Chapter 3.
Fundamentals of E-Commerce

The e-business environment

Macro-environment

International
- Economic factors
- Legal constraints
- Cultural factors

Micro-environment

Technology
- Innovation
- Trends

Organization

Society
- Public opinion
- Moral constraints
- Ethical constraints

Country specific
- Economic factors
- Legal constraints
- Cultural factors

Key — Suppliers — Competitors — Intermediaries — Customers
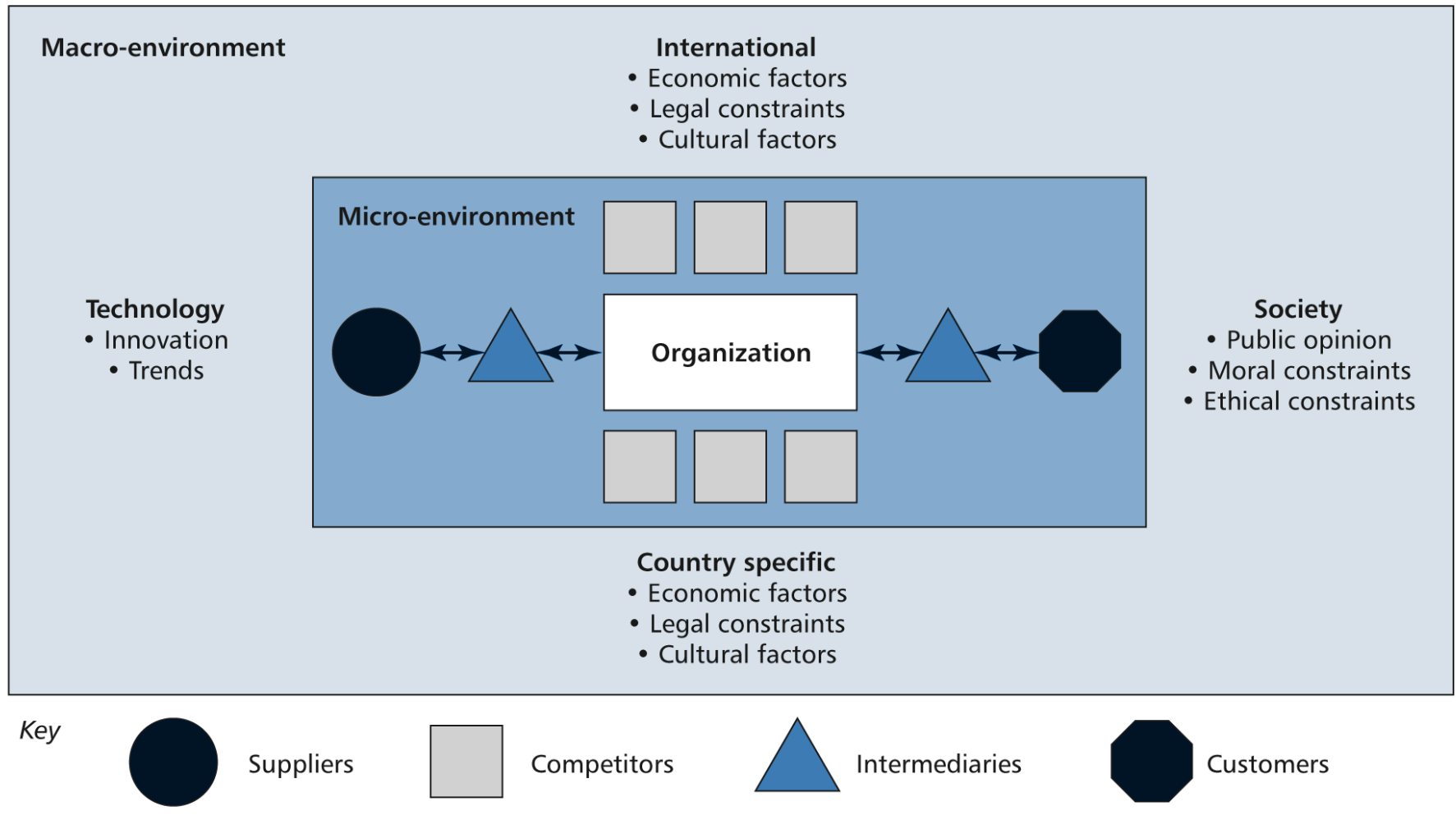
Micro environment

- **Customers** – which services are they offering via their web site that your organization could support them in?
- **Competitors** – need to be benchmarked in order to review the online services they are offering – do they have a competitive advantage?
- **Intermediaries** – are new or existing intermediaries offering products or services from your competitors while you are not represented?
- **Suppliers** – are suppliers offering different methods of procurement to competitors that give them a competitive advantage?

Customers

1 *Community*
 Get to know other people, Participate in an online chat, Join a group.
2 *Entertainment*
  Find information to entertain myself.
3 *Product trial*
 Try on the latest fashions, Experience a product, Try out a product.
4 *Information*
 Do research, Get information I need, Search for information I need.
5 *Transaction*
 Make a purchase, Buy things, Purchase a product I've heard about.
6 *Game*
 Play online games, Entertain myself with Internet games, Play online games with individuals from other countries.
7 *Survey*
 Take a survey on a topic I care about, Fill out an online survey, Give my opinion on a survey.
8. Downloads
Download music, , Listen to music, Watch online videos.
9 *Interaction*
 Connect with my friends, Communicate with others, Instant message others I know.
10 *Search*
 Get answers to specific questions, Find information I can trust.
11 *Exploration*
 Find interesting web pages, Explore new sites, Surf for fun.
12 *News*
 Read about current events and news, Read entertainment news

Web advertisers and site owners can use this framework to review the suitability of facilities to meet these needs.

Macro environment

1.Social

       -Public opinion , moral constraint, ethical   constraints

2. County specific
- Economic factors
- Legal constraints
- Cultural factors

3. Technological
-innovation
- trends

4. International
- Economic factors
- Legal constraints
- Cultural factors

Macro-environment

- SLEPT Factors

  - Social
  - Legal
  - Economic
  - Political
  - Technological

SLEPT Framework

▪ *Social factors – these include the influence of consumer perceptions in determining usage of the Internet for different activities.*
▪ *Legal and ethical factors – determine the method by which products can be promoted and sold online. Governments, on behalf of society, seek to safeguard individuals' rights to privacy.*
▪ *Economic factors – variations in the economic performance in different countries and regions affect spending patterns and international trade.*
▪ *Political – national governments and transnational organizations have an important role in determining the future adoption and control of the Internet and the rules by which it is governed.*
▪ *Technological factors – changes in technology offer new opportunities to the way products can be marketed.*

Social

- Demand analysis (part of micro-environment)
    - Have access to the channel.
    - Are influenced by using the channel.
    - Purchase using the channel.

