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# E-BUSINESS

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DEPARTMENT OF INDUSTRIAL AND SYSTEMS ENGINEERING  
IIT KHARAGPUR

# COURSE OVERVIEW



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# Objective

The Internet has changed the way companies carry out their businesses. The primary objective of this course is to introduce concepts, tools and approaches to electronic business to the post-graduate and the undergraduate students. Further, the subject will help the students to develop skills to manage businesses in the digital world.

# Contents

- Introduction to E-Business
- Making Functional Areas E-Business Enabled
- Technologies for E-Business
- Decision Support in E-Business

## Contents: Making Functional Areas E-Business Enabled :

<b>Week 1</b>	Introduction to E-Business; Making Functional Areas E-Business Enabled; Technologies for E-Business; Decision Support in E-Business
<b>Week 2</b>	Making Functional Areas E-Business Enabled : Value chain and supply chain, inter and intra organizational business processes, ERP
<b>Week 3</b>	Making Functional Areas E-Business Enabled : E-Procurement
<b>Week 4</b>	Making Functional Areas E-Business Enabled : E-marketing, E-Selling, E-Supply Chain Management

E-Business

# Contents: Technologies for E-Business

<b>Week 5</b>	Technologies for E-Business: Internet and Web based system
<b>Week 6</b>	Technologies for E-Business: Security and payment systems
<b>Week 7</b>	Technologies for E-Business: Supply chain integration technologies (EDI, RFID, Sensors, IoT, GPS, GIS)
<b>Week 8</b>	Technologies for E-Business: Supply chain integration technologies (Web services and cloud)

E-Business

# Contents: Decision Support in E-Business

<b>Week 9</b>	Decision Support in E-Business: Web analytics
<b>Week 10</b>	Decision Support in E-Business: Customer behavior modeling
<b>Week 11</b>	Decision Support in E-Business: Auctions
<b>Week 12</b>	Decision Support in E-Business: Recommender systems

E-Business

Week 1: Lecture 1

# INTRODUCTION



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# Los Angeles Times 3rd Annual Investment Strategies Conference, May 22, 1999

“ ... ..

First of all, let me start with a statement that much as we talk about Internet companies today, in five years' time there won't be any Internet companies. All companies will be Internet companies or they will be dead.

... ..”

*Dr Andy Grove  
Intel Chairman*

# What is Business

(Oxford English Dictionary)

1. a person's regular occupation or trade.
2. work to be done or matters to be attended to.
3. a person's concern.
4. **commercial activity.**
5. a commercial organization.
6. (informal) a difficult or problematic matter.
7. (the business) (informal) an excellent person or thing.
8. actions other than dialogue in a play.

# What is Business

Business is the social science of managing people to organize and maintain collective productivity toward accomplishing particular creative and productive goals, usually to generate revenue.

(<http://en.wikipedia.org/wiki/Business>)

A business (also known as an enterprise, a company, or a firm) is an organizational entity involved in the provision of goods and services to consumers. Every business requires some form of investment and enough customers to whom its output can be sold on a consistent basis in order to make a profit. Businesses can be privately owned, not-for-profit, or state-owned.

(<http://www.businessdictionary.com/definition/business.html>)

# What is Business

- A business is generally an organizational unit that has (that should have) a defined strategy and a manager with sales and profit responsibility.

David A. Aaker, Damien McLoughlin, Strategic Market Management: Global Perspectives

# What is the purpose of a business

- To generate revenue
- By delivering value to the customer
- And satisfying them

# Customer Delivered Value

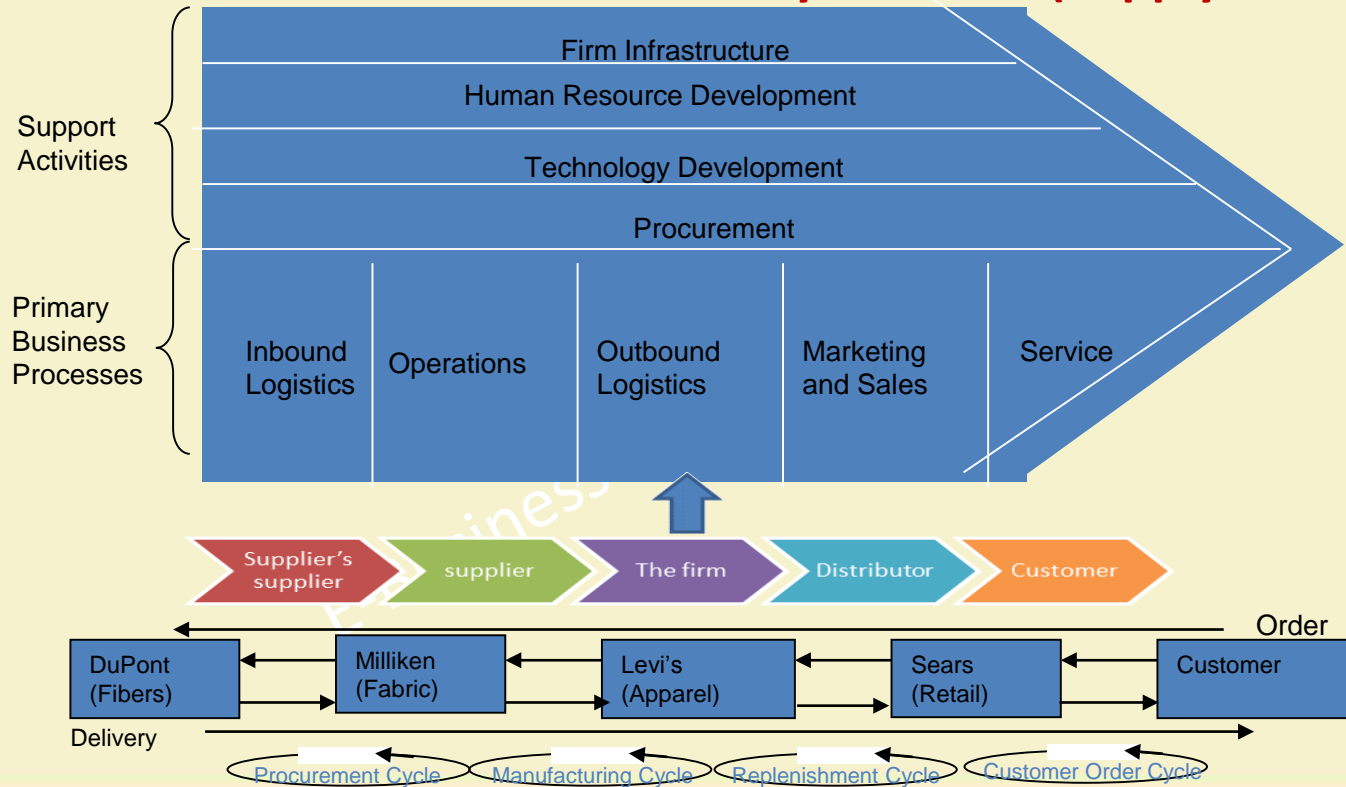
(Kotler)

- Customer delivered value is the difference between total customer value and total customer cost.
- Total customer value is the bundle of benefits customers expect from a given product or service.
- Total customer cost is the bundle of costs the customers expect to incur in evaluating, obtaining, using, and disposing of the product or service.

# Customer Satisfaction

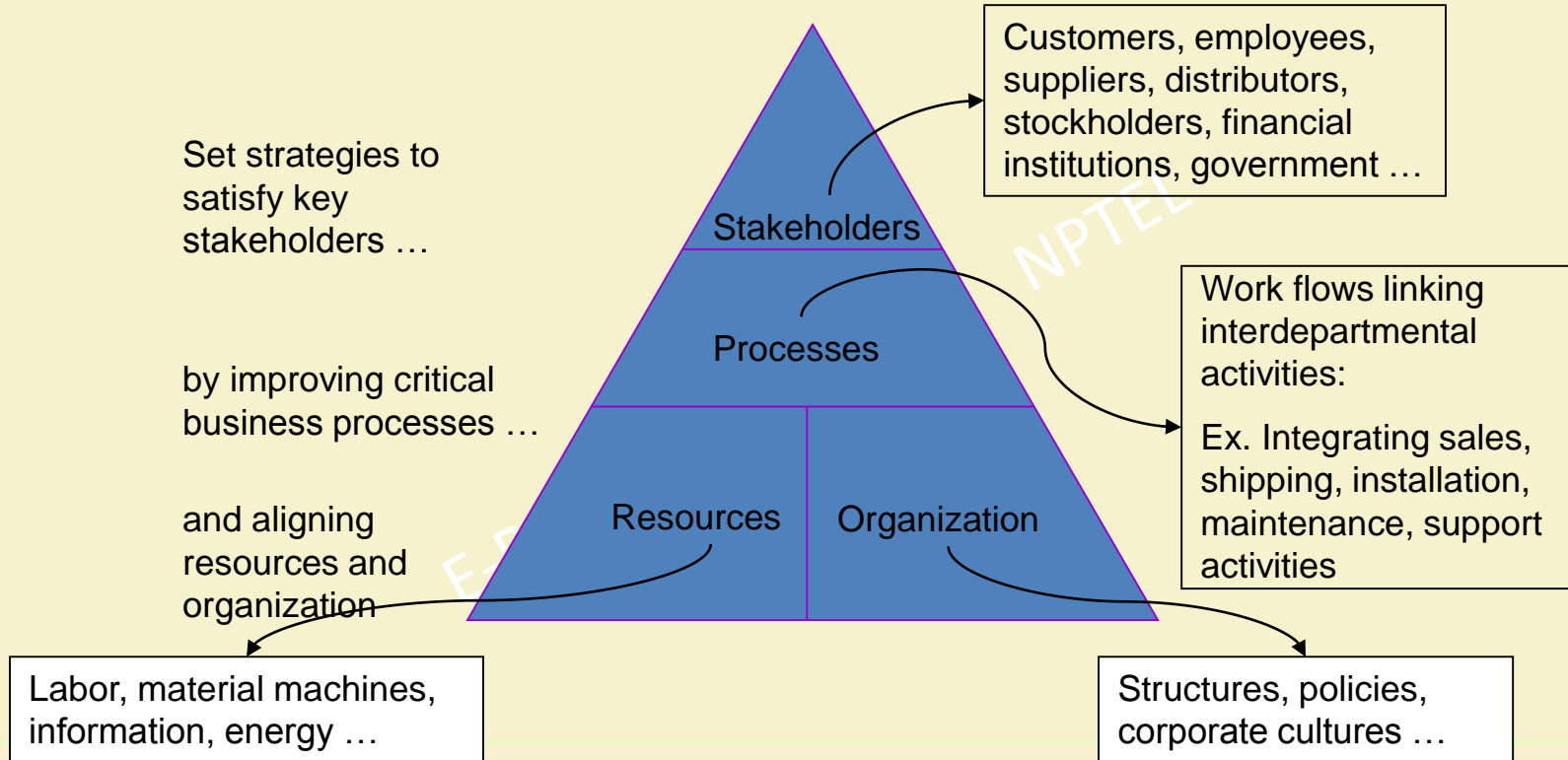
- Satisfaction is a person's feeling of pleasure or disappointment resulting from comparing a product's perceived performance (or outcome) in relation to his/her expectation
- Satisfied customers are loyal customers
- The key to generating high customer loyalty is to deliver high customer value.
- A company must develop a competitively superior value proposition and superior value-delivery system.

