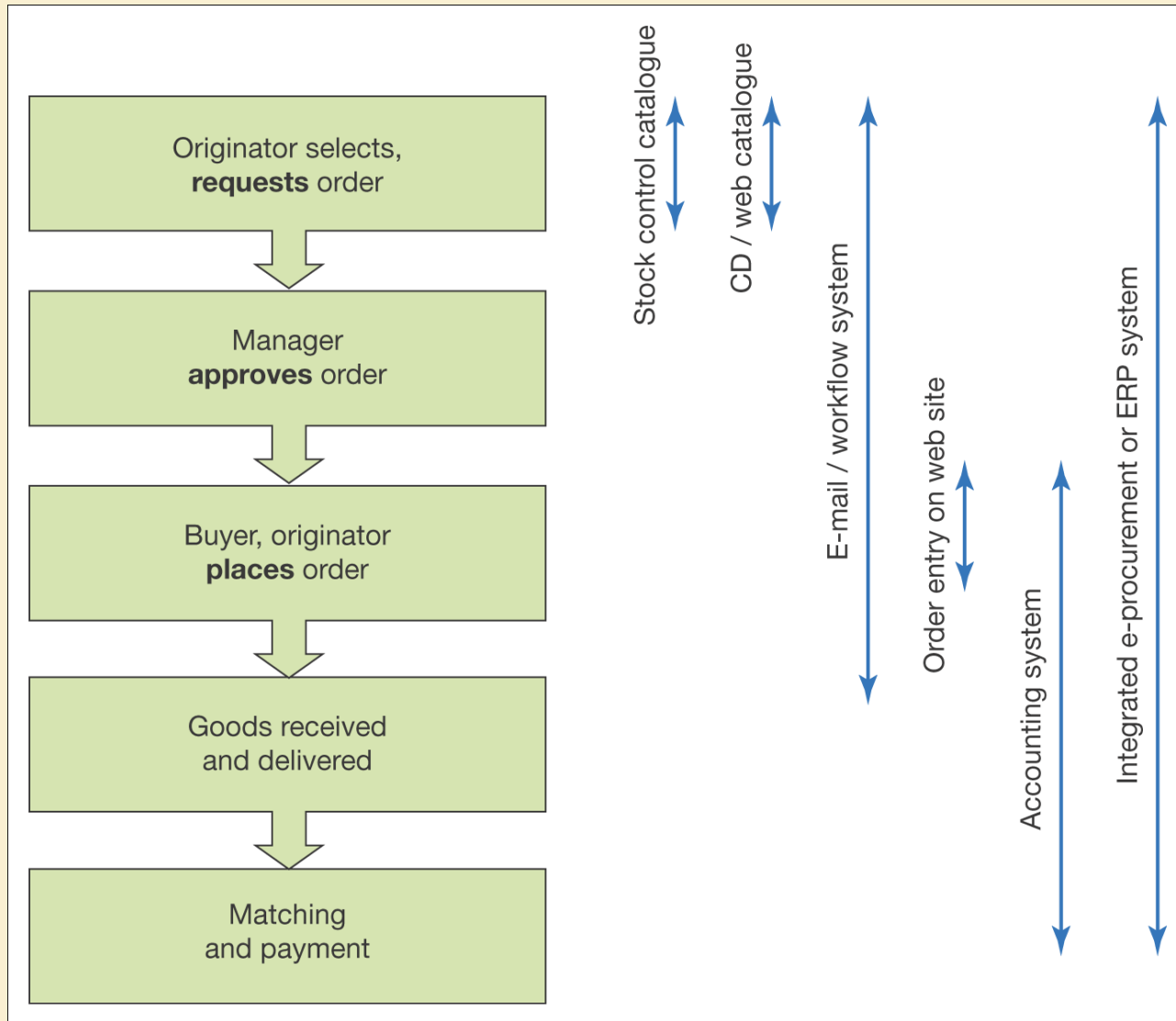


Figure 7.3 Use of different information systems for different aspects of the fulfilment cycle