Legal

1. *Marketing your e-commerce business*
2. *Forming an electronic contract*
3. *Making and accepting payment*
4. *Authenticating contracts concluded over the Internet*
5. *E-mail risks*
6. *Protecting intellectual property*
7. *Advertising on the Internet*
8. *Data protection*

Ethical issues and data protection

- Ethical issues concerned with personal information ownership have been usefully summarized by Mason (1986) into four areas:

1. Privacy – what information is held about the individual?

   contact information, profile , behavioral information (on a single site, on multiple sites)

1. Accuracy – is it correct?

2. Property – who owns it and how can ownership be transferred?

3. Accessibility – who is allowed to access this information, and under which conditions?

Information flows for data protection
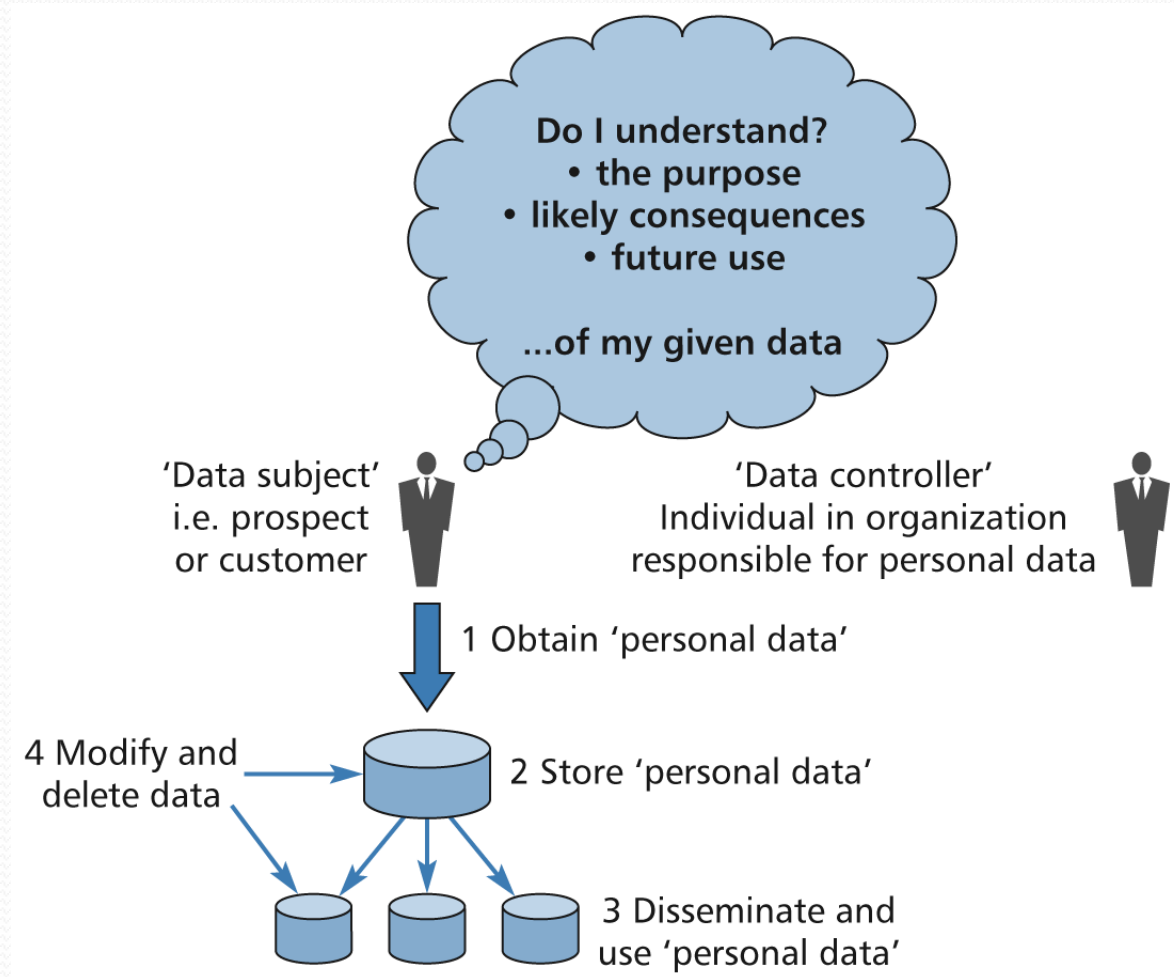
Figure . Information flows that need to be understood for compliance with data protection legislation

The eight principles for data protection

- Fairly and lawfully processed;
- processed for limited purposes;
- adequate, relevant and not excessive;
- accurate;
- not kept longer than necessary;
- processed in accordance with the data subject's rights;
- secure;
- not transferred to countries without adequate protection.

Economic / Political

- Ensuring companies competitive
  - Funding for education and technology
    e.g. http://www.dst.gov.in/
  - Promoting new technology
- Achieving government efficiencies
  - E-government
    http://incometaxindia.gov.in/OnlineEfilingWebsite.asp

