E-Commerce

Sadiq M. Sait, Ph.D

sadiq@ccse.kfupm.edu.sa

Department of Computer Engineering

King Fahd University of Petroleum and Minerals

Dhahran, Saudi Arabia

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Electronic Commerce

- E-Commerce is buying and selling of goods and services on the internet, especially the WWW.

Electronic Commerce

- Involves
  - » Virtual storefronts on Web sites with online catalogs, sometimes grouped in a virtual shopping mall
  - » The gathering and use of demographic data
  - » Electronic Data Exchange (EDI) . the business to business exchange of data
  - » Bulk e-mailing as a media for reaching prospective and established customers with news and updates

Other Requirements

- Infrastructure, delivery system such as UPS in the US

- Warranty, guarantee culture

- Presence of international companies to boost customer trust and confidence

- Based on TV model (but it is possible to determine which ad on the internet is bringing in more customers).

Virtual Stores

- 24 hour availability
- Global reach
- Ability to interact and provide custom info and ordering
- Multimedia capabilities

Examples

- Expected to be a multibillion dollar source of revenue for global businesses
- In 1997 Dell Computes reported orders of a million dollars daily!
- In 1998, total business-to-business e-commerce revenues generated was $12.5 Billion, expected to rise to $131.1 Billion by the year 2000 (reported by eMarketer)
- Vinton Cerf, Chairman of Internet Society (and executive at MCI) estimates that by 2003 e-commerce will reach between $1.8 and $3.2 Trillion
- See amazon.com, travelocity.com, towerrecords.com, etc.

Three Options

1. Buy ready-made solution   ibm Net.Commerce

2. Rent space in a network-based e-commerce solution iCat Commerce and Yahoo Store

3. Build the system from scratch with components and parts (requires expertise, time, and budget---- but will give exact solution).

    Another option is to use a =plug-inqapplication to FrontPage 98 --- JustAddCommerce

For stats and growth of e-commerce and demographs see http://www.wilsonWeb.com/Webmarket/demograf.htm or http://ww.emarketer.com/estats

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EDI

- EDI is the exchange of business data using an understood data format. It was in existence long before the Web

- Involves data exchange among parties that know each other well and make arrangement for one-to-one connection, usually dial-up.

- An EDI message contains a string of data elements which are separated by delimiters. Each data element represents a fact, such as price, product model number, etc. The entire string is called a data segment.

EDI

- A transaction set contains one or more data segments framed by a header and trailer. This is the EDI message or unit of transmission.

- A transaction set usually contains information that would typically be contained in a business document or form.

- Trading partners are parties who exchange EDI transmission.

Bulk E-mail

- Sending ads and info (sometimes in the form of newsletters) is a method for marketers to reach potential E-commerce customers.

- Sometimes customers request to be added to newsletter or =special offerqmailing list when visiting Web sites.

- More often e-mail address are =harvestedqand sold to bulk e-mailers who send their messages to as many Web users as possible

Bulk E-mail

- Unsolicited e-mail is considered to be a "SPAM" to the receiver. The email should include a message that explains how to remove yourself from the list (usually by replying with remove in the subject heading)

See

http://www.isoc.org/internet/issues/spamming

http://www.anti-spam.net

http://email.miningco.com

http://stopspam.sparklist.com

Steps

- Netscape Virtual Office gives 7 steps to selling online:

  Step 1: Getting a free e-mail address for life

  Step 2: Building a custom Website for free

  Step 3: How to attract visitors to your site for free (with Register it)

  Step 4: How to track visitors (with Hitometer)

  Step 5: Tuning your Website (by running critical diagnostics)

  Step 6: Finding new customers for free

  Step 7: Selling Online

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NVO E-Store (an example)

- A cost effective solution to selling on-line
- Can add a store to your Website in few minutes
- Can try it out for free for 30 days
- Company logos and other products images can be uploaded by simple clicks.
- Shopping carts, security of credit card data, confirmation via e-mail, automatic tax calculation, shipping charges, and detailed tracking and analysis are provided.

Things One Must do

- Every business who wishes to accept credit cards through a Website much have all the following:
  - » Merchant Account
  - » Shopping Cart
  - » Secure Server
  - » Processing Mechanism
    - . Real time
    - . Manual

Merchant Account

- This is like a contract with the credit card company

- These companies process your transactions and forward the money to your business account (you must have a business account)

- Fees is reasonable, (application fee $50-$400, monthly statement fee $10-$30, Per transaction fee $0.30-$1.00 and monthly minimum transaction fee $20-$50).