# Value chain and Value Delivery Network (Supply Chain)





# The nature of high performance business



# What is commerce

(Oxford English Dictionary)

- The activity of buying and selling, especially on a large scale

## Business Vs. Commerce

- All businesses involve some commercial activity.
- Commerce is a subset of business

# The evolution of the magic term 'e'



## 1990-onwards: E-Commerce and E-Business Systems

*ERP, Web based systems, Web services, cloud computing, Mobile Computing, RFID, GPS-GIS, Internet of things, Business Analytics, Big data*

## 1980-1990: Strategic and end user support systems

*End user computing systems, Expert systems, Strategic Information system for competitive advantage*

## 1970-1980: Decision Support

*Decision Support Systems: Interactive ad hoc support for managerial Decision making*

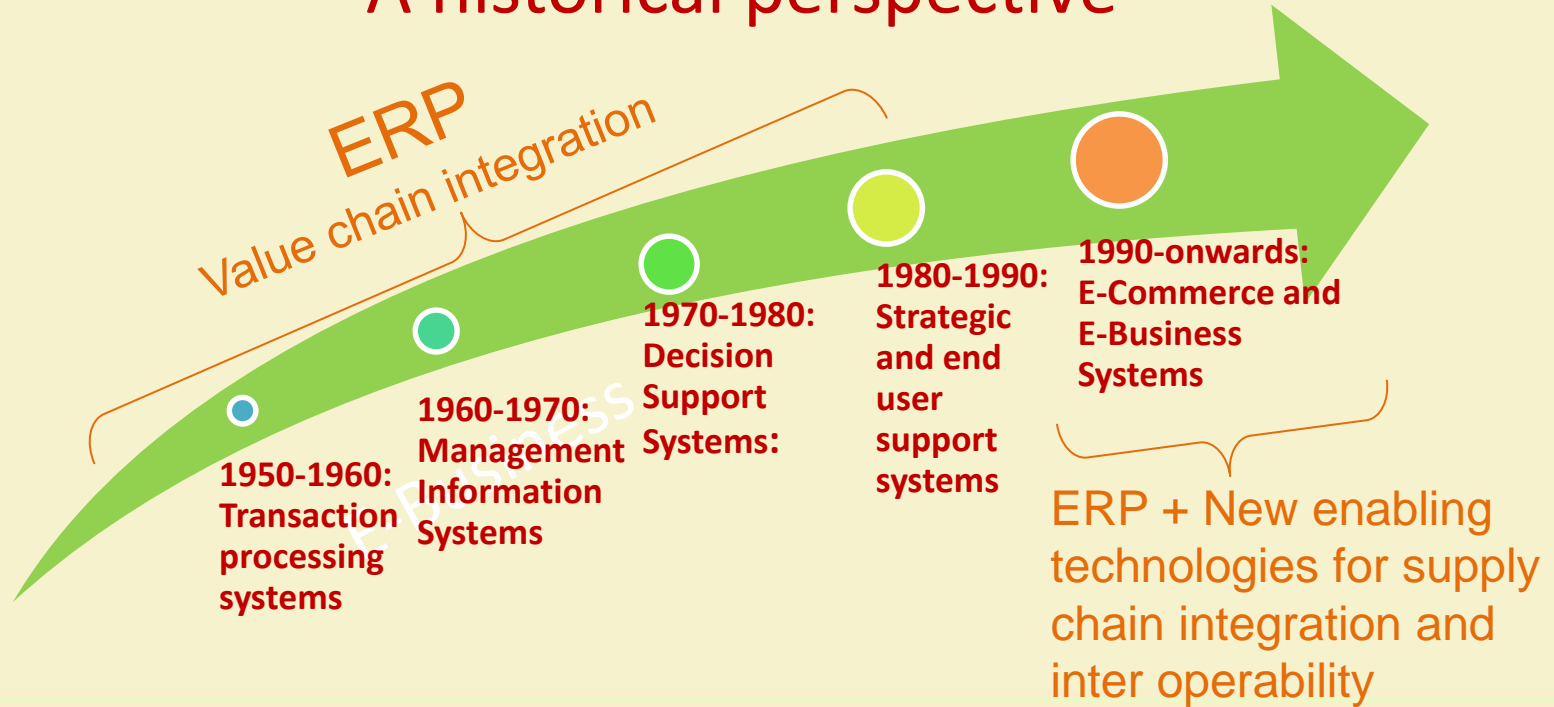
## 1960-1970: Management Reporting

*Management Information Systems: Management reports of pre-specified information to support decision making*

## 1950-1960: Data Processing

*Electronic Data Processing Systems: Transaction Processing, Record Keeping, and Traditional Accounting Practices*

# ICT for managing value chain: - A historical perspective



# E-Commerce

- Buying and selling of goods and services through digital communication network
- Use of the Internet and the Web
- May includes electronic payments systems

## E-Business (coined by Lou Gerstner, CEO of IBM)

- The term "e-business" was A superset of e-commerce activity
  - Not limited to buying and selling
- Includes other business activities such as
  - Servicing the customer
  - Collaborating with the business partners or other stakeholder
  - Supporting internal transactions
- In general conducting all business activities online.

# Defining E-Commerce & E-Business

- **Electronic commerce or e-commerce** consists of the buying, selling, marketing, and servicing of products or services over computer networks. The information technology industry might see it as an electronic business application aimed at commercial transactions.
- **Electronic Business**, or "e-business", may be defined broadly as any business process that relies on an automated information system. Today, this is mostly done with Web-based technologies.
- **E-business is more than just e-commerce.** It involves business processes spanning the entire value chain:
  - electronic purchasing and supply chain management,
  - processing orders electronically,
  - handling customer service,
  - cooperating with business partners.

# Books

- **Management Information Systems: Managing the Digital Firm, Laudon, K.C., and Laudon, J.P., Pearson**
- **Scaling for E-Business: Technologies, Models, Performance, and Capacity Planning, Menasce & Almeida, PHI**
- **eBusiness & eCommerce – Managing the Digital Value Chain, Meier, Andreas, and Stormer, Henrik, Springer**
- **Some reference books, Internet Resources, and Research Papers**

Week 1: Lecture 2

## **TYPES OF E-BUSINESS TRANSACTIONS**



# Types of e-Business transactions

<div>From \ To</div>	Customer/ Consumer	Business	Government
Customer/ Consumer	C2C	C2B	C2G
Business	B2C	B2B	B2G
Government	G2C	G2B	G2G

# Example:

- C2C :
  - www.ebay.com
  - Hosted by intermediary
  - Payment and security issues
- C2B :
  - Customer reviews
  - Amazon.com
  - Hosted by intermediary/by the business
- B2C :
  - Dell.com
  - Hosted by intermediary/by the business
- B2B
  - Metaljunction.com
  - Hosted by intermediary/by the business
  - Automation of business processes

# C2C: The case of e-Bay

eBay  
Online shopping company



ebay



ebay.in

eBay Inc. is a multinational e-commerce corporation, facilitating online consumer-to-consumer and business-to-consumer sales. It is headquartered in San Jose, California. [Wikipedia](#)

**Customer service:** 1800 209 3229

**Stock price:** [EBAY](#) (NASDAQ)  
US\$ 35.22 +0.40 (+1.15%)  
25 May, 4:00 PM GMT-4 - Disclaimer

**CEO:** [Devin Wenig](#) (20 Jul 2015—)

**Founder:** [Pierre Omidyar](#)

**Founded:** 3 September 1995, [San Jose, California, United States](#)

**Headquarters:** [San Jose, California, United States](#)

**Subsidiaries:** [StubHub](#), [GittiGidiyor](#), [Auction Co.](#), [Half.com](#), [more](#)

**Did you know:** EBay is the world's eighth-largest internet company by revenue. [wikipedia.org](#)



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**Rs. 576.00**

12 bids

+Rs. 50.00 shipping

9h left (Today 17:47)

5 Photos

# B2C: The case of Dell

Dell

Computer company



Dell Inc. is a multinational computer technology company based in Round Rock, Texas and, along with Dell EMC, is a subsidiary of Dell Technologies, one of the largest technology companies in the world with 138,000 employees. [Wikipedia](#)

**Customer service:** 1800 425 2067

**Technical support:** 1800 425 8045

**CEO:** Michael S. Dell (31 Jan 2007–)

**Headquarters:** Round Rock, Texas, United States

**Founder:** Michael S. Dell

**Founded:** 1 February 1984, Austin, Texas, United States


**Subsidiaries:** Alienware, EqualLogic, Mozy, Dell A.S., more





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www.dell.com/in/p/deals/laptop-deals?ST=dell&dc=ST&cid=288121&lid=5518789&acd=1059922518623414226&ven1=s8TopRQcl&ven2=e

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 <b>7th Generation Laptops</b> Starting at Rs.41,790.00 <sup>1</sup>	 <b>NEW 2-in-1 PCs</b> Starting at Rs.43,690.00 <sup>1</sup>	 <b>Best Selling Laptops</b> Starting at Rs.31,790.00 <sup>1</sup>	 <b>Best Selling Desktops</b> Starting at Rs.25,190.00 <sup>1</sup>	 <b>Premium Series Offer</b> Starting at Rs.61,190.00 <sup>1</sup>	 <b>Popular Gaming Deals</b> Starting at Rs.76,490.00 <sup>1</sup>
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12 Deals Sort by Price: Low to High

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### Hot Dell Deals



Lenovo ThinkPad T430

Number Of Bids: **14**

Listing #: **1846536**

Auction Ends: **May 27, 2017**  
**04:45:00 PM CDT**

**Current Bid**  
**\$250.00**

**Bid Now**



Apple MacBook Air (13-inch,  
Mid 2013) - A1466 (BTO/CTO)

Number Of Bids: **12**

Listing #: **1846538**

Auction Ends: **May 30, 2017**  
**12:15:00 PM CDT**

**Current Bid**  
**\$300.00**

**Bid Now**



Apple MacBook Air (13-inch,  
Mid 2013) - A1466 (BTO/CTO)

Number Of Bids: **12**

Listing #: **1850131**

Auction Ends: **May 27, 2017**  
**02:15:00 PM CDT**

**Current Bid**  
**\$330.00**

**Bid Now**

Closing Soon

? Sup



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# C2B: The case of Amazon

Amazon.com, Inc.