    http://www.epfindia.com/

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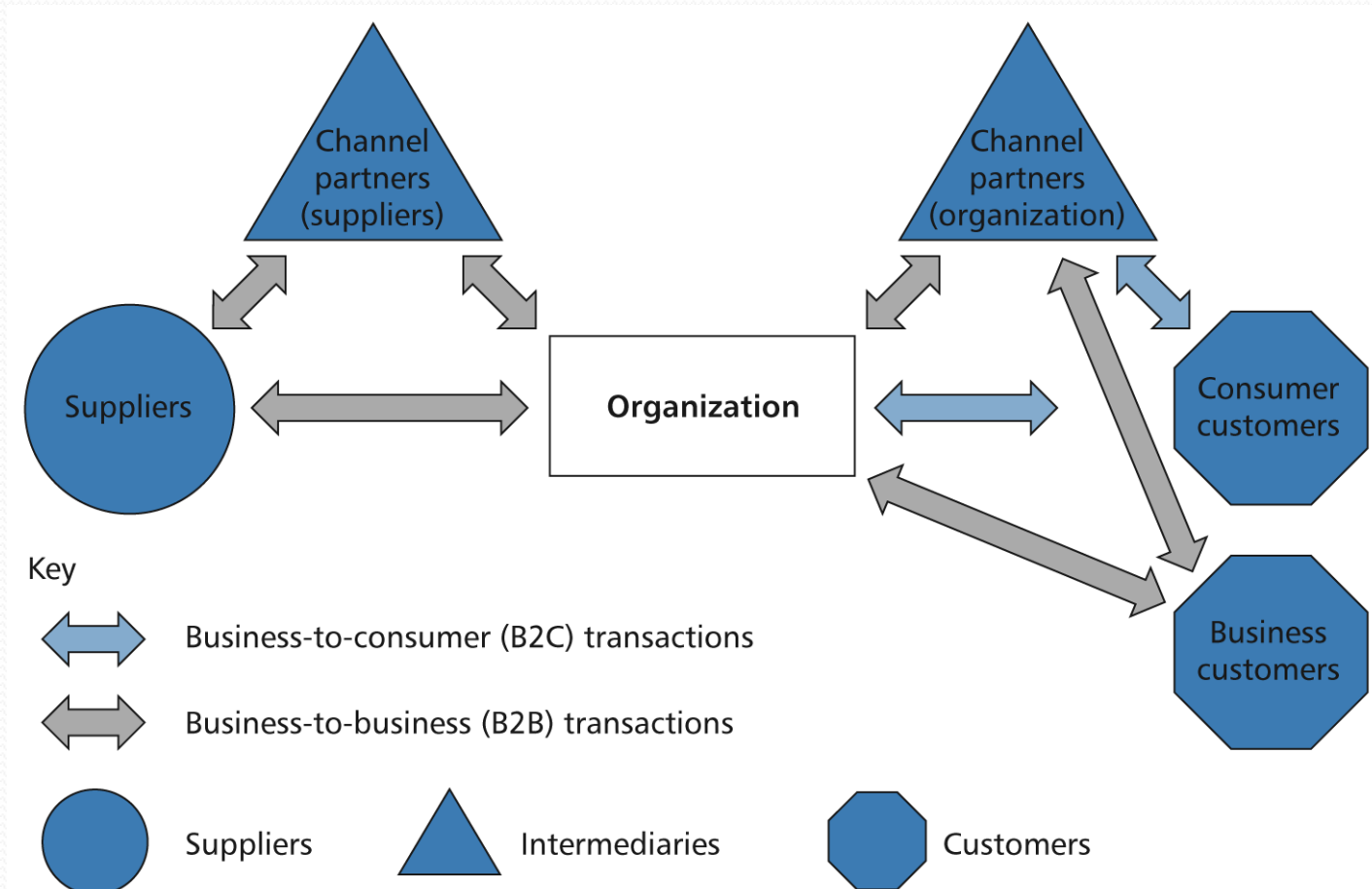# The E- commerce marketplace

Fig. B2B and B2C interactions between an organization, its suppliers and its customers

Difference between B2C and B2B

Characteristic	B2C	B2B
Proportion of adopters with access	Low to medium	High to very high
Complexity of buying decisions	Relatively simple – individual and influencers	More complex – buying process involves users, specifiers, buyers, etc.
Channel	Relatively simple – direct or from retailer	More complex, direct or via wholesaler, agent or distributor
Purchasing characteristics	Low value, high volume or high value, low volume. May be high involvement	Similar volume/value. May be high involvement. Repeat orders (rebuys) more common
Product characteristic	Often standardized items	Standardized items or customised

- Intermediary
- A business whose main source of revenue derives from capturing consumer information and developing detail profiles of individual customers for use by third party
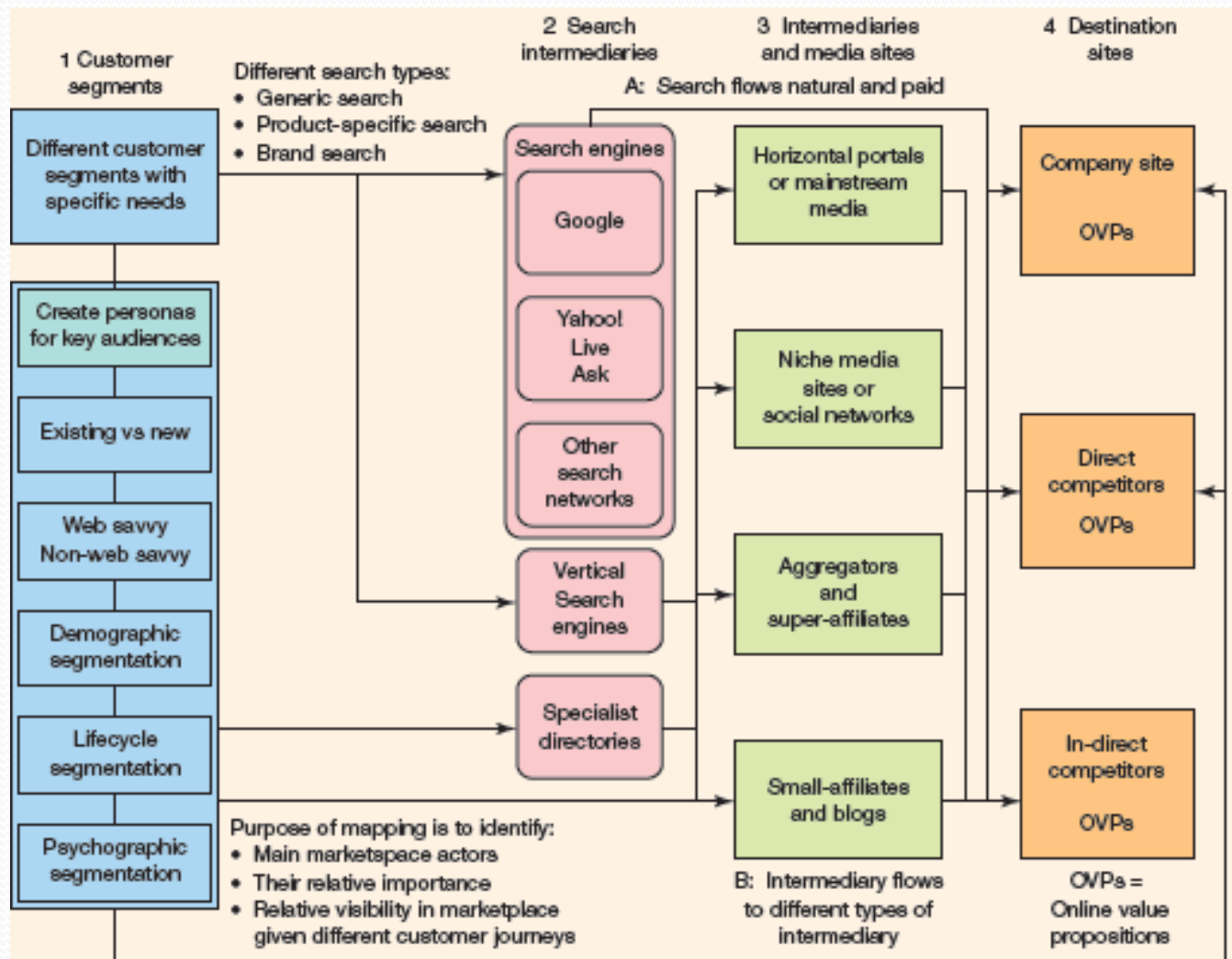
1 Customer segments

Different customer segments with specific needs

Create personas for key audiences

Existing vs new

Web savvy Non-web savvy

Demographic segmentation

Lifecycle segmentation

Psychographic segmentation

Different search types:
- Generic search
- Product-specific search
- Brand search

Purpose of mapping is to identify:
- Main marketspace actors
- Their relative importance
- Relative visibility in marketplace given different customer journeys

2 Search intermediaries

A: Search flows natural and paid

Search engines

Google

Yahoo! Live Ask

Other search networks

Vertical Search engines

Specialist directories

3 Intermediaries and media sites

Horizontal portals or mainstream media

Niche media sites or social networks

Aggregators and super-affiliates

Small-affiliates and blogs

B: Intermediary flows to different types of intermediary

4 Destination sites

Company site

OVPs

Direct competitors

OVPs

In-direct competitors

OVPs

OVPs = Online value propositions

Figure 2.3 An online marketplace map

1 Customer segments.

Buyer behavior and the type of content and experiences they will be looking for from intermediaries and your web site.

