

E-Marketplaces, Portals

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Learning Objectives

- Define e-marketplaces and list their components.
- List the major types of e-marketplaces and describe their features.
- Describe the various types of EC intermediaries and their roles.
- Describe electronic catalogs, shopping carts, and search engines.
- Describe the major types of auctions and list their characteristics.

Learning Objectives

- Define m-commerce and explain its role as a market mechanism.
- Discuss competition in the digital economy.
- Describe the impact of e-marketplaces on organizations and industries.

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JEWELLERY

 GIFTS

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- ▶ TOP TEN HEARTS UNDER £100
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Radiant



Pear



Heart



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Case of Study

E-marketplaces

The Emerging Role of Electronic Marketplaces on the Internet

Yannis Bakos*

Communications of the ACM, August 1998

Internet-based electronic marketplaces leverage information technology to match buyers and sellers with increased effectiveness and lower transaction costs, leading to more efficient, “friction-free” markets.

Marketplaces

Markets play a central role in the economy, facilitating the exchange of information, goods, services, and payments (Bakos 1998).

1. Functions of a Market

Markets play a central role in the economy, facilitating the exchange of information, goods, services and payments. In the process, they create economic value for buyers, sellers, market intermediaries and for society at large. Recent years have seen a dramatic increase in the role of information technology in markets, both in traditional markets, and in the emergence of electronic marketplaces, such as the multitude of Internet-based online auctions.

Markets (electronic or otherwise) have three main functions, summarized in Table 1: (a) matching buyers and sellers; (b) facilitating the exchange of information, goods, services and payments associated with market transactions; and (c) providing an institutional infrastructure, such as a legal and regulatory framework, that enables the efficient functioning of the market. In a modern economy, the first two functions are provided by intermediaries, while the institutional infrastructure is typically the province of governments. Internet-based electronic marketplaces leverage information technology to perform the above functions with increased effectiveness and reduced transaction costs, resulting in more efficient, “friction-free” markets.

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Marketplaces - II

- Three functions for markets (both real and electronic):
 - matching buyers and sellers
 - facilitating the exchange of information, goods, services, and payments associated with market transactions
 - providing an institutional infrastructure, such as a legal and regulatory framework, that enables the efficient functioning of the market

Functions of a Market

- In later years markets have seen a dramatic increase of IT and EC use

EXHIBIT 2.1 Functions of a Market		
Matching of Buyers and Sellers	Facilitation of Transactions	Institutional Infrastructure
<ul style="list-style-type: none">• Determination of product offerings<ul style="list-style-type: none">Product features offered by sellersAggregation of different products• Search (of buyers for sellers and of sellers for buyers)<ul style="list-style-type: none">Price and product informationOrganizing bids and barteringMatching seller offerings with buyer preferences• Price discovery<ul style="list-style-type: none">Process and outcome in determination of pricesEnabling price comparisons• Others<ul style="list-style-type: none">Providing sales leads	<ul style="list-style-type: none">• Logistics<ul style="list-style-type: none">Delivery of information, goods, or services to buyers• Settlement<ul style="list-style-type: none">Transfer of payments to sellers• Trust<ul style="list-style-type: none">Credit system, reputations, rating agencies such as <i>Consumer Reports</i> and the BBB, special escrow and online trust agencies• Communication<ul style="list-style-type: none">Posting buyers' requests	<ul style="list-style-type: none">• Legal<ul style="list-style-type: none">Commercial code, contract law, dispute resolution, intellectual property protectionExport and import law• Regulatory<ul style="list-style-type: none">Rules and regulations, monitoring, enforcement• Discovery<ul style="list-style-type: none">Provides market information (e.g., about competition, government regulations)

E-Marketplaces (or marketspaces)

- Online marketplace (or online ecommerce marketplace) refers to a type of ecommerce site where product and inventory information is provided by multiple third parties, (whereas transactions are processed by the marketplace operator) [wikipedia.org]
 - Greater information richness
 - Lower search costs for buyers
 - Less information asymmetry
 - Buyers and sellers can be in different locations

Marketspaces

- Major components of a marketspace:
 - Customers
 - Sellers
 - Products
 - Infrastructure
 - ...