- Some e-commerce packages include the application for a merchant account.

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Shopping Cart

- This is the software on your Web site which allows customers to ``Browse your store´´ and select items to ``place in their shopping cart´´ for purchase when they check out.

- The SW computes applicable state sales tax, shipping costs (if any) and quantity totals.

- Many companies charge $100-$1000 for this SW. Some companies give it free with their E-commerce package (e.g., S-Mart sopping Cart software is available free).

Secure Server

- Most customers will not give their credit card information over the internet unless its over a secure server.

- The current popular secure server is "SSL" (secure socket layer).

- SSL encrypts the data being passed from your consumers browser to the secure server (making data useless if intercepted)

Processing Mechanism

- This is the final requirement. Now that you have the merchant account, shopping cart software and a secure Web site, you will need a way to transmit your credit card transactions to your merchant account
- There are two methods

Processing Mechanism Methods

- Real Time: Customer credit card info is checked for approval immediately while he waits.

- Manual: This means that each transaction is entered by the merchant after the consumer's purchase is made.

- To process in real-time one must have a direct Web link with the processing company, usually through the secure Web site (Cybercash, a costly was to achieve real-time processing).

Free Software

- Several sites provide free software or free demo downloads.

- Examples: http://www.dansie.net and Perl$hop http://www.arpanet.com/perlshop provide free shopping cart software.

- Another most powerful free shopping cart system is available from MiniVend. (Runs on Perl 5.04 under Unix and Windows).

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Free Software

- MiniVend supports just about every need for a leading edge shopping site. Online credit processing CyberCash, Authorize.Net, PaymentNet, security with SSL and PGP, powerful database connectivity with SQL and DBI/DBD, internationalization, and much more.

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Free Software

- There are companies who will handle the whole transaction process, form calculating the order to processing the credit transaction. FreeMerchant.com claims free credit card processing and secure account handling (catch? Maybe banners on your site)

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Others

- Merchant Planet

- Sales Gate

- Yahoo Stores

- IBM

All provide solutions at cost.

Products can also be sold through on-line auctions. Check up eBay.

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Other Issues

- Buying on the internet
- E-Auctions
- E-Trading
- ISP and E-Business
- Security Aspects

E-Auctions

- What's an E-Auction ?
- Types for E. Auction
- E. Auction Formats
- Payment Options
- Consumer Concerns
- Avoiding Auction Fraud
- What's for Sale at Online Auctions?
- Quick Tips for Buyers/Sellers

É Examples
É Tips to buy a PC at Auction
É Who Can Help
É Create and Run Your Own Auction Site Online

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E-Auctions

- Started in 1995, Internet auctions are bazaars, and online auctions deliver good fun and good buys when you play it safe

- To participate, both sellers and buyers must register with the site (Registration is FREE)

- Make sure you understand the site's policy before you begin

- Currently there are over 400 popular auction sites and we will be adding more
  - » http://www.bidfind.com/af/af-list.html

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E-Auctions

- You can't actually see what you are bidding on (only a full description and a photo)

- You must trust that it's accurate.

- Buyers pay the sellers directly and also pay the shipping costs

- Internet auction types: Business-to-Person & Person-to-person

  » Operators of **business-to-person** auction sites have physical control of the merchandise. In **person-to-person** auctions, individual sellers or small businesses offer their items for auction directly to consumers

Types of E-Auction

- Generally, the seller · not the site · has physical possession of the merchandise. After the auction closes, the seller is responsible for dealing directly with the highest bidder to arrange for payment and delivery

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Auction Formats

- ## Single Item Auctions
    - » The simplest to operate
    - » Seller submits a single item to the auction
    - » The auction will begin on a specified date and time, and at a specified price and bid increment
    - » Once the auction closes and a winning bid submitted, both buyer and seller will be notified via e-mail.
    - » Seller will then bill buyers credit card that is on file for the goods, applicable shipping, handling, and insurance, plus state sales tax, if required

- ## Multiple Item Auctions
    - » The process for multiple item auctions is much the same except that bidders specify the number of items to bid on

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Payment Options

- Buyers may have several payment options
  - » credit card
  - » personal check
  - » money order
  - » cash on delivery
  - » escrow services
- All sellers do not accept all forms of payment