2 Search intermediaries

- China (Baidu), Russia (Yandex) and South Korea (Naver)

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computer　百度翻译

computer　英 [kəm'pju:tə(r)] 🔊　美 [kəm'pjutɚ] 🔊

n.　计算机，电脑（电子）；
全部释义>>

[例句]　We could play **computer** games.
我们可以玩**电脑**游戏。
更多例句>>

复数：computers

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Computer　百度百科

计算机（computer）俗称电脑，是一种用于高速计算的电子计算机器，可以进行数值计算，又可以进行逻辑计算，还具有存储记忆功能。是能够按照程序运行，自动、高速处理海量数据的现代化智能电子设备。由硬件系统和软件系统所组成，没有安装任何软件的计算机称为裸机。可分为超级计算机、工业控制计算机、…
发展历史　机器组成　主要特点　主要分类　应用领域　更多>>
baike.baidu.com/ ▾

Computer - Wikipedia, the free encyclopedia

usually "compiled" into machine language (or sometimes into assembly language and then into machine language) using another **comput**

英语翻译

百度翻译　有道词典　金山词霸
简单可依赖　网易出品的　历史悠久的
的翻译专家　互联网词典　翻译软件

英语学习助手

拓词　新东方在线　百词斩
被赞为会上　国内领先网　有爱的英语
瘾的背单词　络教育平台　单词大杀器

其他人还搜

最长的英文　中式英语　经典英文歌
单词　中国人自创　曲
指字母最多　出来的新词　欣赏音乐同

3 Intermediaries and media sites

a. Mainstream news media sites or portals. Include traditional, e.g. Times of India e.g. Google news, an aggregator.

b. **vertical media sites, e.g.** Stackoverflow , SpiceNetworks

c. **Price comparison sites (also known as aggregators), e.g.** carwale.com, smartprix.com

d. **Superaffiliates.**

Affiliates gain revenue from a merchant they refer traffic to using a commission-based arrangement based on the proportion of sale or a fixed amount.

e. **bloggers.** These are often individuals, but they may be important

4 Destination sites

- These are the sites that the marketer is trying to generate visitors to, whether these are transactional sites, like retailers, financial services or travel companies or manufacturers or brands. E.g. vipbags.com

Different types of online intermediary

- Directories (e.g yahoo)
- Search engines (e.g. Google)
- Malls (e.g. http://inorbit.in)
- Virtual reseller (e.g. flipkart)
- Financial intermediaries (e.g. hdfc)
- Forum (e.g. twitter)
- Evaluator or comparator (e.g. carewale.com)
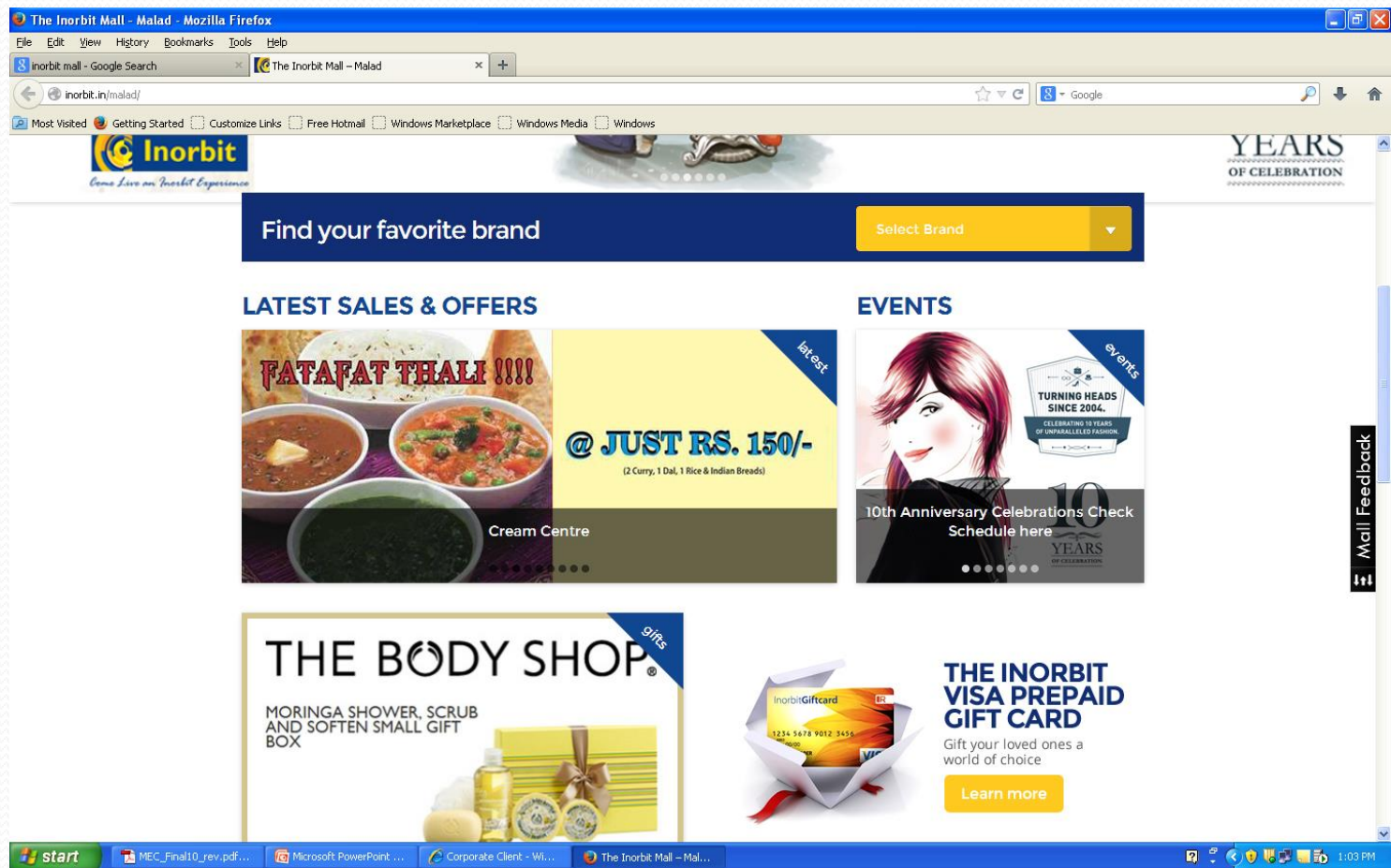
Marketplace and channel structures