Marketspaces - II

- ...
- Front-end
- Back-end
- Intermediaries
- Support services

Customers

- Millions of people surfing the web
 - search for detailed information
 - compare
 - place bid, buy (digital) objects

Sellers

- Millions of storefronts are on the Web
- Huge variety of products and services
- Sellers can sell directly on their website or from e-marketplaces

Products and Services

- In marketplaces it is possible to commerce in digital products and services
- Both type of markets can sell physical products
- Marketplaces can sell digital products, that can be delivered over the Internet
- With digital products most of the costs are fixed, and variable costs are very low
- Profit increase very rapidly as sales volume increase

Online File W2.1 Examples of Digital Products

1. Information and entertainment products:

- ▶ Paper-based documents: Books, newspapers, magazine journals, store coupons, marketing brochures, newsletters, research papers, and training materials
- ▶ Product information: Product specifications, catalogs, user manuals, and sales training manuals
- ▶ Graphics: Photographs, postcards, calendars, maps, posters, and x-rays
- ▶ Audio: Music recordings, speeches, and lectures
- ▶ Video: Movies, television programs, and video clips
- ▶ Software: Programs, games, and development tools

2. Symbols, tokens, and concepts:

- ▶ Tickets and reservations: Airlines, hotels, concerts, sports events, and transportation
- ▶ Financial instruments: Checks, electronic currencies, credit cards, securities, and letters of credit

3. Processes and services:

- ▶ Government services: Forms, benefits, welfare payments, and licenses
- ▶ Electronic messaging: Letters, faxes, and telephone calls
- ▶ Business-value-creation processes: Ordering, bookkeeping, inventorying, and contracting
- ▶ Auctions, bidding, and bartering
- ▶ Remote education, telemedicine, and other interactive services
- ▶ Cybercafes, interactive entertainment, and virtual communities

Examples of digital
products

in 2006!

Infrastructure

- The marketspace infrastructure includes electronic networks, hardware, software, etc

Front-End

- The portion of an e-seller's business processes through which customers interact, including the seller's portal, electronic catalogs, a shopping cart, a search engine, and a payment gateway