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Quick Tips for Sellers

- Provide an accurate description of the item you're selling, including all terms of the sale and who will pay shipping costs

- Respond quickly to any questions bidders may raise during the auction

- Contact the high bidder as soon as possible after the auction closes to confirm details of the sale

- Ship the merchandise as soon as you receive payment

Quick Tips for Buyers

- Identify the seller and check the seller's feedback rating

- Do your homework. Be sure you understand what you're bidding on, its relative value and all terms and conditions of the sale, including the seller's return policies and who pays for shipping

- Establish your top price and stick to it

- Evaluate your payment options. If possible, use a credit card. It offers the most protection if there's a problem. Consider using an escrow service if the seller doesn't accept credit cards.

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Consumer Concerns

- According to the <u>Federal Trade Commission</u>, Internet auction fraud has become a significant problem. Most consumer complaints center on sellers who:
  » don't deliver the advertised goods;
  » deliver something far less valuable than they advertised;
  » don't deliver in a timely way; or
  » fail to disclose all the relevant information about the product or terms of the sale.

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Avoiding Auction Fraud

- Shop with businesses you already trust
- Read the auction site's policy carefully before you bid
- Contact the seller directly and question him or her about the merchandise
- Get the seller's full information, including name, address and phone number
- Check the auction site to see if there any negative postings about the seller

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Avoiding Auction Fraud

- If possible, pay by credit card for the same protection you have when making purchases in the real world

- Don't send your credit card number by e-mail

- Print a copy of your transaction for your records

- To be successful at any auction, you must know the fair market value of the products going up for sale

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Avoiding Auction Fraud

- Be skeptical of deals that appear too good to be true. They probably are

- Check the shipping costs, which could make the total purchase price more than what you would pay in a retail store

What's for Sale at Online Auctions?

- You cannot sell a baby
- You can't sell your kidney either, though someone tried
- Anything: many, many products are available for sale on the Internet
  - » http://www.ubid.com/

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Yahoo Auction Site

- Site name: http://auctions.yahoo.com

- Getting Started
  - » How to Bid
  - » How to Sell
  - » Actions Tour

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Create and Run Your Own Site

- Create and Run Your Own Auction Site Online!
  No Installation. No Waiting. No Cost.
  - » **http://www.baybuilder.com/home.htm**

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Ebay Web Site

- Site Name: http://www.ebay.com/
- Getting Started:
  - » New to eBay?
  - » New to Browsing?
  - » New to Bidding?
  - » New to Selling?
  - » Are there Fees?
  - » Why eBay is safe?
  - » New to the Internet?

Tips For Buying PCs at Auction

- Buying a computer via online auction can lead to a great deal of saving, but it isn't the best bet for everyone. Keep the following tips in mind

1. Think about the type of computer you're seeking and what you are willing to pay before you start shopping. Tens of thousands of computers are offered in auctions: Know precisely what you want in order to avoid getting overwhelmed by the options

Tips For Buying PCs at Auction

2. When you find a candidate, make sure it's clear whether the computer is new or used

3. If you are bidding on used machines, it can be safer to choose auctions from reputable resellers. If you're buying directly from the computer's previous owner, you can protect yourself by using an escrow service: http://www.escrow.com/

4. Find out if the computer comes with a warranty or not.

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Tips For Buying PCs at Auction

5. If you're a first-time buyer or not technically minded, the additional service and support provided by a retail computer shop is a good bet

   » Bidding on an auction is best when you're not in a hurry. The process of waiting for the auction to close (and bidding on another if you lose) can take days or weeks

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Who Can Help?

- If you run into a problem during your transaction:
  - » Try to work it out directly with the buyer or the auction web site
  - » If that doesn't work, file a complaint with the Federal Trade Commission by calling toll-free 1-877-FTC-HELP (382-4357) or visiting the FTC's web site at http://www.ftc.gov/
  - » Although the Commission cannot resolve individual problems for consumers, it can act against an individual or company if it sees a pattern of possible law violations. You also may want to contact your state Attorney General or your local consumer protection office

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E-Trading

- **Basics of Investing**

- **Investing Strategies**

- **Quotes & Research**

  - » Stock Quotes

  - » Stock Charts

  - » Stock Research

- **Opening Etrading Account**

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W h

- Maintain purchasing power to cope with even mild inflation.
- Investing is fun
  - » pitting your intellect against investing community
  - » rewarded with increase in assets
- Investment returns can accumulate at a faster rate than your salary.
- A successful investor puts natural curiosity and intellectual interest to work to earn more money.
- Personal wealth.