Disintermediation
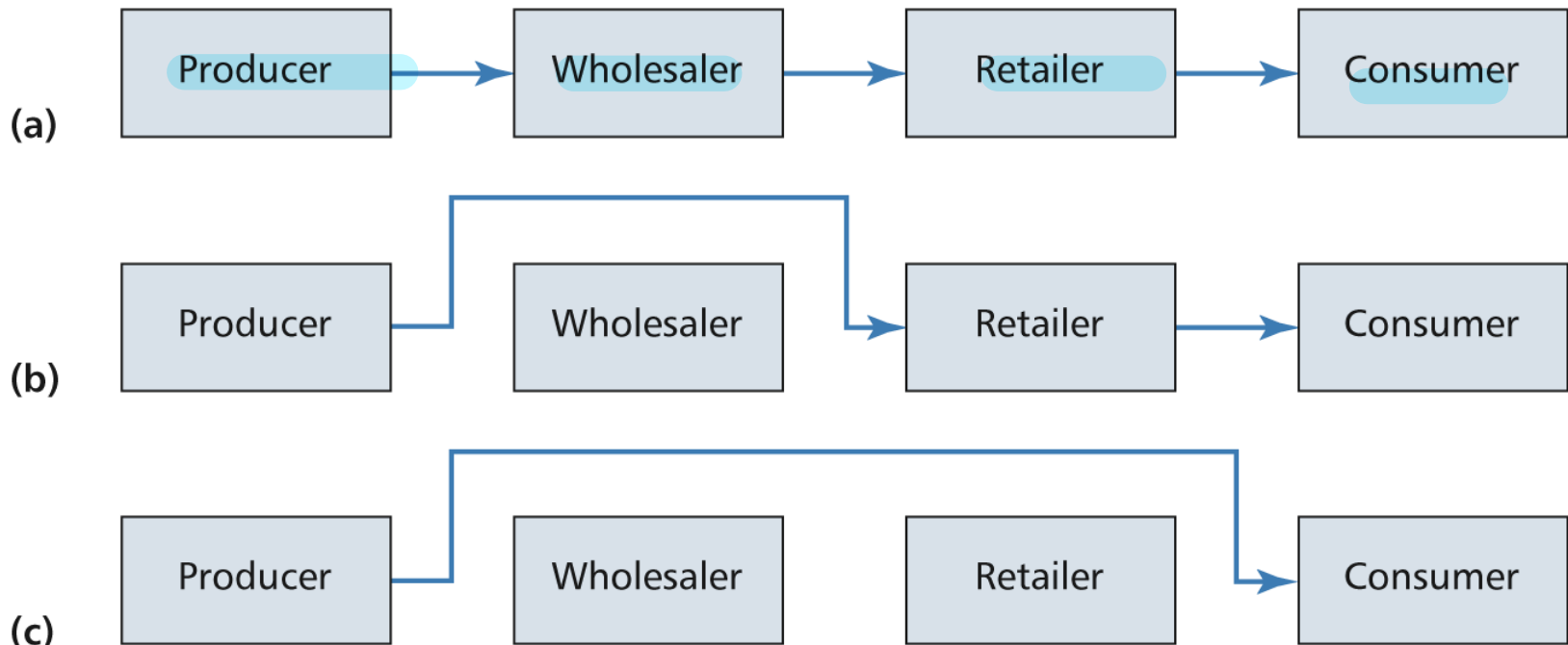
Fig. Disintermediation of a consumer distribution channel showing
(a) the original situation, (b) disintermediation omitting the wholesaler, and
(c) disintermediation omitting both wholesaler and retailer