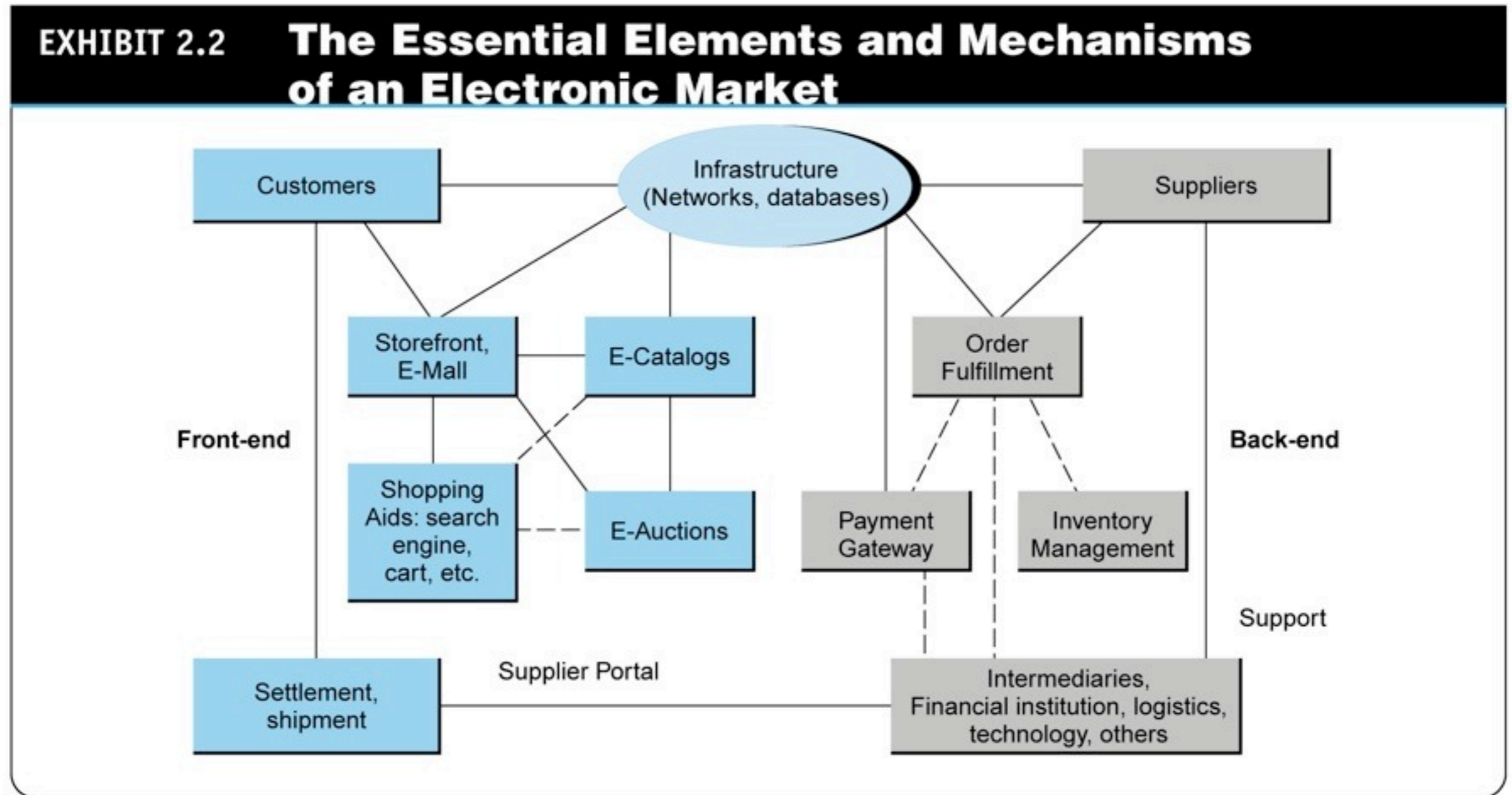
Back-End

- Back end: The activities that support online order-taking. It includes fulfillment, inventory management, payment processing, packaging, and delivery

Intermediary

- A third party that operates between sellers and buyers
- Online intermediaries create and manage the online market.
- They help match buyers and sellers, provide some infrastructure services, and help customers and/or sellers to institute and complete transactions

Essential Elements



Types of E-Marketplaces - Storefront

- A storefront refers to a single company's website where products and services are sold
- May belong to manufactures, retailers, or to individuals
- Several components necessary to carry out the sale: electronic catalog, search engine, shopping cart, payment gateway, shipment, customer service

Storefront Example - Raffles Hotel (Singapore)

The screenshot displays the Raffles Hotel Singapore website. At the top left is the Raffles logo with the text "RAFFLES SINGAPORE". To the right, there are links for "Hotel Destinations", "Select Language", "Contact us", and "Raffles Home". A search bar is located on the right side of the header. Below the header is a navigation menu with the following items: "Location & Attractions", "Exclusive Offers", "Guest Services", "Suites", "Restaurants & Bars", "Meetings & Events", "Raffles Spa", "History", and "Media Room". The main content area features a large photograph of an outdoor courtyard with a green lawn, palm trees, and a building in the background. Below the photograph are four promotional tiles: "Long Bar Steakhouse open for Lunch" with an image of a steak and vegetables; "The 16th Annual Wine Food & Arts Experience" featuring "SALON" champagne and wine bottles; "Usher in the Year of the Rabbit with Raffles" with an image of a dish; and "Raffles Business Package" with an image of a hotel room. To the right of these tiles is a "Quick Links" section with links to "Photo Gallery", "Virtual Tour", "eBooks", "Bouquets", and "Factsheet". Below the quick links are social media icons for "Facebook" and "Twitter". On the far right is a "Reservations" section with a form for selecting the location (Singapore), hotel (Raffles Hotel, Singapore), arrival date (28 Jan 11), number of nights (1), and adults (1). It includes a "Find" button and a "Toll-Free Reservations" link.