Electronic commerce  
company



amazon.in

Amazon.com, also called Amazon, is an American electronic commerce and cloud computing company that was founded on July 5, 1994, by Jeff Bezos and is based in Seattle, Washington. [Wikipedia](#)

**Customer service:** 1800 3000 9009

**Stock price:** [AMZN](#) (NASDAQ)

US\$ 993.38 +13.03 (+1.33%)

25 May, 4:00 PM GMT-4 - Disclaimer

**CEO:** [Jeff Bezos](#) (May 1996–)

**Headquarters:** [Seattle, Washington, United States](#)

**Founder:** [Jeff Bezos](#)

**Founded:** [5 July 1994, Seattle, Washington, United States](#)

**Subsidiaries:** [Audible Inc.](#), [Zappos](#), [Alexa Internet](#), [AbeBooks](#), more



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## Customer Reviews

★★★★★ 8

5.0 out of 5 stars ▾



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## Top Customer Reviews

★★★★★ **Excellent performance & n capacity approach for app layer**

By [Mike Tarrani](#) [HALL OF FAME](#) [TOP 50 REVIEWER](#) on July 20, 2002

Format: Paperback | [Verified Purchase](#)

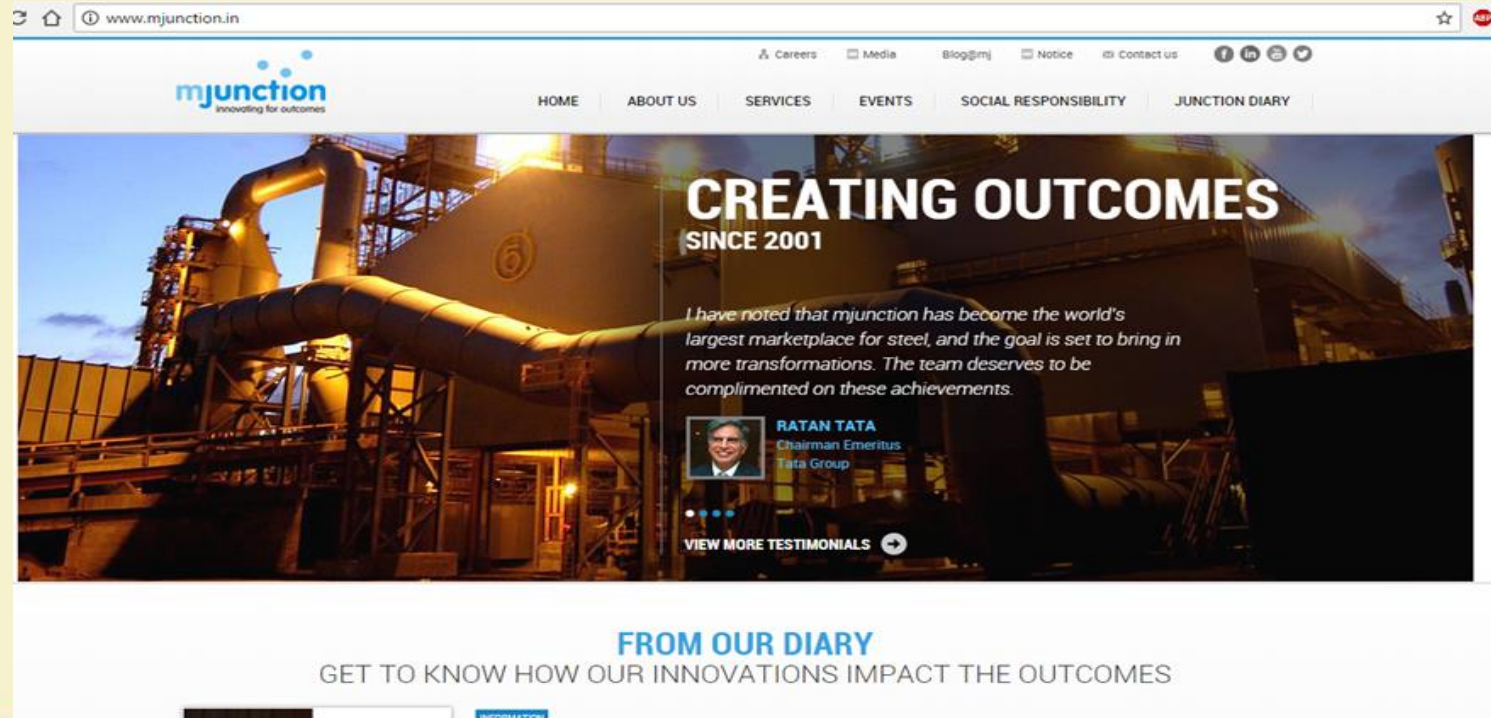
This is one of a series of books about performance and capacity metrics by the authors. Each of their books covers a specific environment (client/server, mainframes, web services), and each explains the theory, quantitative methods and practical approaches using common tools like Microsoft Excel.

This book's focus is on performance and capacity of applications in the e-commerce infrastructure, and like the other books by the authors, it covers every facet while explaining the what's and why's. More importantly, this book will not overwhelm readers who are rusty in math because the authors weave in refresher material as they go along.

What makes this book valuable is the blend of business and technical topics, particularly in Part I where business models are thoroughly discussed. I personally believe that this material is as important as the more technically focused material in subsequent chapters because it wakes up the technical reader as to why their job of developing scalable solutions is important by linking the technical aspects to business imperatives. Parts II (Evaluating E-Business Infrastructure and Services) and III (Capacity Planning for E-Business) are the heart of the technical matter, and the chapters systematically dissect each aspect of an e-commerce infrastructure from the application layer point of view. This is where quantitative methods are introduced and where the value of the spreadsheets on the CD ROM increase. Note that there are more up-to-date versions of these spreadsheets on the book's associated website, as well as errata for the book.

Practical considerations that blend the business and technical perspectives are presented in Part IV (Models of Specific E-Business Segments). This chapter consists of case studies that tie together all of the preceding material using real world examples.

# B2B: The case of Metaljunction



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ICRA Anti-dumping duties on steel products to create a conducive environment: ICRA...[More](#)

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**TODAY'S AUCTIONS**

**UPCOMING AUCTIONS**

**EARLIER AUCTIONS**

**Friday, 26 May 2017**

- 11:00:00 RASHTRIYA ISPAT NIGAM LIMITED TSSD VISAKHAPATNAM - MJ07
- 11:00:00 SAIL BSO CHENNAI BILLET AND ROUNDS - AS01
- 11:00:00 SAIL BSP FERROUS FA-10100287
- 11:00:00 SAIL RSP SSSY FA-34001160
- 11:00:00 TTSL EWASTE BATTERY AND MISC ITEM - VJ03
- 11:00:00 TATA STEEL EX CA BLUEMOON KOLKATA SHEET CUTTING AUCTION **REV - 01.30**
- 11:00:00 JSL OFA 425 and 441
- 11:30:00 TATA STEEL- FP- Ex JSR-TSPDL-GA-25.05.2017
- 11:30:00 TATA STEEL EX JAMSHEDPUR IRON AND STEEL SCRAP 06-80MM & 20-80MM AUCTION **REV - 01.10**
- 12:00:00 SAIL BSO HYDERABAD SSD MATERIALS -SSD01 **REV - 01.90**
- 12:00:00 SAIL BSO BHILAI LP-36 TMT BAR
- 12:00:00 SAIL BSO KANPUR OFA 19 CR COIL **REV - 01.10**
- 12:00:00 SAIL BSO MANDI OFA 002A RAIL



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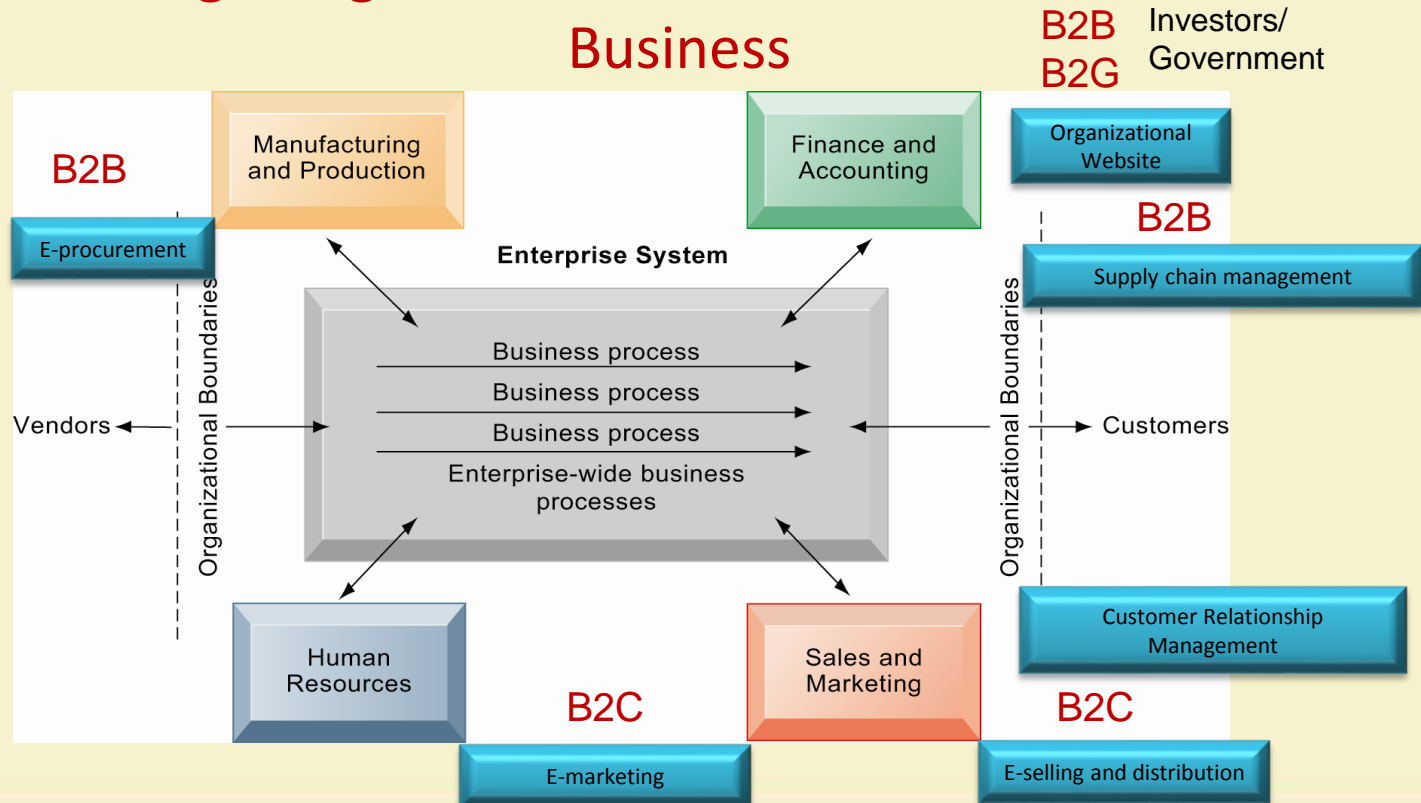


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# Examples:

- C2G: paying taxes, and applying for benefits
- G2C: Answering public queries, Asking for suggestion from citizens
- G2B: Registration, renewal of licenses
- B2G : Selling product to government buyers
- G2G : e-payment between government organizations

# Integrating Brick and Mortar Business with e-Business



# Advantages of Integrating Brick and Mortar Business with e-Business Operations

- Better availability of service
- Cost reduction in information processing
- Better timeliness of service
- Better access to customer market
- Initial cost of operations less expensive
- Operating costs of operations less expensive
- Better purchasing prices from suppliers
- Improved product development
- Improved scheduling
- Better supplier quality

Week 1: Lecture 3

# **BUSINESS MODELS ON THE WEB**



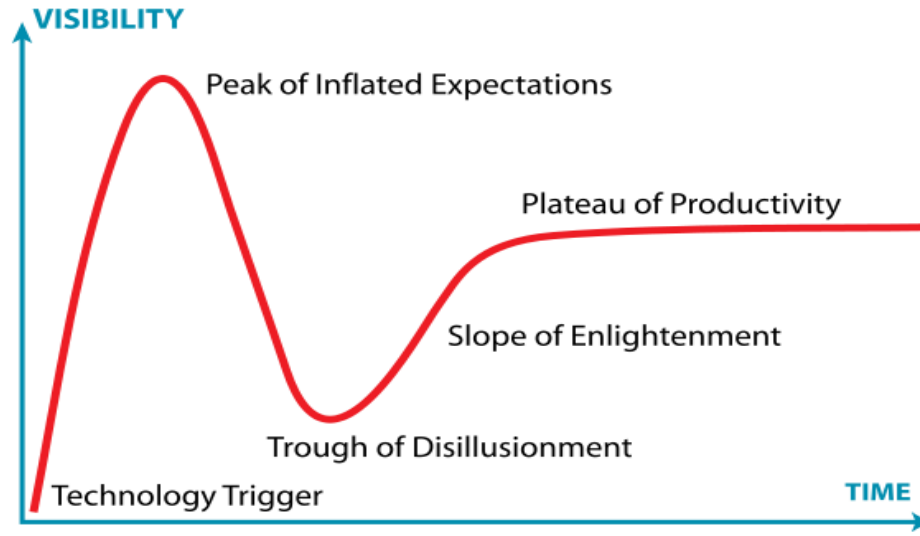
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# Gartner Hype Cycle