Where Stocks Trade

- Stocks traded on securities and commodities exchanges or over the counter.

- Exchanges members handle trades for themselves and their clients.

- Securities and options are regulated by SEC (Securities and Exchange Commission) (NYSE, AMEX)

- For the over-the-counter (OTC) market: trades are handled electronically· either via telephone or computer or through dealers

- Regulated by the National Association of Securities Dealers, NASDAQ provides the automated quotes for this market.

Stock Market Cycle

- Stock market moves in cycles: fluctuates.
- Get wonderful bargains every few years and sell again at high prices a few years later.
- With this principle, you will prosper if you don't become too paralyzed to act.
- Stock market is a voting machine, polling investors on the future, not the present.
- The worse you feel, news is bad, the safer the market.
- The better you feel, news is good, the closer you are to a top.

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Stock Glossaries

- **Shares Outstanding:** shares of common stock currently owned by investors.

- **Volume:** total number of shares traded of a stock during a specific time period.

- **Revenues:** net sales of the company plus any other revenues associated with business operations. (Does not include dividends, interest income or non-operating income).

- **Net Earnings:** profit after all costs, expenses and taxes have been paid.

- **Dividends:** cash payment, per share, to shareholders every quarter. Part of profits not reinvested in the company.

- **Total Return:** price change plus dividend return over last 12 months

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Stock Glossaries – Cont.

- **Yield**
  - » annual rate of return on a stock as paid in dividends.
  - » calculated by dividing latest dividend rate by latest closing price and multiplying by 100.
  - » latest dividend rate is the total <u>dividends</u> paid in the past 12 months.

- **Net Earnings-Per-Share (EPS)**
  - » net earnings allocated to each share of stock.
  - » calculated by dividing <u>net earnings</u> by common shares outstanding

- **PEG ratio (price-to-earnings-growth)**
  - » The higher the PEG, the pricier the stock.

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Investing Strategies

- Investing is a simple process:
- Stock Selection
- Commit to a Position
- Monitoring the Position
- Closing the Position

Other Issues

- Value and Growth Strategies

- Importance of Diversification

- Mutual Funds Investing

- Impact of News on Investment

- Do not Rush to an Investment

- Common Mistakes: Panic selling, Never selling, Investing in Penny stocks

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Tap the Power of the Internet

- Internet shattered barriers between Wall Street and Main Street.
- Previously, took a lot of manpower and computing power to research a stock.
- With internet you can
  - » retrieve in seconds stock price and volume information
  - » plot intraday stock graphs or historical graphs for one week or one month, one year or twenty
  - » up-to-date company news
  - » inspect corporate financial statements filed with the Securities and Exchange Commission (SEC).
  - » insider information

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Quotes & Research

- Many excellent internet sites for stock quotes and research
  - » finance.yahoo.com
  - » www.excite.com
  - » www.etrade.com
- Most stock quotes are delayed by 20 minutes
- Free real time quotes with account
- Example: finance.yahoo.com
  - » stock Quote, charts: stock price ranges, research, news, SEC & insider

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Intel Corporation

Symb	Last	Change		Volume	Day's Range	52-week Range
INTC	131 $^1/_8$	-5 $^{11}/_{16}$	-4.16%	22,361,100	130 $^7/_8$ - 139 $^1/_{16}$	50 $^1/_8$ - 145 $^3/_8$

Stock Quote - Detailed

Last Trade 2:55PM · **131 ³/₈**	Change +¹/₄ (+0.19%)		Prev Cls 131 ¹/₈	Volume 21,959,200	Div Date Jun 1
Day's Range 127 ³¹/₆₄ - 134 ¹/₄	Bid 131 ⁵/₁₆	Ask 131 ³/₈	Open 130	Avg Vol 27,561,364	Ex-Div May 3
52-week Range 50 ¹/₈ - 145 ³/₈	Earn/Shr 2.11	P/E 62.14	Mkt Cap 439.1B	Div/Shr 0.12	Yield 0.09

1d 5d   none
1d 5d 3m 1y 2y 5y
max

INTC 10-Apr-2000 (C)Yahoo!