Types of E-Marketplaces - E-Mall

- An online shopping center where many stores are located
- Different types of malls
 - Simply a directory
 - Shared services



The screenshot displays the Hawaii.com website interface. At the top, the logo features a yellow flower icon and the text "HAWAII.COM Your Click-out to Paradise". A navigation menu includes links for Oahu, Maui, Kauai, Big Island, Molokai, Lanai, Virtual Tours, Multimedia, and Search Travel. A user login area in the top right corner says "Aloha Visitor! Being a member of Hawaii.com has its rewards! Log In Join Club Forgot Password?". Below the navigation is a large white search bar. The main content area is divided into several sections: a weather widget for Honolulu showing "74° Mostly Cloudy" and an update time of "12/20/10 12:53 AM Hawaii ST"; a sidebar with a "Getting to Hawaii" menu; a central article titled "Hawaiian Air's Hawaii Five-O Special Extended!" with a "CLICK HERE!" button; a "Plan and Book Your Next Hawaii Vacation!" section with a "Whale Watching" sub-section; and a "Best Pricing - All Islands" section with a list of travel offers. At the bottom, there is a "Paradise Tool: What's Your Paradise?" link and a "Search Travel Expedia" button.

Il mio spazio Expedia [Nascondi](#)

Quali novità da Expedia? [Informazioni utili](#)
 Sei un nuovo utente? [Registrati ora](#)

Crea il tuo viaggio

Nessuna spesa di prenotazione sui voli

Volo

Hotel

Auto

Attrazioni

Vacanze

Prenota Insieme & risparmia

Volo + hotel

Volo + hotel + auto

Volo + auto

Partenza da: Destinazione:

Partenza: gg/mm/aaaa Ritorno: gg/mm/aaaa

Adulti: (19-64) Senior: (+65) Bambini: (0-18)

[Ulteriori opzioni di ricerca: più camere, compagnia aerea...](#)

Scopri le offerte

Offerte a tema

 **Speciale New York**

Risparmia fino al 20% sul tuo soggiorno a New York.

a partire da **€ 491**

 **Prenota ora**

Prenota in anticipo e risparmia

a partire da **€ 154**

 **Last Minute**

Con le nostre offerte ultimo minuto puoi prenotare ora il tuo hotel e partire il prossimo week end!

a partire da **€ 23**

 **Weekend**

Scopri le offerte di Expedia per il tuo weekend nelle più belle città del mondo

a partire da **€ 115**


Lasciati ispirare

Scegli la tua destinazione

scegli la destinazione

Flash

Incredibili offerte per Stoccolma

 Fantastici sconti quando si effettua la prenotazione contemporaneamente di volo + hotel. Offerta limitata nel tempo.

Hotel solo	da € 50
Voli + 5 notti	da € 286

"Questo paese è meraviglioso"

Types of Stores and Malls

- General (amazon.com)
- Specialized (1800flowers.com)
- Regional (parknshop.com)