Countermediation

- Creation of a new intermediary by an established company

Reintermediation
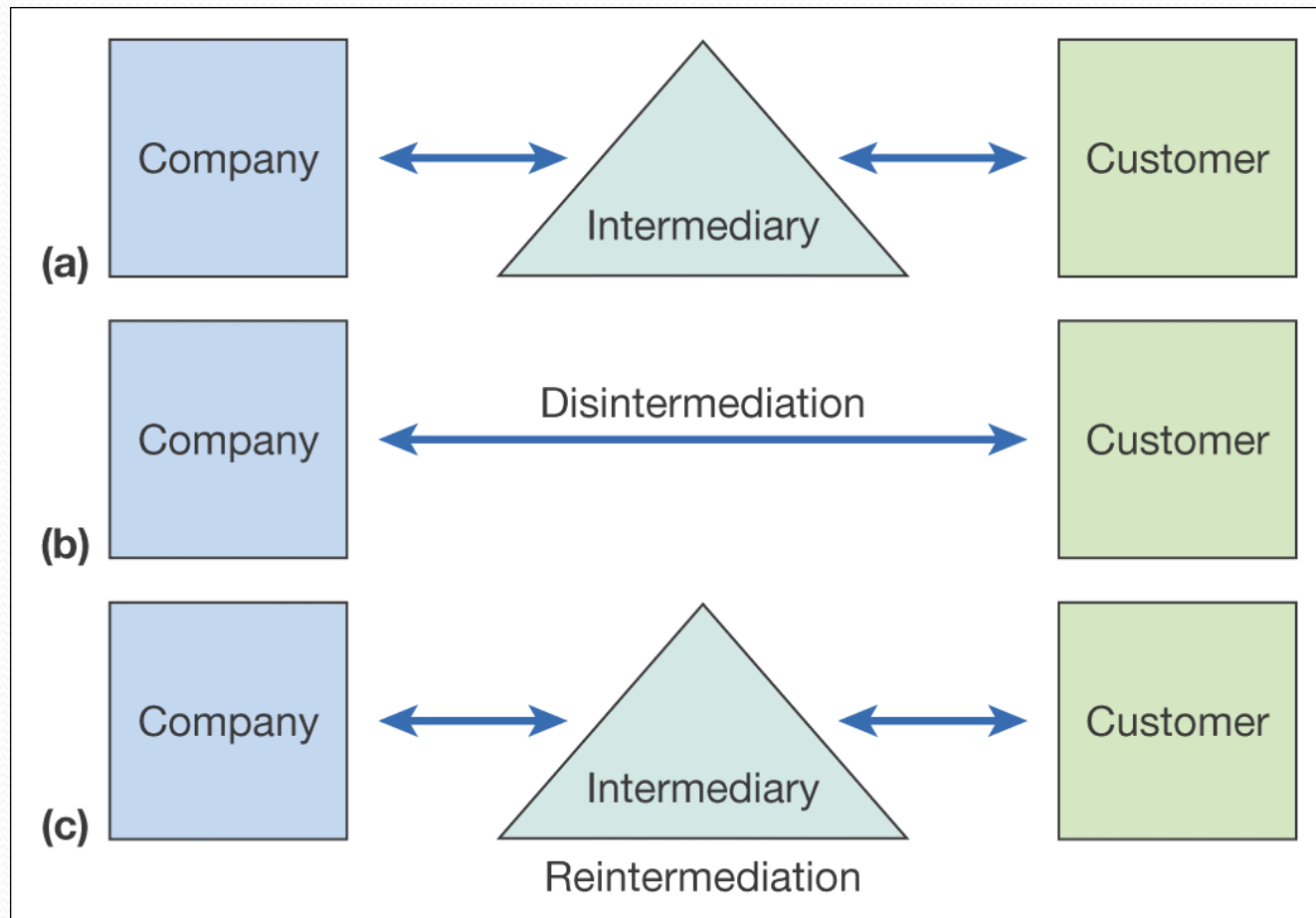
Types of portals

Type of portal	Characteristics	Example
Access portal	Associated with ISP	Mtnl.net.in
Horizontal or functional portal	Range of services: search engines, directories, news recruitment, personal information management, shopping, etc.	Yahoo! (www.yahoo.com) Excite (www.excite.com) Lycos (www.lycos.com)
Vertical	May cover a single function e.g.: –news – and industry sector	Timesofindia.com
Geographical (region, country, local area)	May be: – horizontal – vertical	googlemaps
Marketplace	May be: – horizontal – vertical – geographical	CommerceOne (www.commerceone.net) PlasticsNet (www.plastics.net)
Media type	Voice portal Wireless portal Streaming media portal	Verizon VoiceGear (www.voicegear.net) Vodafone Vizzavi (www.vizzavi.com) Silicon (www.silicon.com)

Purchase place	Description and example
Seller controlled	Vendors own site e.g. www.dell.com
Seller oriented	Intermediaries controlled by third partied to the seller such as distributors and agents
Neutral	Intermediary not controlled by buyers industry Product specific search engine Comparison sites Auction sites
Buyer oriented	Intermediary controlled by buyers Purchasing agents and aggregators
Buyer controlled	Web-site procurement posting on company's own site

Location and scale of trading on e-commerce sites
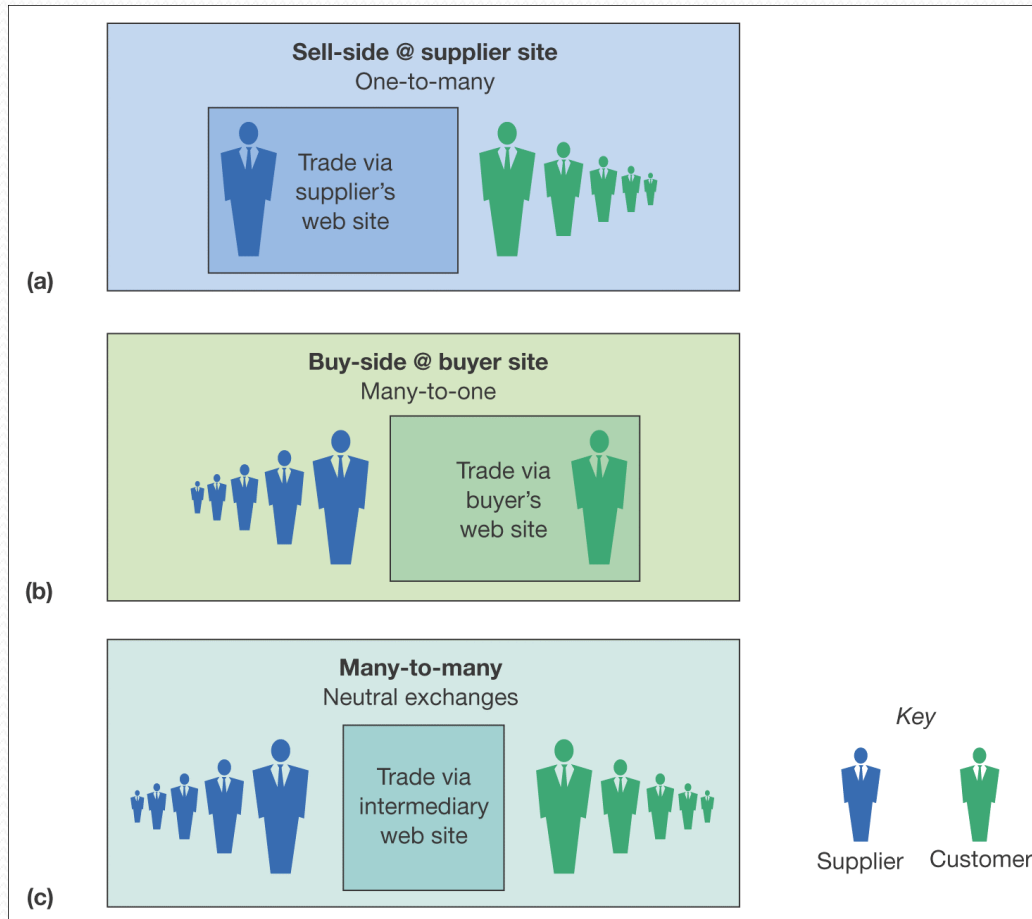
Types of intermediaries

- Infor-mediaries— intermediaries that capture, profile, and sell customer information

- Metamediaries— intermediaries that assist with selection and discussion of about different product and services; they connects customers with the providers