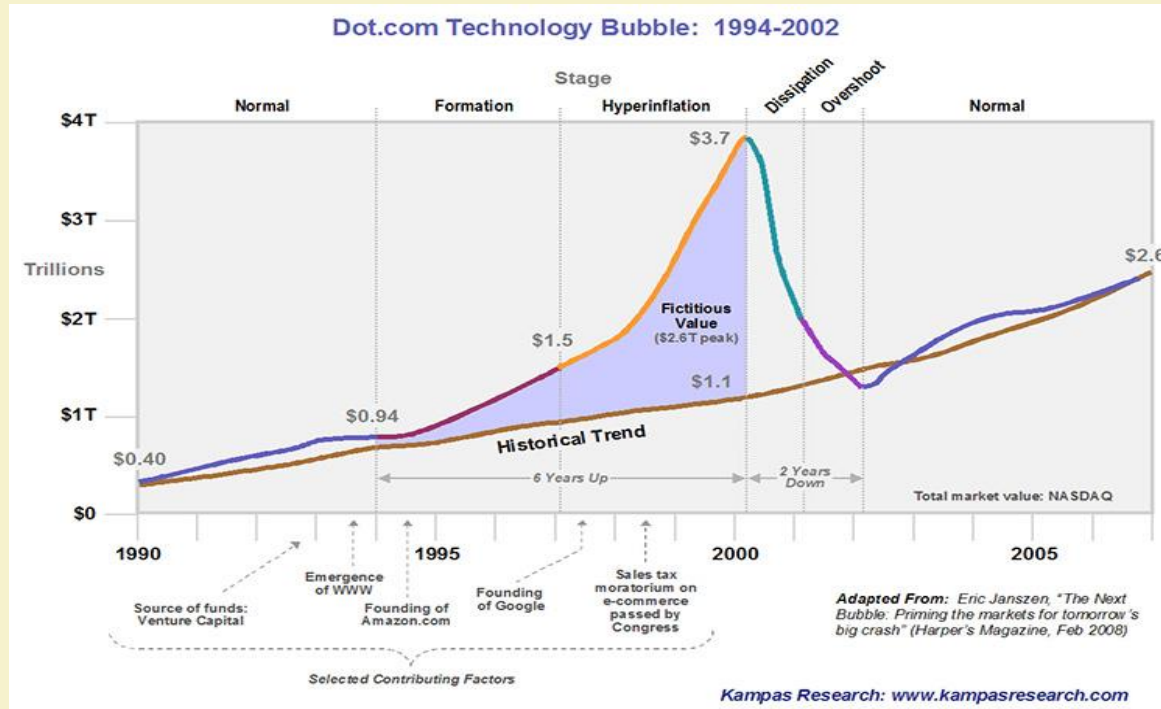


- Developed and used by Gartner group
- Represents the maturity, adoption and social application of specific technologies.

[https://en.wikipedia.org/wiki/Hype\\_cycle](https://en.wikipedia.org/wiki/Hype_cycle)



# Dot Com Boom and Bust

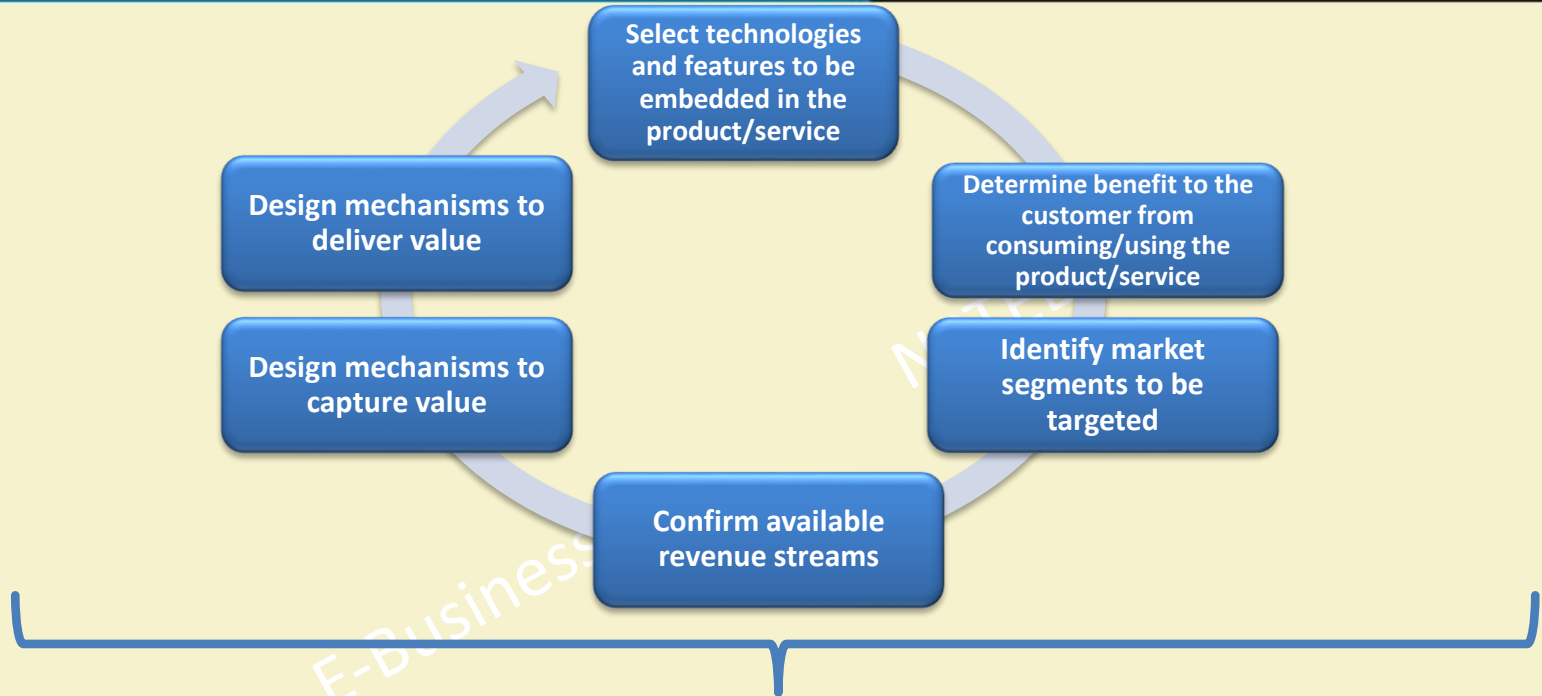


<http://www.kampasresearch.com/Bubbles.html>

# What is a business model

- A business model articulates the logic and provides data and other evidence that demonstrates how a business creates and delivers value to customers.
- It also outlines the architecture of revenues, costs, and profits associated with the business enterprise delivering that value.

Teece, D.J., 2010. Business models, business strategy and innovation. *Long range planning*, 43(2), pp.172-194.



**Create value for Customers, Entice payments, and Convert Payments to Profits**

# Business Models on the Web

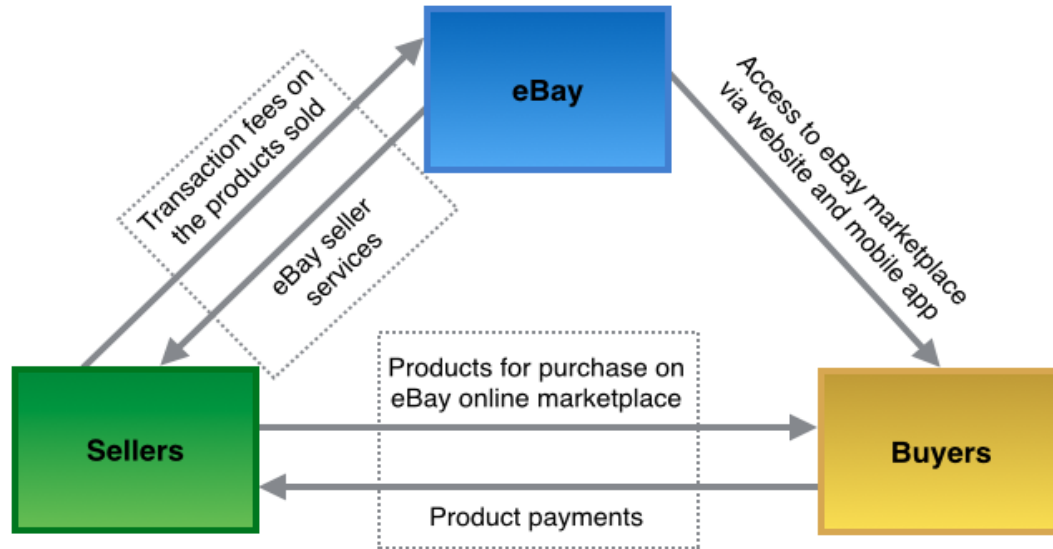
- Brokerage
- Advertising
- Infomediary
- Merchant
- Manufacturer (Direct)
- Affiliate
- Community
- Subscription
- Utility

<http://digitalenterprise.org/models/models.html>

# Brokerage Model

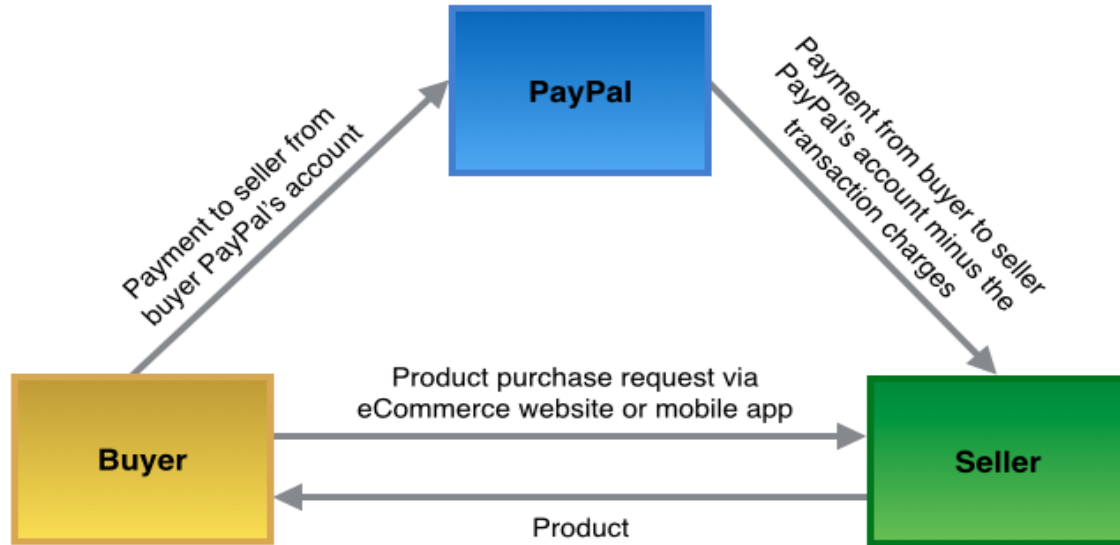
- Brokers are market-makers who bring buyers and sellers together and facilitate transactions.
- Exists in Business-to-business (B2B), business-to-consumer (B2C), consumer-to-consumer (C2C) markets.
- Usually a broker charges a fee or commission for each transaction it enables.
- Brokerage models include:
- Marketplace Exchange -- [Orbitz](#), [ChemConnect](#)
- Buy/Sell Fulfillment -- [CarsDirect](#), [Respond.com](#)]
- Demand Collection System -- [Priceline.com](#)
- Auction Broker -- [eBay](#)
- Transaction Broker -- [PayPal](#), [Escrow.com](#)
- Distributor – Catalogue services
- Search Agent – Price bots and shop bots
- Virtual Marketplace -- [Amazon.com](#)]

# The eBay Model



[www.revenuesandprofits.com](http://www.revenuesandprofits.com)

# The PayPal model



[www.revenuesandprofits.com](http://www.revenuesandprofits.com)

# Advertising Model

- The web advertising model is an extension of the traditional media broadcast model.
- web site, provides content and services mixed with advertising messages in the form of banner ads.
- The banner ads may be the major or sole source of revenue for the broadcaster.
- The broadcaster may be a content creator or a distributor of content created elsewhere.
- The advertising model works best when the volume of viewer traffic is large or highly specialized.
- **Examples:**
- **Portal** -- [Yahoo!](#)
- **Classifieds** -- [Monster.com](#), [Craigslist](#), [Match.com](#)
- **Query-based Paid Placement** – [Google](#)



## National

Style IANS India Private Limited

**Anger is good and other lessons from Mahatma Gandhi to his grandson**

Father of the Nation Mahatma Gandhi is widely thought to have been a calm and composed personality but this highly anecdotal book by one of his grandsons suggests otherwise. Gandhi, the author says, lost his cool all the time and believed that "anger is good". The much revered leader.