The screenshot displays the PARKnSHOP.com website interface. At the top, there are navigation links for Customer Service, Privacy Policy, About PARKnSHOP, and Back to Home, along with a language selector for 中文版. A banner at the top right promotes a 'Winning More for Almost 38 Years' Lucky Draw. The main content area features a large red starburst graphic with the text 'Pick up your order in one of 58 stores' and a promotion for Pun Choi, Sushi, and Siu Mei Online Special. Below this, there are several product categories under 'Buy More Save More' and 'MONEY BACK' (易賞錢). The 'Buy More Save More' section includes items like VITASOY SB MILK, HUGGIES NC BABY WIPES, MASTERS PURA FRESH MILK, SCOTT ECONOMY 3 PLY BATHROOM TISSUE, DOWNY ULTRA FABRIC SOFTENER, and MARUSAN SOYA DRINK. The 'MONEY BACK' section features MAS BELLES EAUX, CH MARTINET SAINT EMILION, and FIRST PRESS NAPA CABERNET. At the bottom, there are banners for 'Xmas Food Fair' and 'Stainless Steel Vacuum For Free with MoneyBack Reward Points', along with logos for A.S. Watson Group, MONEY BACK, great, and Watson's Wine Cellar. The footer contains logos for caring company, VERIFIED by VISA, MasterCard SecureCode, VeriSign Secured, and MWL, along with text indicating it is a member of A.S. Watson Group and a Hutchison Whampoa Company.

PARKnSHOP, a division of A. S. Watson Group (HK) Limited (a BVI company)
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Information Portals (aka enterprise portal)

- A portal is a mechanism used in e-marketplaces, e-stores, etc.
- A portal is an information gateway
- it enable people to search and access relevant information from disparate systems and the Internet
- many portals can be personalized by the users

Information Portals - II

- Commercial Portals: the most popular type on the Internet, broad audience, diverse communities, personalization
- Corporate Portals: organized access to a narrow set of company and partners informations
- Publishing portals: communities with specific interests, little customization, great search
- Personal Portals: narrow content very personalized
- Mobile Portals: portals accessible from mobile devices
- Voice Portals: portals with audio interfaces

History of information portals [wikipedia]

- **The mid-1990s saw the advent of public Web portals like AltaVista, AOL, Excite, and Yahoo!.** These sites provided a key set of features (e.g., news, e-mail, weather, stock quotes, and search) that were often presented in self-contained boxes or portlets. Before long, enterprises of all sizes began to see a need for a similar starting place for their variety of internal repositories and applications, many of which were migrating to Web-based technologies.[2]
- By the late 1990s, software vendors began to produce **prepackaged enterprise portals**. These software packages would be toolkits for enterprises to quickly develop and deploy their own customized enterprise portal. The first commercial portal software vendor began to appear in 1998. Pioneers in this marketing included "pure play" vendors like Epicentric, Plumtree Software and Viador. The space, however, quickly became crowded by 2002, with the entry into the market of competing product offerings from application server vendors (such as BEA, IBM, Passageways, Oracle Corporation and Sun Microsystems), who saw portals as an opportunity to stave off the commoditization of application server technology, and Business Intelligence vendors such as Liferay portal. Enterprises may choose to develop multiple enterprise portals based on business structure and strategic focus while reusing architectural frameworks, component libraries, or standardized project methods (e.g. B2E, B2C, B2B, B2G, etc.).
- In 2003, vendors of Java-based enterprise portals produced a **standard** known as JSR-168. It was to specify an API for interoperability between enterprise portals and portlets. Software vendors began producing JSR-168 compliant portlets that can be deployed onto any JSR-168 compliant enterprise portal. The second iteration of the standard, JSR-286, is final-released on 12 Jun, 2008.

Technology of the Year

The year's most significant new technology was a disruptive product made by Apple.

- 9 reasons you might NOT want to give an iPad this Christmas
- Microsoft to show off true iPad competitors at CES?
- Apple's iPad at work: Consumerization, security and support
- iPad or iPad 2 ... or something else?