...ation – 1 year Stock chart

Intel Corp as of 7-Apr-2000

Splits: ▼

Copyright 2000 Yahoo! Inc.   Volume (1000's)   http://finance.yahoo.com/

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Intel Corporation – 5 year Stock chart

Intel Corp as of 1-Apr-2000

Splits: ▼

Copyright 2000 Yahoo! Inc.   Volume (1000's)   http://finance.yahoo.com/
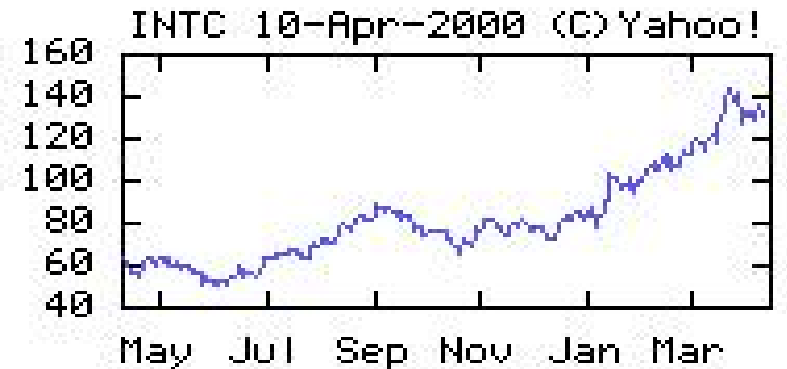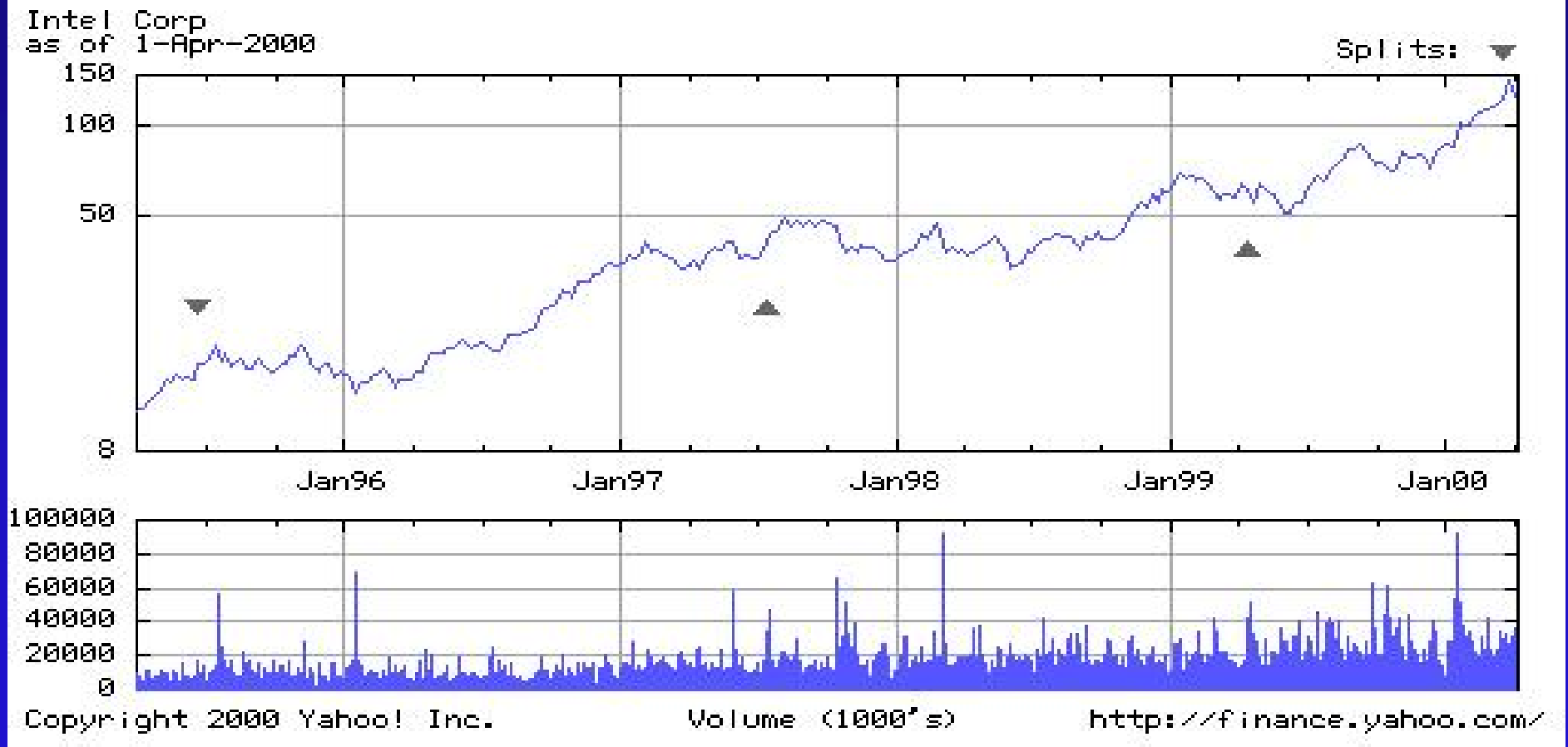
Intel Corporation – 1 year chart vs. S&P500