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**Of food, travels, history and infidelity**

There is nothing more varied that the IANS bookstore could offer to its readers this weekend. When Kaumudi Marathe moved to the US from India, she never thought she'd be a famous chef, food writer and unofficial spokesperson for Indian cuisine abroad.



News IANS India Private Limited

**Gal Gadot nearly quit acting before 'Wonder Woman'**

Los Angeles, May 26 (IANS) Actress Gal Gadot was on the verge of quitting acting before auditioning for her role in "Batman v Superman: Dawn of Justice". The 32-year-old actress opened up about her past struggle in Hollywood at host Jimmy Fallon's show "The Tonight Show Starring Jimmy".



Style IANS India Private Limited

**'Sachin': You don't have to be a cricket fan to love the Sachin bio-pic(Movie Review, Rating: \*\*\*\* 1/2)**

Rating: \*\*\*\* 1/2 There is something about Sachin Tendulkar, something so correct and so innocent you want him to win in life even when you know he is no more the 'God' of the cricket field. The rousing farewell speech that Sachin gives at the end of this astutely emotional journey into the



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Experience ▼

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<input type="checkbox"/> Inspiration Manp...	1120
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<input type="checkbox"/> Rivera Manpower ...	811
<input type="checkbox"/> Ekhard HR Services	1608
<input type="checkbox"/> Asap Info Systems	899
<input type="checkbox"/> Black & White Bu...	1126
<input type="checkbox"/> Gratitude India ...	1306
<input type="checkbox"/> White Horse Manp...	1064

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Relevance

Freshness

#### Immediate Job Opening for C++ Developer with Telecom Domain@ Aricent...

**Srishti i2i Biz Solutions Private Limited**

Keyskills: "Telecom","Telecom Area","LINUX OS",C,C++,"C++ development","C++ Developi...

📍 Bengaluru / Bangalore

📅 5-8 years

Apply

📄 Share ↔ Posted : 26th May 2017

#### Senior UI Developer

**Reflections india**

Keyskills: HTML,HTML5,CSS,CSS3,Javascript,jQuery

Summary: Scketch is looking for an experienced Senior Web Developer to join our Bang..

📍 Bengaluru / Bangalore

Apply



kashmiri shawl



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Women's Blue ...  
₹ 519  
Amazon India



Weavers Villa  
Women's ...  
₹ 760  
Amazon India



Weavers Villa -  
Women's ...  
₹ 450  
Amazon India



Iliv Burly Wood  
Kashmiri Shawl  
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<https://www.kashmirvilla.com/women/kashmiri-shawls>

Online store for buying Kashmiri Shawls in India. We have wide range of quality Kashmiri Kashmiri Shawls at reasonable price.

Pashmina Shawls · Sozni Work Shawls · Aari Work Shawls · Kani Work Shawls

Pashmina Online - Buy Shawl, Kashmiri Shawl, Woolen Shawls Online

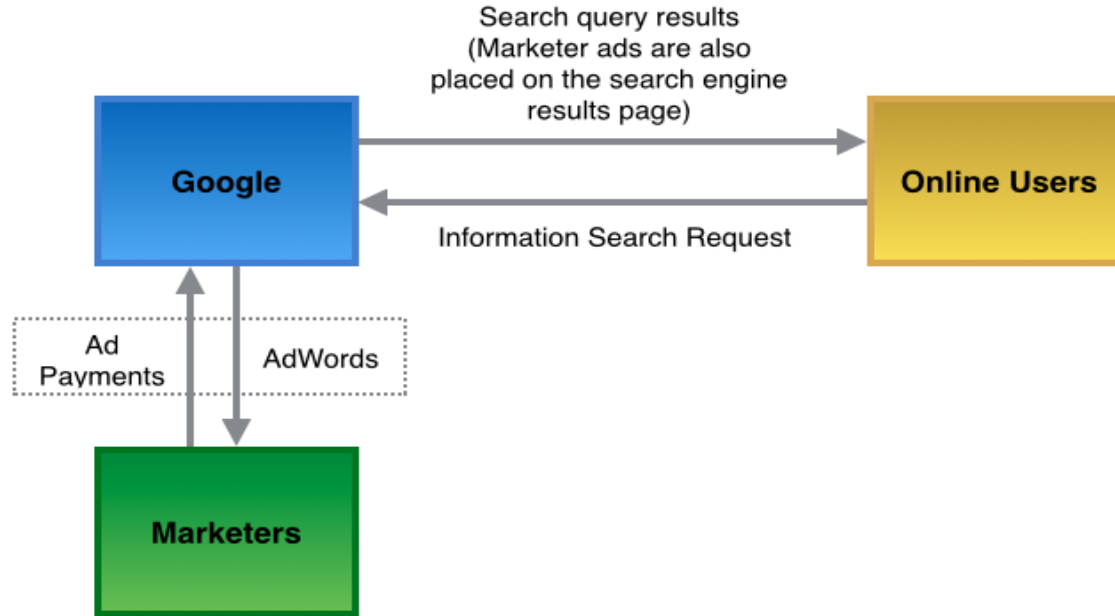


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# Google's advertisement model



[www.revenuesandprofits.com](http://www.revenuesandprofits.com)

# Infomediary Model

- Some firms function as infomediaries (information intermediaries) assisting buyers and/or sellers understand a given market.
- Target marketing campaigns.
- Comparative Purchasing
- Advertising Networks -- [DoubleClick](#)
- Audience Measurement Services -- [Nielsen/Netratings](#)

Watch the Google Marketing Next keynote

WATCH NOW

DoubleClick by Google

Insights Success

# Universal Pictures makes movie ads relevant with DoubleClick

Case Study | Success Stories | Measurement (Digital Marketing) | Programmatic |  
DoubleClick Bid Manager





## The Goals

- Raise brand awareness of Universal Pictures' latest films
- Promote new releases such as The Huntsman and Jason Bourne
- Leverage ad-centric data to profile and target audience passions
- Stimulate pre-booking sales

## The Approach

- Unified media buying across all film releases into single platform
- Consolidated marketing assets including online video, YouTube TrueView, Google Preferred, YouTube Mastheads and video banners
- Produced data-driven creatives mixing 1st, 2nd and 3rd party data
- Completed media buys using both open auction and Programmatic Guaranteed

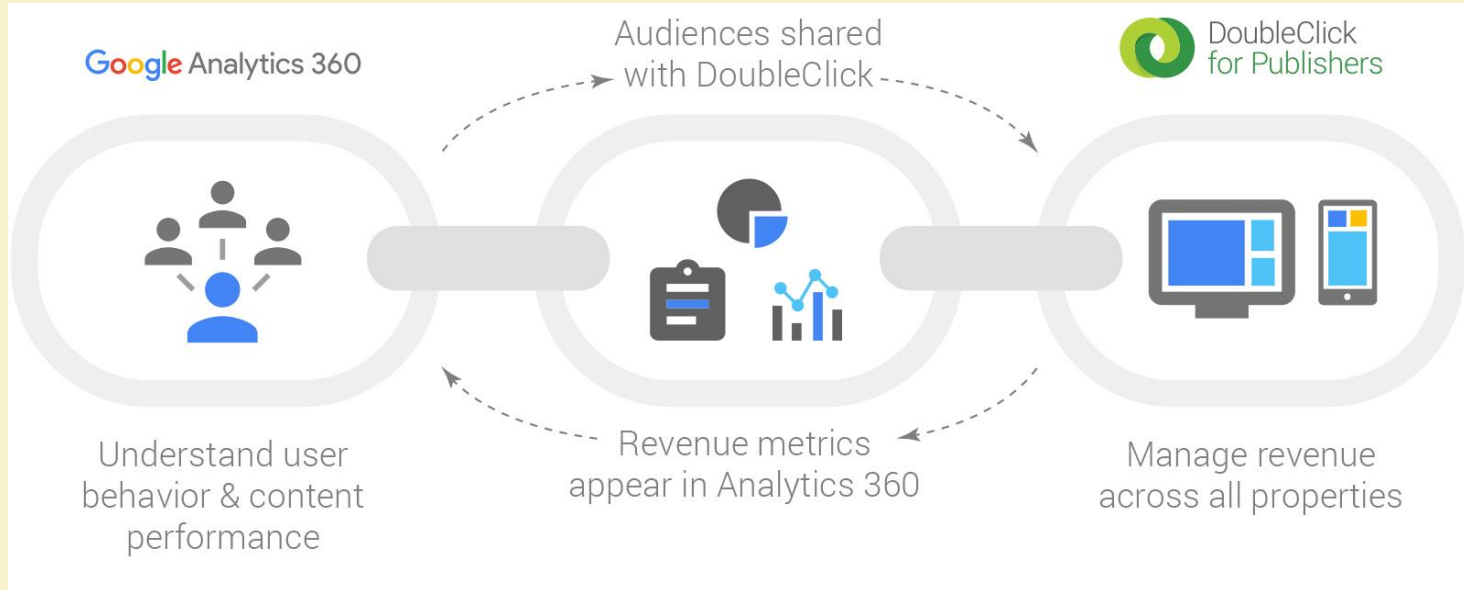
## The Results

- New media buying approach enabled brand to meet and exceed goals
- 68%\* average view-through rate
- 2.5\* average frequency
- 69%\* average viewability

Published May 2017









## NEWSWIRE

MEDIA AND ENTERTAINMENT | 05-25-2017

### OVER 92% OF ALL ADULT VIEWING IN THE U.S. IS DONE ON THE TV SCREEN

A new analysis of insights from our fourth-quarter 2016 Comparable Metrics Report found that over 92% of all viewing among U.S. adults (18+) happens on the TV screen.

CONSUMER | 05-25-2017

### CRAFT BEER DRINKERS OFTEN JUDGE A BEER BY ITS PACKAGING

In the crowded craft beer space, brewers need every edge they can get when they want their products to land in consumers' baskets. That's where product packaging can help, especially when you consider that 70% of beer purchase decisions are made at the shelf.