TECHNOLOGY OF THE YEAR

TIME



Top Stories

- Google TV: Back to the drawing board?
- Best Buy's HDTV strategy: still working?
- Would a Nokia Windows Phone 7 device improve sales for either company?
- The MacBook Air's biggest omission
- Indian startup Notion Ink shows how to completely botch a product launch
- Vizio launches its largest HDTV ever
- Facebook redefines the 'big fish'
- Google rejects state AG's request
- 10 reasons to use meta keywords tag
- Google adds warnings for shady sites
- Microsoft hits back at Google's e-mail plan

ZDNet's Wikileaks poll: You're conflicted

Gallery: Buyers' remorse? 10 tech acquisitions spat back out

Sometimes things don't go as planned. Here are 10 companies that got acquired, then re-sold later on. [Browse Galleries](#)

Gallery: Going back in Time: Person of the Year winners in tech

Mark Zuckerberg is in good company.

Holiday Tech Gift Guide 2010

- E-book Readers
- Gifts for road warriors
- Gifts under \$100
- 7 wacky gadgets

ZDNet Perspectives and Analysis



Home Theater

Is Best Buy's HDTV



iGeneration

Harry Potter and



ZDNet Government

11 completely crazy,



SEO Whistleblower

SEO Shocker: 10

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Media Gallery



Cisco CIO: Adapting to emerging workplace tech



15 sites and services that shuttered in 2010 tech

Vendor Showcase

ZDNet: Where Technology Means Business

ZDNet is a one-stop destination for professionals

Publishing Portal
Example

www.zdnet.com

Google Search

I'm Feeling Lucky



[Change theme from Purple Apple](#) | [Add stuff](#) »

Home

- Fantascienza.com
- Slashdot
- SlashGear
- iSpazio - Notizie su i...
- MacRumors : Mac N...
- Il Fatto Quotidiano
- CSS-Tricks
- Matteo Spinelli's Cu...
- CSS3 Wizardry
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- + [Coding a Rotating Image Slideshow w/ CSS3 and jQuery](#)

Il Fatto Quotidiano

- + [La fobia degli arresti di Gasparri](#)
- + [Scontri Roma: "Sono io ad](#)

Fantascienza.com

- + [Notizie: Thor è arrivato sulla Terra](#)
- + [Notizie: Mass Effect 2 e 1/2 per Ps3](#)
- + [Notizie: Sam Neill ad Alcatraz, mentre The Event si complica](#)

CSS-Tricks

- + [WebKit Image Wipes](#)
- + [The Hacktastic Zoom Fix](#)
- + [The lean, mean, CSS-reset machine.](#)

MacRumors : Mac News and Rumors

- + [Apple Prepping for iWork '11](#)

Slashdot

- + [Google Donates Windowbuilder, Codepro To Eclipse](#)
- + [FBI Defend Raids On Texas Datacenter](#)
- + [Nigerian Email Scam Victim Sues Bank, Loses Appeal](#)

iSpazio - Notizie su iPhone 4 in Italia, iOS 4, iPhone 3GS, iPod Touch, iPad Italia e recensioni App Store.

- + [EasyTrails GPS: Ecco tutte le novità della versione 4.2](#)
- + [Solo per oggi e fino alle 18:00 Vodafone offre la Mobile Internet ad 1€ a settimana per 1 anno!](#)
- + [Apps Builder: Crea la tua](#)

Personal Portal Example

www.google.com/ig

Mobile Portal Example

www.google.com/ig

on Safari Mobile



Intermediation

Intermediation in E-Commerce

- Intermediaries (brokers) provide value-added activities and services to buyers and sellers
- Infomediaries: electronic intermediaries that provide and/or control information flow in cyberspace, often aggregating information and selling it to others
- The infomediary business model recognizes that there is value in this personal data and the infomediary seeks to act as a trusted agent, providing the opportunity and means for clients to monetize and profit from their own information profiles. One of the first focused implementations of the infomediary concept was an online advertising company called AllAdvantage. (Source: Wikipedia)