Intel Corp as of 7-Apr-2000

Splits: S&P

Copyright 2000 Yahoo! Inc. Volume (1000's) http://finance.yahoo.com/

Stock Research Summary

Number of brokers recommending as:

Strong Buy	22
Moderate Buy	12
Hold	6
Moderate Sell	0
Strong Sell	0

Average Recommendation

(Strong Buy) 1.00 - 5.00 (Strong Sell)

This Week	**1.52**
Last Week	1.57
Change	0.1

Earnings Per Share

Last Quarter	(Dec 1999)	0.69
Surprise		9.5%

Consensus Estimates

This Quarter	(Mar 00)	0.68
This Year	(Dec 00)	2.91
Next Year		3.39

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Earning History & Growth

	Dec 1998	Mar 1999	Jun 1999	Sep 1999	Dec 1999
Estimate	0.53	0.54	0.54	0.57	0.63
Actual	0.60	0.57	0.51	0.55	0.69
Difference	0.07	0.03	-0.03	-0.02	0.06
% Surprise	12.26 %	5.56 %	-5.56 %	-3.51 %	9.52 %

	Last 5 Years	This Year (Dec 00)	Next Year (Dec 01)	Next 5 Years	Price/Earn (Dec 00)	PEG Ratio (Dec 00)
Intel Corp ELEC COMP- SEMIC S&P 500	16.5 % 10.8 % 9.2 %	25.3 % 30.4 % 11.6 %	16.5 % 36.7 % 8.5 %	19.3 % 30.8 % 15.2 %	45.0 57.6 26.7	1.78 1.89 2.30

Opening E-trading Account

- There are several companies to Etrade with.
- Types of accounts:
  - » cash
  - » margin
- E*trade: www.etrade.com
  - » $20 per trade (upto 5000 shares), $1000 for cash account, $2000 for margin account, free real time quotes
- Charles Shwab: www.shwab.com
  - » $30 per trade (upto 1000 shares), $5000 for margin account, free real time quotes

g Etrading Account – Cont.

- ● **Datek Online:** www.datek.com
  - » $10 per trade (upto 5000 shares), $2000 for margin account, free real time quotes
- ● **National Discount Brokers:** www.ndb.com
  - » $15 market order, $20 limit order per trade (upto 5000 shares), no minimum balance to open account
- ● **TD Waterhouse:** www.tdwaterhouse.com
  - » $12 per trade (upto 5000 shares)
- ● **Ameritrade:** www.ameritrade.com
  - » $8 market orders, $13 limit and stop orders (upto 10,1000 shares), free real time quotes

Summary

- Investing is important to maintain money power.
- Before investing learn
  - » investing basics
  - » investing strategies
- Internet has made trading simple
- Tap the power of the internet in stock research and collecting information.
- Extensive information resources and tools.
- Any one can make good money by electronic trading.

Internet Service Providers

- Provide connection to the Internet, just like telephone companies give connection to Telephone network.

- Connection Options:
  - » Dial-up Connection: Data over telephone lines, speeds up to 33 Kbps
  - » ISDN: Integrated Service Digital Network: Even though around for a long time, getting very popular now, Speeds up to 128 K-bits/sec

Connecting To The Internet

- Things needed to connect to the Internet
  - » Computer: PC, SUN, Mac or other
  - » ISP connection
    - . Dial-up connection
      - Telephone connection, ISDN
    - . Dedicated leased lines
      - T1, EI, ATM, SONET
      - Connect to an existing network
  - » Software
    - . Email client, WWW browser, TCP/IP network software

Finally….

- Summary
- Questions