## CATEGORY

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[Global >>](#)

[Innovation >>](#)

[Media and Entertainment >>](#)

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[Online >>](#)

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[Case Studies >>](#)

[Newswire >>](#)



Week 1: Lecture 4

# **BUSINESS MODELS ON THE WEB**

# Merchant Model

- Wholesalers and retailers of goods and services on the Web
- Sales may be made based on list prices or through auction.
- Virtual Merchant -- [Amazon.com](https://www.amazon.com)
- Catalog Merchant -- [Lands' End](https://www.landsend.com)
- Click and Mortar -- [Barnes & Noble](https://www.barnesandnoble.com)
- Bit Vendor -- [Apple iTunes Music Store](https://www.apple.com/itunes)

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for all ages.

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# Manufacturer (Direct) Model

- Reaching the buyers directly and thereby compress the distribution channel.
- The manufacturer model can be based on efficiency, improved customer service, and a better understanding of customer preferences.
- Ex.: [Dell Computer](#)

# Affiliate Model

- The affiliates provide purchase-point click-through to the merchant.
- It is a pay-for-performance model -- if an affiliate does not generate sales, it represents no cost to the merchant.
- Variations include, banner exchange, pay-per-click, and revenue sharing programs.
- [Barnes & Noble](#), [Amazon.com](#) with [DoubleClick](#)

# Community Model

- Revenue can be based on the sale of ancillary products and services or voluntary contributions; or revenue may be tied to contextual advertising and subscriptions for premium services.
- **Example:**
- **Open Source** -- software developed voluntarily by a global community of programmers who share code openly. Instead of licensing code for a fee, open source relies on revenue generated from related services like systems integration, product support, tutorials and user documentation. [Red Hat]
- **Public Broadcasting** -- user contributor model used by not-for-profit radio and television broadcasting extended to the web. The model is based on the creation of a community of users who support the site through voluntary donations. [The Classical Station ]
- **Social Networking Services** -- sites that provide individuals with the ability to connect to other individuals along a defined common interest (professional, hobby etc.). Social networking services can provide opportunities for contextual advertising and subscriptions for premium services. [LinkedIn]

# Subscription Model

- Users are charged a periodic -- daily, monthly or annual -- fee to subscribe to a service.
- Example:
- **Content Services** -- provide text, audio, or video content to users who subscribe for a fee to gain access to the service. [[Listen.com](#), [Netflix](#)]
- **Person-to-Person Networking Services** -- are conduits for the distribution of user-submitted information, such as individuals searching for former schoolmates. [[Classmates](#)]
- **Trust Services** -- come in the form of membership associations that abide by an explicit code of conduct, and in which members pay a subscription fee. [[Truste](#)]
- **Internet Services Providers** -- offer network connectivity and related services on a monthly subscription. [[America Online](#)]



# Utility Model

- The utility or "on-demand" model is based on metering usage, or a "pay as you go" approach. Unlike subscriber services, metered services are based on actual usage rates.
- **Metered Usage** -- measures and bills users based on actual usage of a service. Internet service providers (ISPs) in some parts of the world operate as utilities, charging customers for connection minutes, as opposed to the subscriber model.
- **Metered Subscriptions** -- allows subscribers to purchase access to content in metered portions (e.g., numbers of pages viewed). [[Slashdot](#)]

# Instruction for developing the case

- Background and history of the case company
- Focus of the case (which business functionality you like to focus on)
  - Procurement, selling, marketing, HR, operations, customer relationship management, supplier management, supply chain management
- Nature of the underlying information system
- Business process reengineering due to adoption of E-Business practices
- Perceived benefits (revenue models etc.)
- Failure or success stories
- Your view and analysis
- Minimum 20 References (research papers, company website, authentic web resources)
- Maximum 10 PPT, audio, video inclusion if available

Week 1: Lecture 5

# **INNOVATIVE E-BUSINESS MODELS FOR BRICK AND MORTAR FIRMS**

# E-Procurement at Tata Steel

E-Business



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# The Organization

- Tata Steel contributes over 13% of the total steel production in India
- Total turnover in fiscal year 2002-2003 : 19.6 billion USD
- Company's profit in the same year was 2.2 billion USD.

# Tata Steel's journey to e-Procurement

1999-2000

- Auto Bill Payment through IBM
- Auto-indenting for fast and medium moving items
- Electronic routing and approval
- Decision Support System for Stores

2000-2001

- Beginning of ERP(SAP) implementation
- Strategic analysis of e-procurement solution options
- Parallel development of e-Procurement solutions
- Lotus Notes for e-Mail communication with suppliers
- Supply Chain, MRO home page launched in the intranet

# Tata Steel's journey to e-Procurement

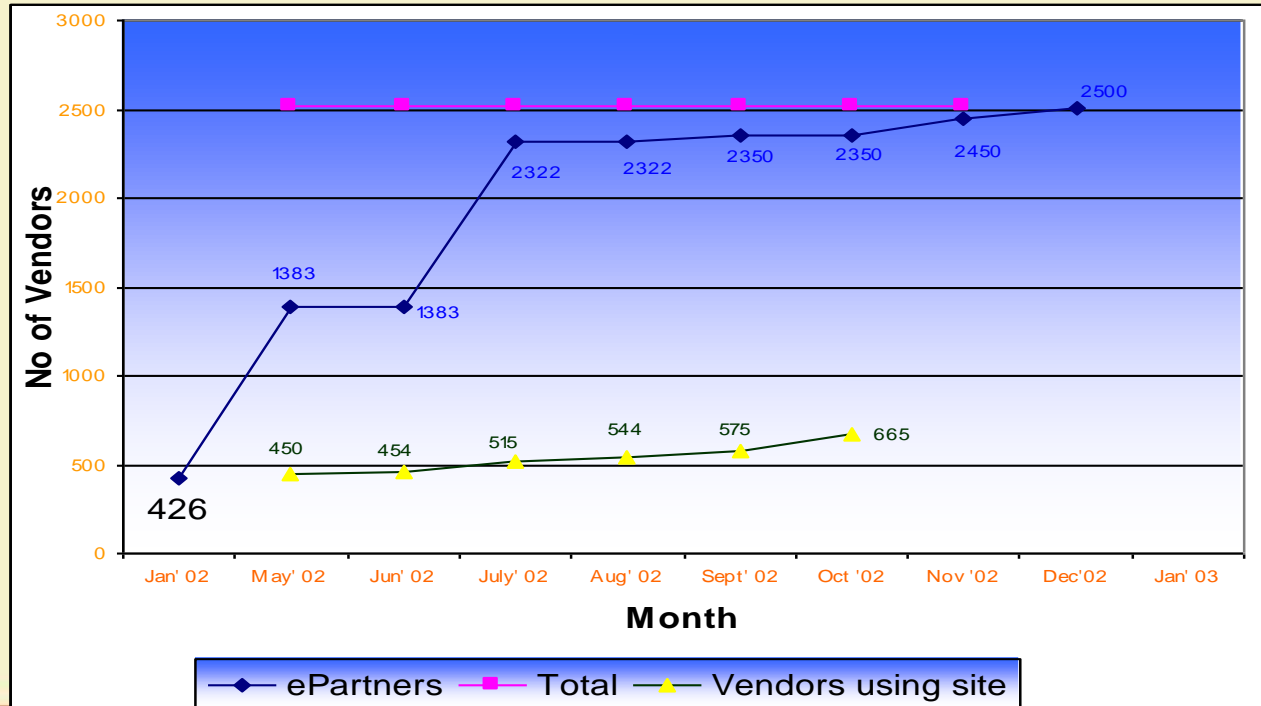
2001-2002

- Implementation of SAP-MM module (i.e. stabilization completed)
- Implementation of e- Procurement in MRO(P)
- Linkage of e-Procurement with SAP
- Reverse Auction
- Import orders to TLL thru e route
- Use of intranet for receiving customer complaints

2002-2003

- On line “ Code of Conduct” through e-Procurement site
- Supplier Satisfaction Survey through e-Procurement site
- Online bidding for price discovery

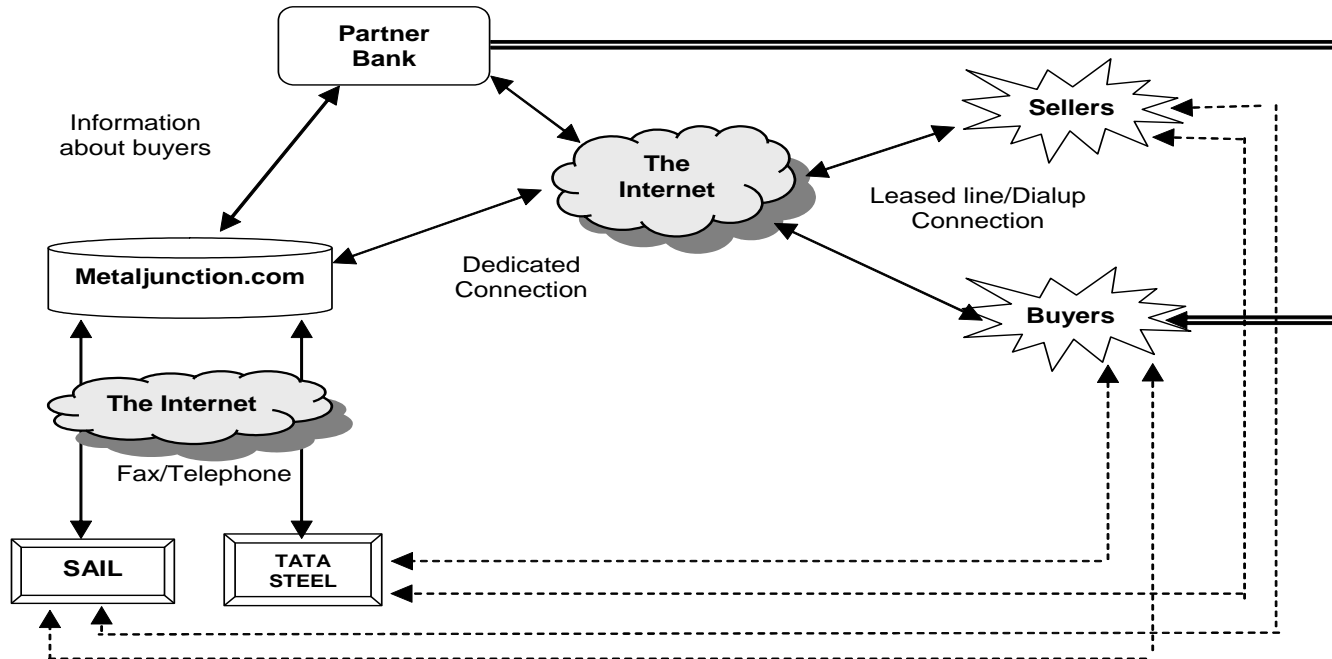
# Adoption of e-Procurement solution (s) by the suppliers