Multi-channel Marketplace Model

- Consumers use a combination of channels for their purchases.
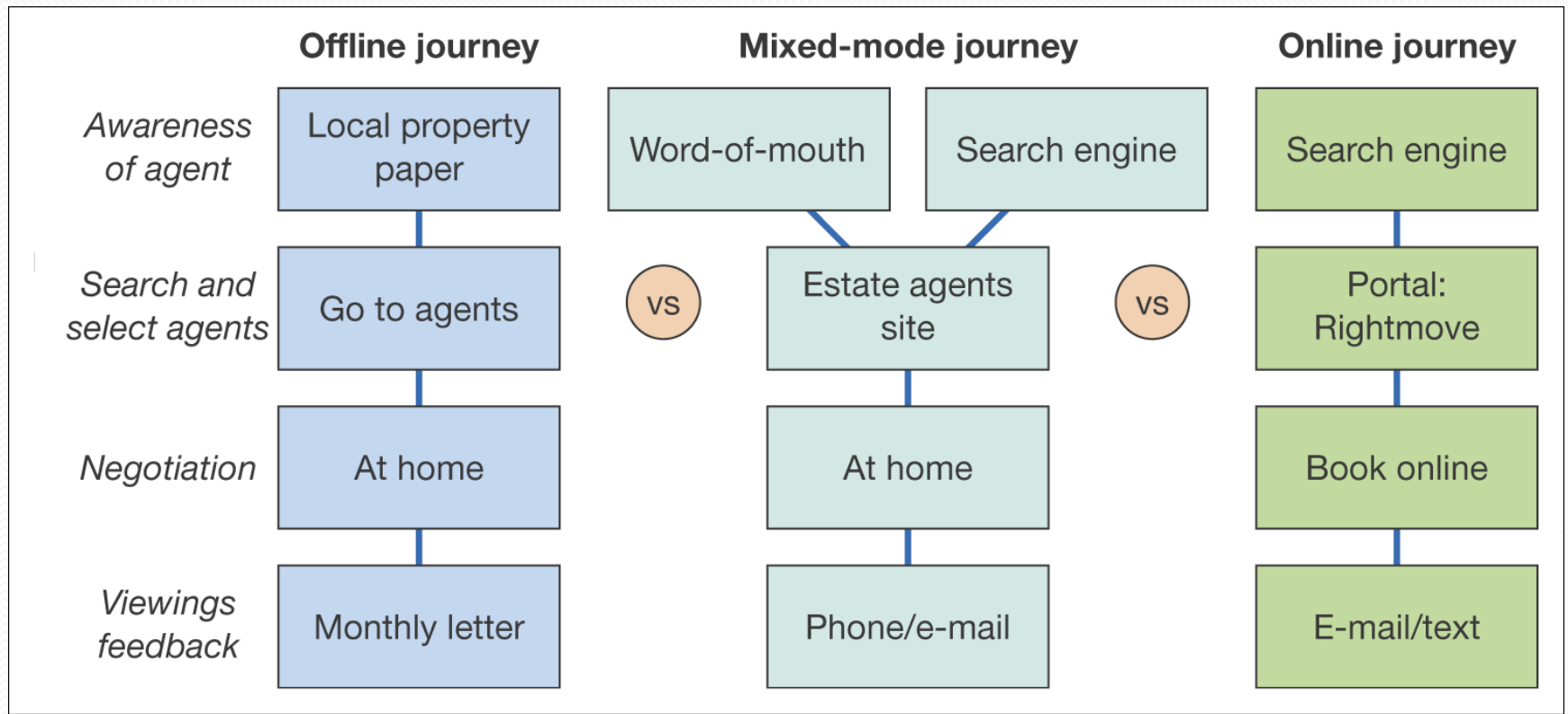
- M-Channel Defines how different marketing channels should integrate and support each other

Figure Example channel chain map for consumers selecting an estate agent to sell their property

Business model

Timmers (1999) defines a 'business model' as:

An architecture for product, service and information flows, including a description of the various business actors and their roles; and a description of the potential benefits for the various business actors; and a description of the sources of revenue.

Key elements

1. *Value proposition-products & services to offer*
   - Which products and or services will the company offer?

     value proposition is a promise of **value** to be delivered and acknowledged and a belief from the customer that **value** will be delivered and experienced.

2. *Market or audience*
   - Which audience will the company serve and target with its communications?

3. *Revenue models and cost base*
   - What are the specific revenue models that will generate
   - different income streams? What are the main costs of the business forming its budget?

4. *Competitive environment*
   - Who are the direct and indirect competitors for the service? and which range of business models do they possess?

5. *Value chain and marketing positioning*
   - How is the company and its services positioned
   - in the value chain between customers and suppliers and in comparison with direct and
   - indirect competitors?

6. *Representation in the physical & virtual world*
   - high-street presence, online only, intermediary, mixture?
   - How will the company influence its audience through the buying process through multichannel marketing?

7. *Organizational structure*
   - How will the organization be internally structured to create, deliver and promote its service?

8. *Management*
   - What experience in similar markets and companies do the managers have?
   - What is their profile which can be helpful to attract publicity?

- Timmers identified 11 different types of business models.
- E-shop
- E-Procurement
- E-Malls
- E-auctions
- Virtual communities
- Collaboration platform
- Third party marketplace
- Value chain integrator
- Value chain service provider
- Information brokerage
- Trust an other services

Alternative Perspectives on Business Model

1. Marketplace position perspective
2. Revenue model perspective
3. Commercial arrangement perspective

Figure Alternative perspectives on business models

Revenue model

- It describes how a business generate revenue
- What are traditional ways?
- The New Ways

Revenue Model- Publisher Example

- Advertising CPM (cost per thousand/mille)
- Advertising CPC (cost per click)
- Sponsorship of section, content, or widget
- Affiliate Revenue (CPA or CPC)
- Transaction Fee
- Subscription access to content or services
- Pay-per-view Access to document
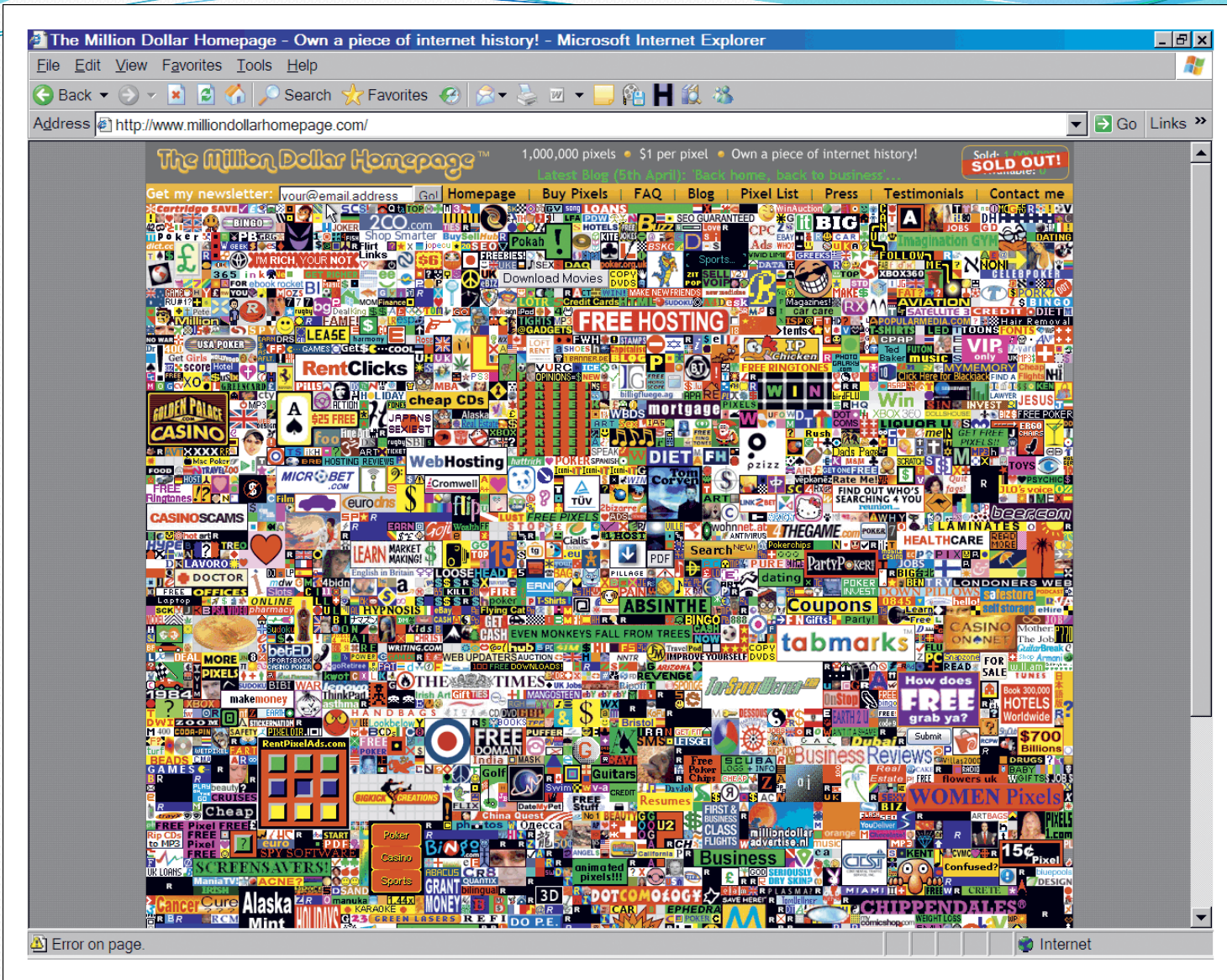- Subscription Data Access for e-mail Marketing