Note

- AllAdvantage was an Internet advertising company that positioned itself as the world's first "infomediary" by paying its users/members a portion of the advertising revenue generated by their online viewing habits. It became most well known for its slogan "Get Paid to Surf the Web" a phrase that has since become synonymous with a wide array of online ad revenue sharing systems (see, e.g., paid to surf). (Source Wikipedia)



does not exist anymore
(www.alladvantage.com in 2011)

Detour: Pay for Surf

- Pay to surf is a business model that became popular in the late 1990s, prior to the dot-com crash. Essentially, a company uses income from advertising placed on members' screens to pay them for time spent surfing.
- A pay-to-surf company would provide a small program, commonly called a "viewbar"
- Advertisers' banner ads were then displayed while the member was browsing the web. Since the viewbar tracked websites that the user visited, the pay-to-surf company was able to deliver targeted ads for their advertisers.
- Advertisers paid the pay-to-surf company a small amount (typically US\$0.50) for every hour of a member's surfing.

Una pay-for-surf italiana: NetFraternity

- Pay for surf classica
- Declino nel maggio 2001, prima offre solo crediti per uno store online, poi richiede la navigazione tramite il loro provider personale (a pagamento)
- Dura lotta con spammer e cheater
- http://www.repubblica.it/online/tecnologie_internet/paytosurf/netfraternity/netfraternity.html



Netfraternity Netspot
on guadagnando.com

75 pixels + floating window

Roles of Intermediaries

- Intermediaries can address the following five important limits of direct interaction:
 - Search costs: by predicting demands or matching consumers with sellers
 - Lack of privacy: by protecting some information about the trade
 - Incomplete information: by providing additional information on the product or service sold
 - Contract risk: by reducing risks of non-payments, publicize bad behavior, holding payments until transaction is complete

Disintermediation and Reintermediation

- Disintermediation: Elimination of intermediaries between sellers and buyers
 - two types of intermediaries: the first provides information, the second add value
 - the first can be eliminated (airlines sell tickets online instead of using agencies)
- Reintermediation: Establishment of new intermediary roles for traditional intermediaries that have been disintermediated, or for newcomers
 - new intermediary roles can arise from disintermediated businesses

Market Mechanisms

Electronic Catalogs

- Electronic Catalog: the presentation of product information in an electronic form: the backbone of most e-selling sites
- Objective: advertise and promote products and services
- Quick search with search engines
- Early online catalogs were replica of the printed catalogs
- They evolved, and become integrated with shopping charts

Electronic Catalogs Classification

- Electronic catalogs can be classified by the following dimensions:
 - The dynamics of the information presentation
 - The degree of customization
 - Integration with business processes

EXHIBIT 2.6 Comparison of Online Catalogs with Paper Catalogs

Type	Advantages	Disadvantages
Paper catalogs	<ul style="list-style-type: none">• Easy to create without high technology• Reader is able to look at the catalog without computer system• More portable than electronic	<ul style="list-style-type: none">• Difficult to update changed product information promptly• Only a limited number of products can be catalog displayed• Limited information through photographs and textual description is available• No possibility for advanced multimedia such as animation and voice
Online catalogs	<ul style="list-style-type: none">• Easy to update product information• Able to integrate with the purchasing process• Good search and comparison capabilities• Able to provide timely, up-to-date product information• Provision for globally broad range of product information• Possibility of adding on voice and animated pictures• Long-term cost savings• Easy to customize• More comparative shopping• Ease of connecting order processing, inventory processing, and payment processing to the system	<ul style="list-style-type: none">• Difficult to develop catalogs, large fixed cost• There is a need for customer skill to deal with computers and browsers

Paper and Online
Catalog

Comparison

Search Engines

- A computer program that access a database of Internet resources, search for specific information, and report the results.
- Semantic search

Shopping Carts

- Order processing technology to accumulate items they wish to buy
- B2C shopping carts are simple, B2B can be more complex
- Many software implementations

Summary

- E-marketplaces and their components
- The role of intermediaries
- The major types of e-marketplaces
- Overview of catalogs, search engines, shopping carts