# Different e-Procurement solutions

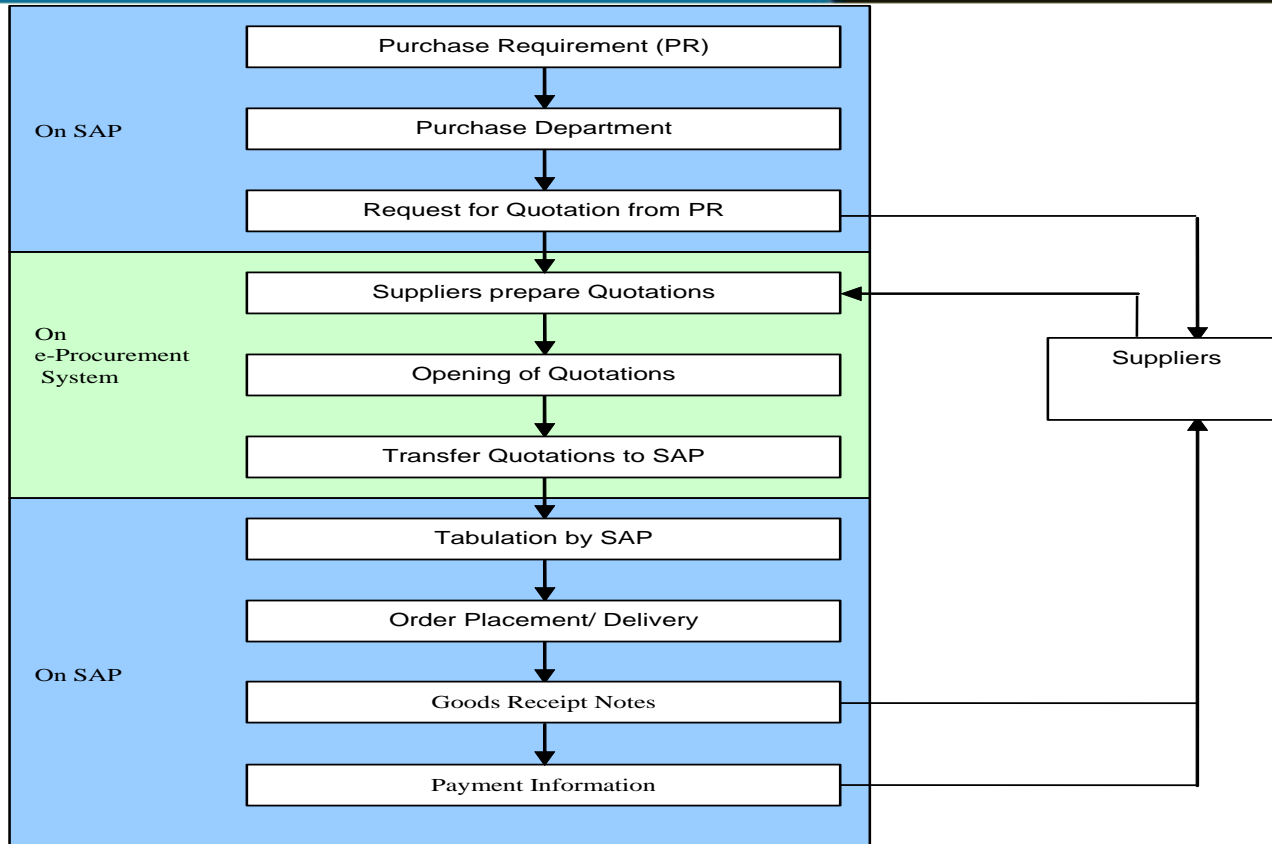
- Metaljunction.com – an e-market for steel industry sponsored by a consortium of SAIL and Tata Steel
- An internal e-Bidding solution
- E-negotiation solution
- Online Stock Information System for VMI suppliers



Information Flow

Inventory and Finance Flow

Credit Flow



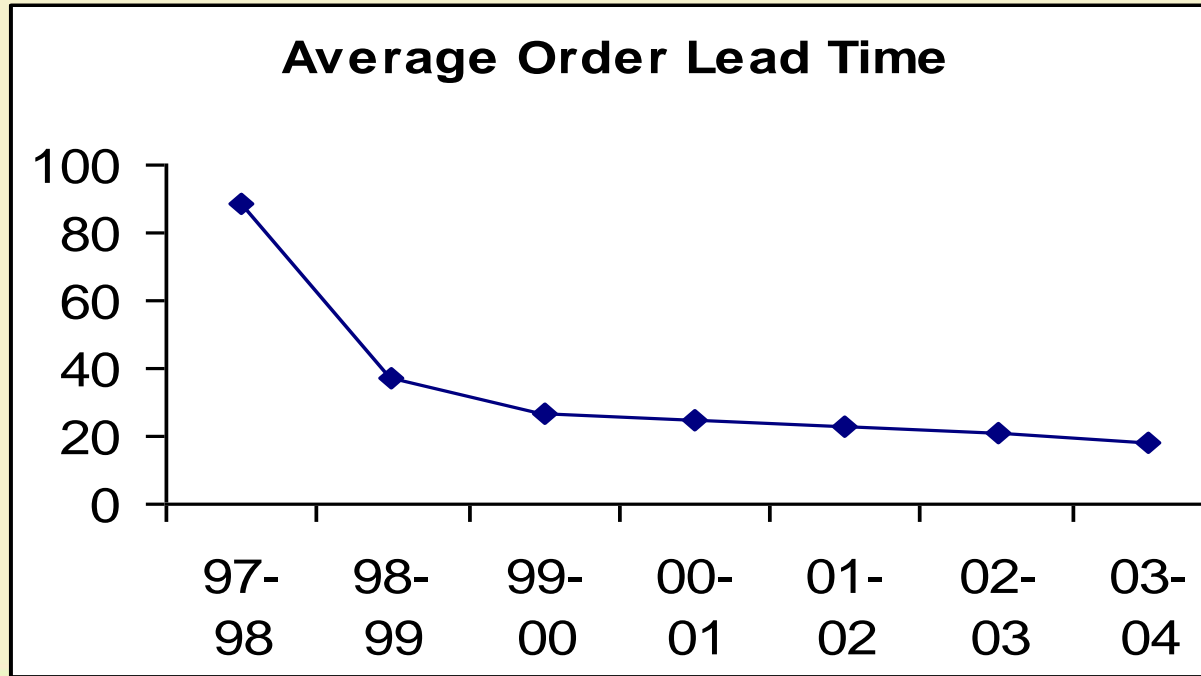
# Portfolio for e-Procurement solution

Buy Volume	High	Reverse Auction	Partnership with suppliers E-negotiation
	Low	Business Process Outsourcing	Metaljunction.com (When there is a need for Scanning the entire market)
		Low	High

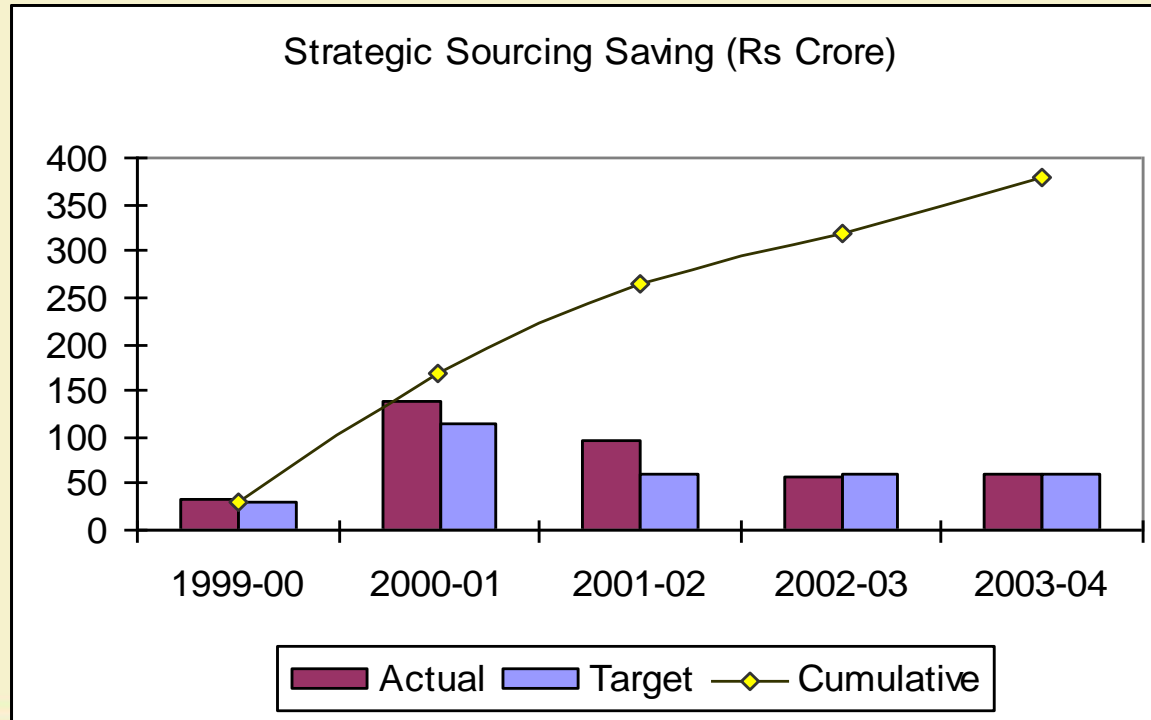
Critical to cost or quality

# Benefits from the e-Procurement Solutions

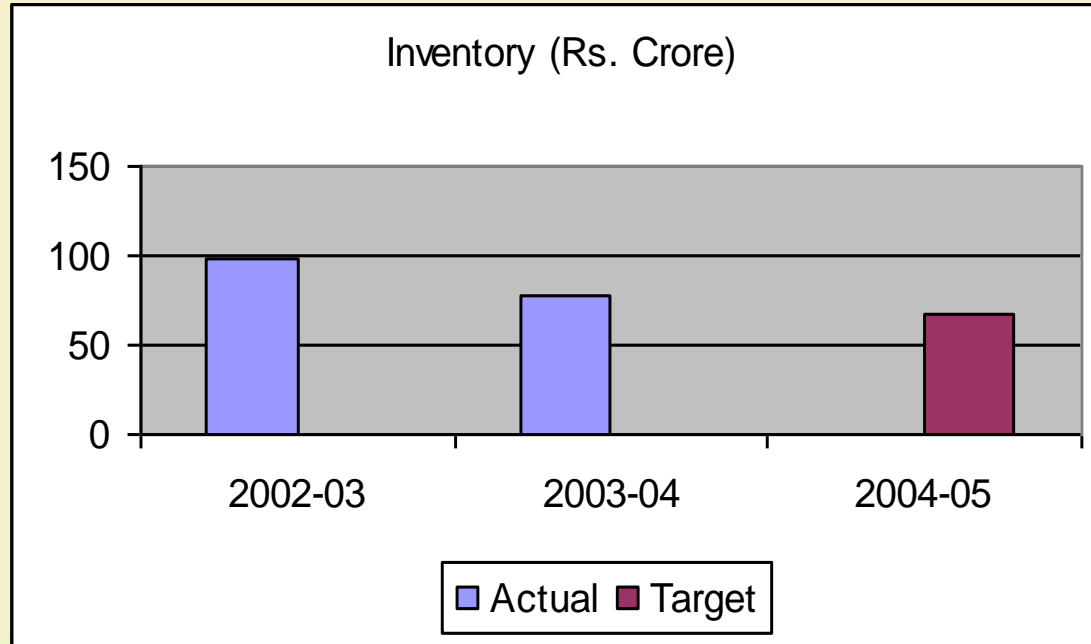
# Actual Reduction in Order lead time



# Savings in sourcing



# Inventory reduction in last three years





# ITC's eChoupal Initiative

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# The Beginning

- This initiative was implemented by ITC Limited's International Business Division (IBD) under the leadership of Chief Executive S. Sivakumar. It began with the aim of deploying technology to re-engineer procurement of soybeans and its derivatives such that it serves as a highly profitable distribution and marketing channel.
- Management Principles adopted
  - i. **Focusing on Re-engineering, Not Reconstructing**
  - ii. **Addressing the Whole, Not Just a Part**

# The eChoupal model

- ITC supplied a computer kit to each village with the following components:
  - A PC with a Windows/Intel platform, multimedia kit, and connectivity interface
  - Connection lines, either telephone (with bit rate between 28.8 and 36 kbps) or, more commonly, VSAT
  - A power supply consisting of UPS and solar-powered battery backup
  - A dot-matrix printer
- The total setup cost to ITC was Rs. 170,000 (\$3,762) per choupal. Another Rs. 100,000 (\$2,213) was spent on people, travel, communication, software, and training.
- Farmers were able to access the World Wide Web through a site dedicated specifically to them-[www.soyachoupal.com](http://www.soyachoupal.com)
- The company believed it would be able to recover the cost and make a profit within three years of the initial eChoupal rollout.