Figure   Alex Tew's Million Dollar Home Page (www.milliondollarhomepage.com)

Revenue model- auction

Roles for auction (Klein 1997)

- Price discovery
- Efficient Allocation mechanism
- Distribution mechanism—attracting audience
- Coordination mechanism

Types of auction

- English—forward or upward, initiated by seller this is more of conventional auctions we commonly seen in physical world and on virtual market

- Dutch—Reverse, downward, initiated by buyer This is more commonly seen in large manufacture procurement
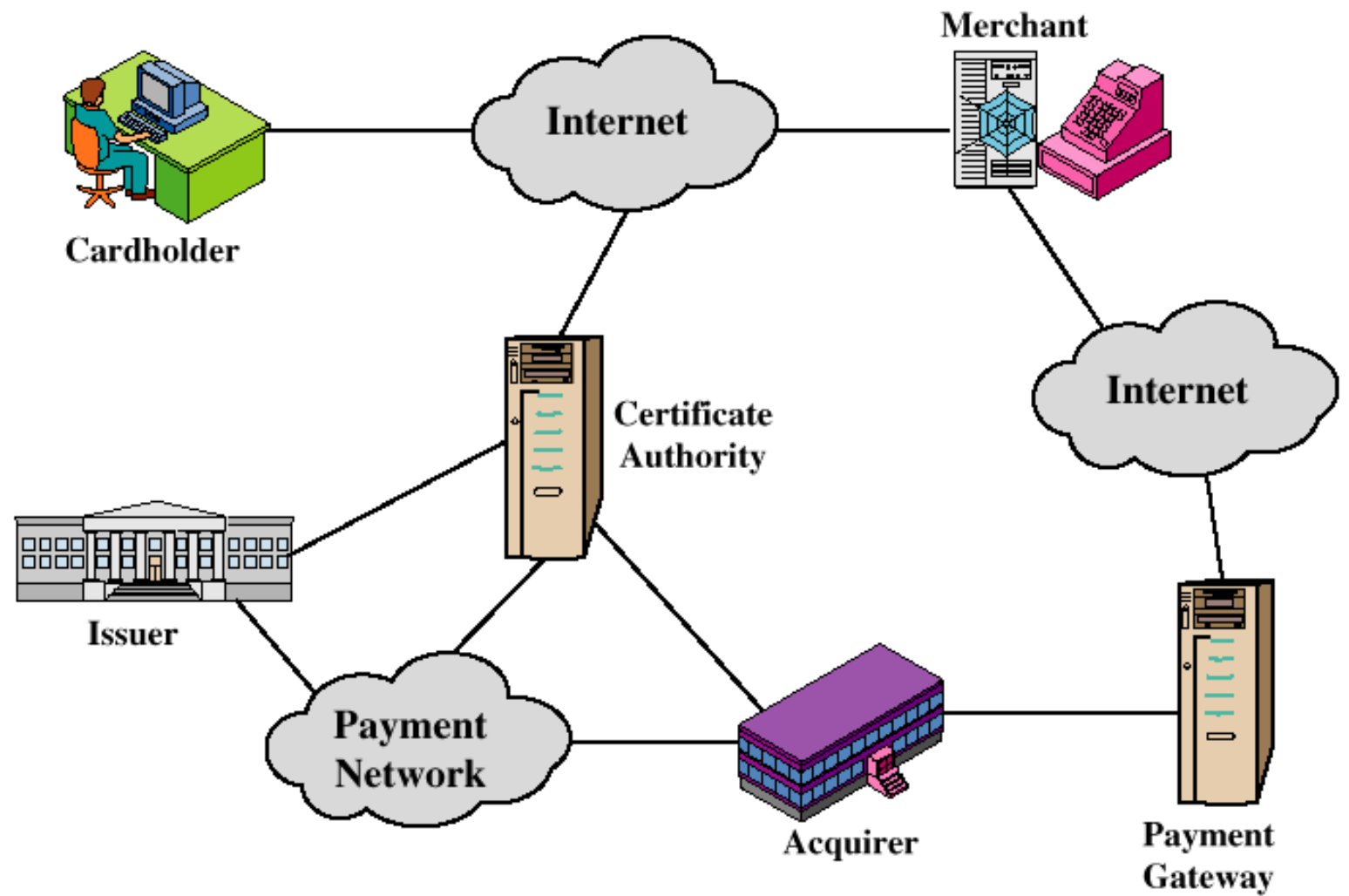
guidelines for developing e-commerce strategy

- Explore new business and revenue models.
- Perform continuous scanning of the marketplace and respond rapidly.
- Set up partner networks to use the expertise and reputation of specialists.
- Remember that the real world is still important for product promotion and fulfilment.
- Carefully examine the payback and return on investment of new approaches.

- Secure Electronic Transaction

Participants in the SET System

SET Transactions