# Integrating company systems with supplier systems

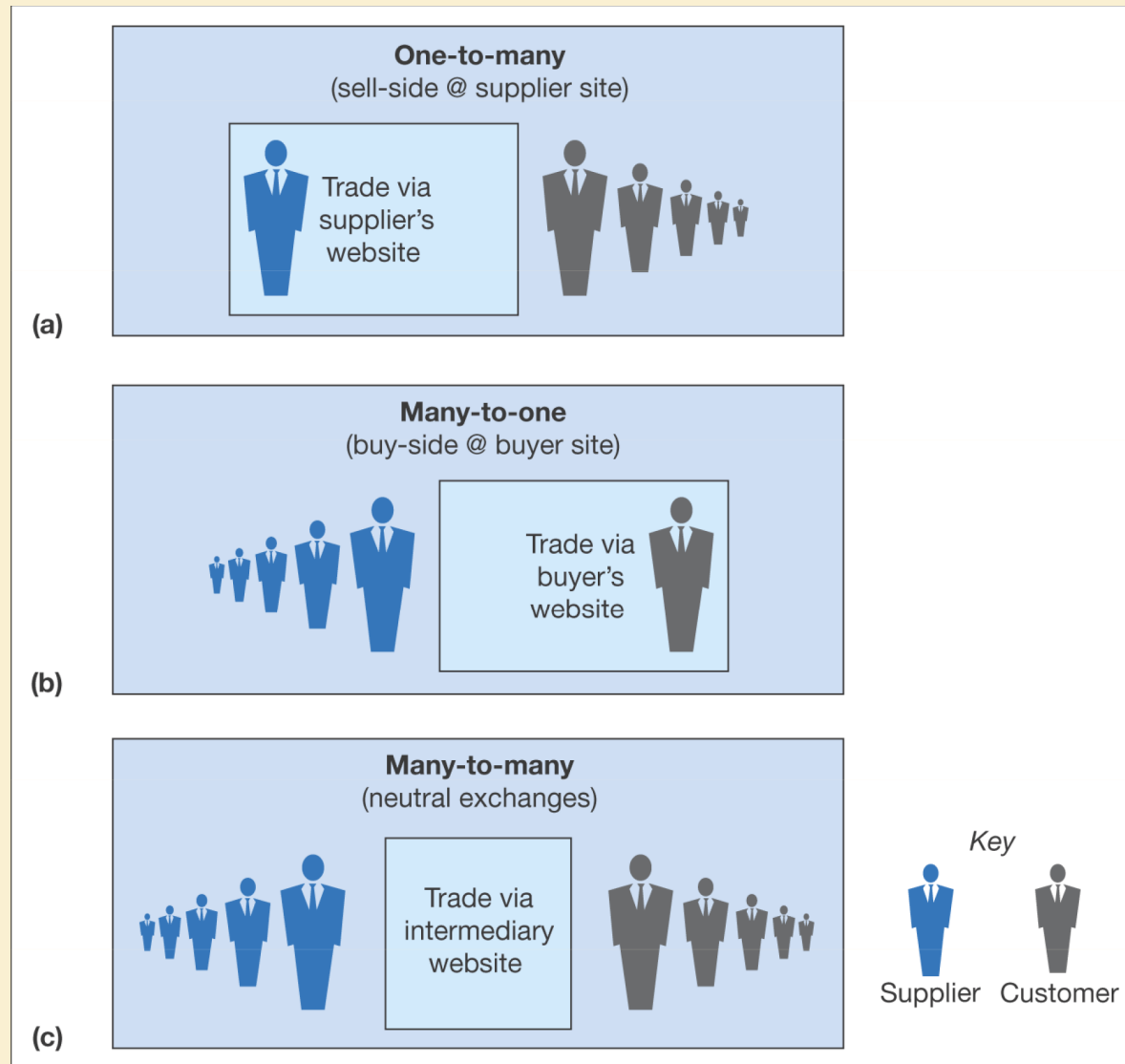


Figure 7.4 The three main e-procurement model alternatives for buyers

# Alternatives of procurement model

<i>Procurement model</i>	<i>Advantages to buyer</i>	<i>Disadvantages to buyer</i>
<b>Sell-side</b> e.g. many catalogue-based B2B suppliers such as <a href="http://www.rswww.com">www.rswww.com</a>	<ul style="list-style-type: none"> <li>• Searching</li> <li>• Onus of maintaining data on supplier</li> </ul>	<ul style="list-style-type: none"> <li>• Different interface on each site (catalogue and ordering)</li> <li>• Restricted choice</li> <li>• Poor integration with ERP/procurement systems</li> <li>• Limited purchase control</li> </ul>
<b>Buy-side</b> Private exchanges hosted by manufacturers and major suppliers to these manufacturers, e.g. solutions developed by <a href="http://www.ebreviate.com">www.ebreviate.com</a> , <a href="http://www.covisint.net">www.covisint.net</a> and ERP suppliers such as SAP and Oracle	<ul style="list-style-type: none"> <li>• Simplicity – single interface</li> <li>• Wider choice than sell-side</li> <li>• Integration with ERP/procurement systems</li> <li>• Good purchase control</li> </ul>	<ul style="list-style-type: none"> <li>• Onus of maintaining data is on buyer</li> <li>• Software licence costs</li> <li>• Retraining</li> </ul>
<b>Independent marketplace</b> e.g. <a href="http://www.ec21.com">www.ec21.com</a> , <a href="http://www.eutilia.net">www.eutilia.net</a>	<ul style="list-style-type: none"> <li>• Simplicity – single interface</li> <li>• Potentially widest choice of suppliers, products and prices</li> <li>• Often unified terms and conditions</li> </ul>	<ul style="list-style-type: none"> <li>• Difficult to know which marketplace to choose (horizontal and vertical)</li> <li>• Poor purchase controls*</li> <li>• Uncertainty on service levels from and order forms unfamiliar suppliers</li> <li>• Interfacing with marketplace data format*</li> <li>• Relatively poor integration with ERP*</li> </ul>

\* Note that these disadvantages of the marketplace will disappear as marketplaces develop ERP integration.

Table 7.6 Assessment of the procurement model alternatives for buyers

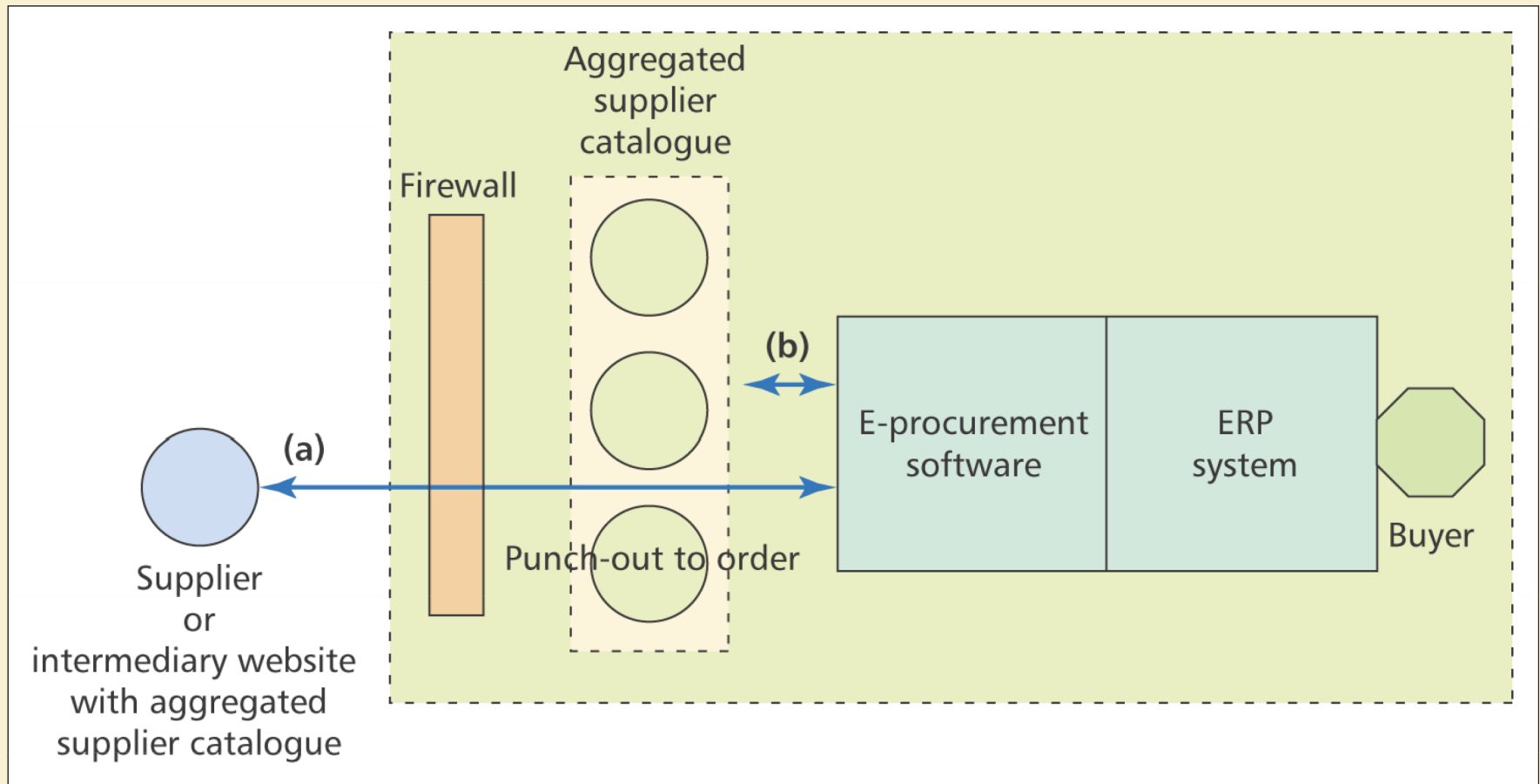


Figure 7.5 Integration between e-procurement systems and catalogue data