# www.soyachoupal.com

- This website was updated by the ITC Bhopal office. The data uplink (that provided the source information for the site), however, took place in Bangalore, home of ITC Infotech India Ltd.
- The site contained much useful information that was previously unavailable to farmers in Madhya Pradesh.
- The site opened up by welcoming farmers into the “community” of the eChoupal.
- On the left side of the screen, there were nine links to the areas of key information that comprised the eChoupal:
- Weather, Best Practices, Crop Information, Market Information, FAQs, News, Feedback, and information about ITC.
- The feature set had been developed progressively with full involvement of the farmers using the system

# Scope and Coverage of the Portal

- i. Weather information
- ii. Farming practices
- iii. Market information -Provides market information under the following heads:
  - ❑ Domestic market prices
  - ❑ International market prices - of selected competing countries
  - ❑ Global trends — commentary by the expert panel
- iv. Agri inputs - This section gives details of India's best Agri input manufacturers/ vendors.

- v. Alerts -The purpose of this is to provide the farmers with region specific alerts
- vi. Soil and Water Testing -This section will explain to the farmers the significance of soil/water testing and also ways to collect samples. The test results can be viewed online in this section.
- vii. News -The purpose is to provide the farmers with information on the latest happenings in the agri industry.

# Kiosk establishment guidelines

## Kiosk Establishment

- i. Mapping of Internet supportive telephone exchanges
- ii. Selection of agri-active village
- iii. Identification of a progressive farmer with leadership skills in the selected village (“Prathinidhi”) in whose premises/ supervision the Kiosk shall be established

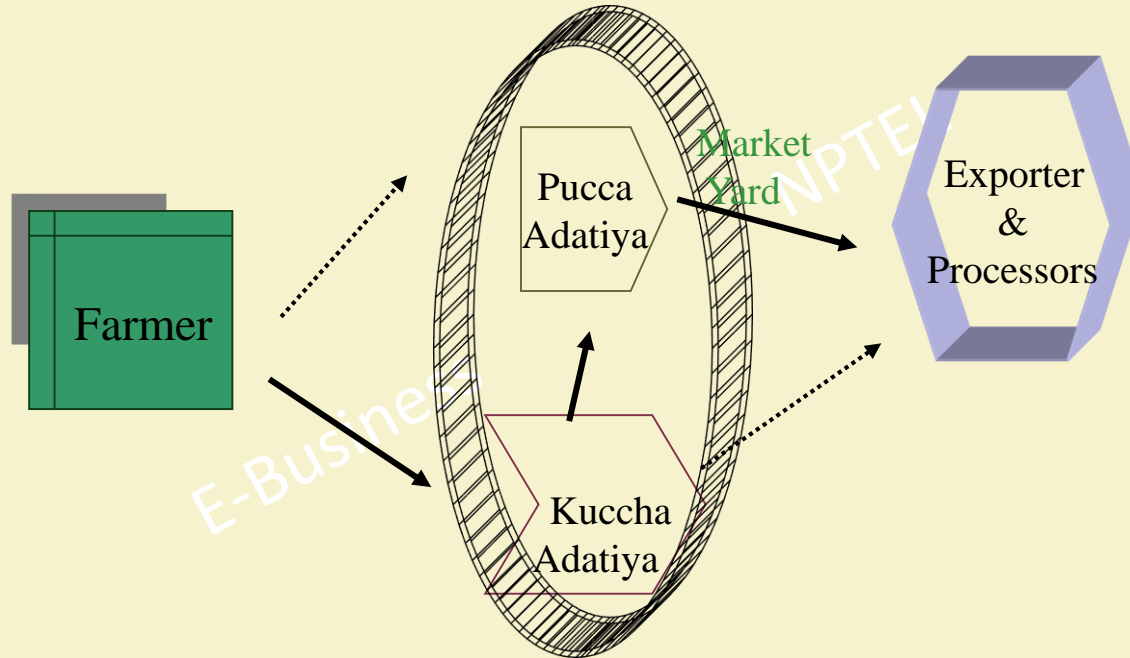
## Kiosk infrastructure

- i. PC, UPS, Dot matrix printer, Telephone & Internet connectivity
- ii. Earthing facilities

## Prathinidhi Training

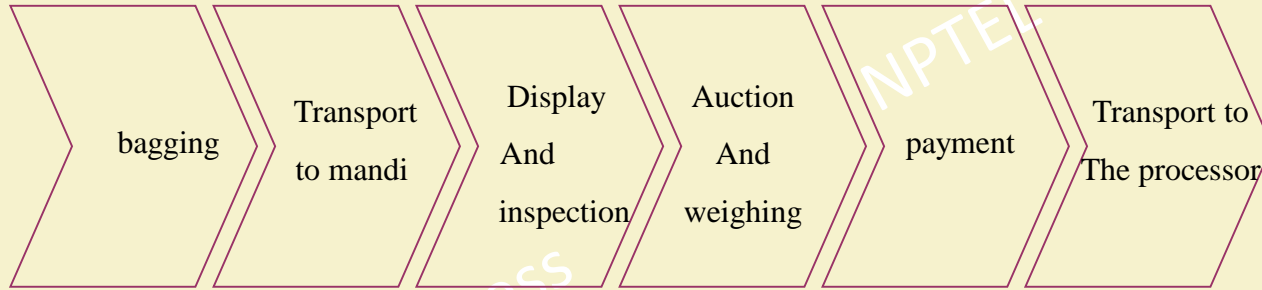
Prathinidhi and a group of 10-15 farmers in the village are trained in PC operation and Portal use through trained computer operators

# The Old Supply Chain





# Current Procurement system

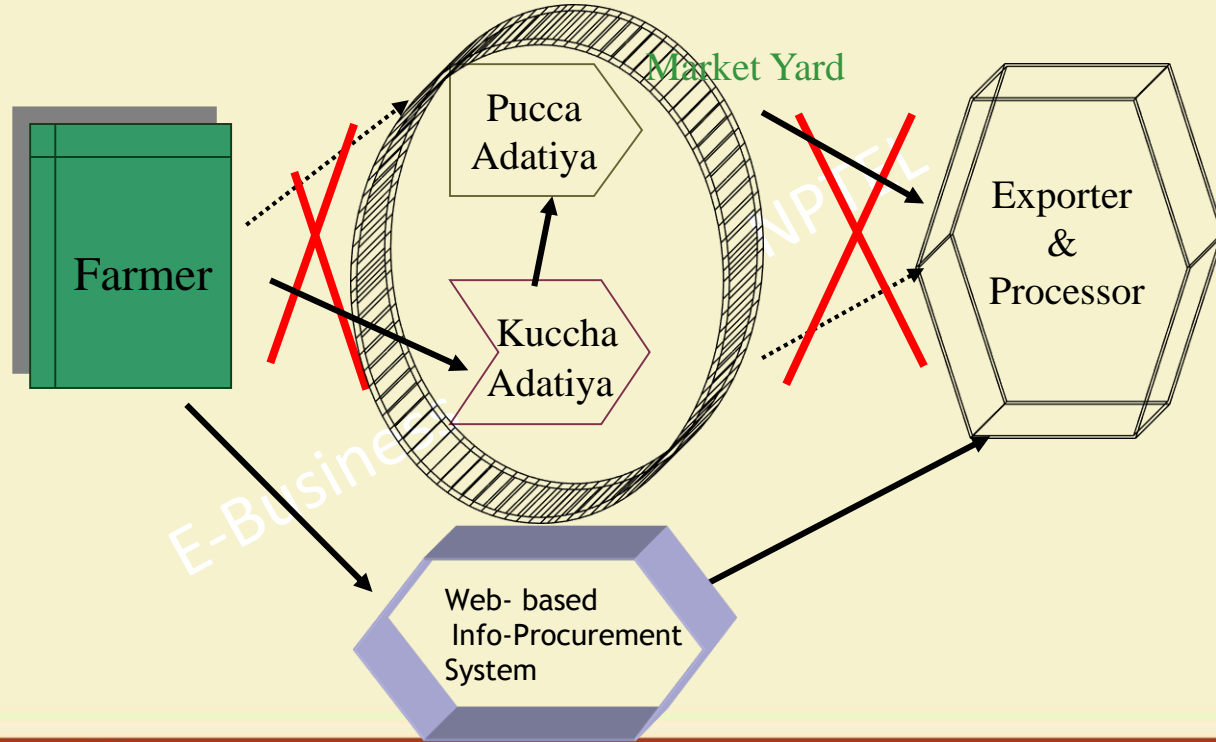


## Problems of the Existing Mandi System

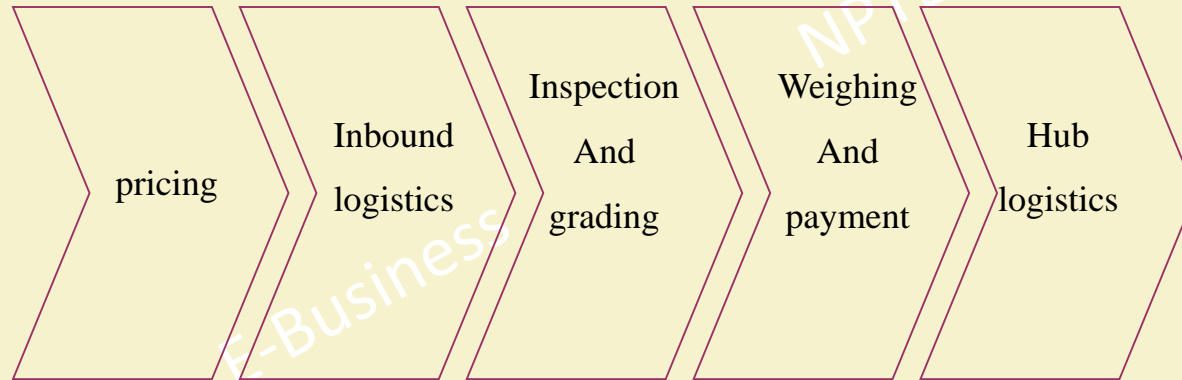
- i. The lack of professional competition combined with the communal stranglehold on rural trading
- ii. Agents forward loans to the farmers during sowing season → farmers obliged to sell their produce to these agents → deductions done by the agents for loan amount and interest.
- iii. Dependent on the agents for information regarding prices → manipulate prices and information
- iv. No resources to analyze or exploit price trends → sale not optimal price for the crop.
- v. Weights used for the weighing process are tampered with

- vi. Crops are displayed in open air courtyards → subject to being negatively affected by the weather
- vii. Inspection process is unscientific and often arbitrary → favor the buyer → no incentive to farmers to invest in better seed or farming practices that lead to higher quality—even though quality matters to Processors.
- viii. The multiple points of handling in the supply-chain require the produce to be bagged, which takes four to five times longer to be unloaded at the processing plant than unbagged produce.
- ix. Traders generally do not have the capacity to store and manage different qualities and grades of produce, inhibiting efforts to produce better crop grades.

# The e-Supply Chain



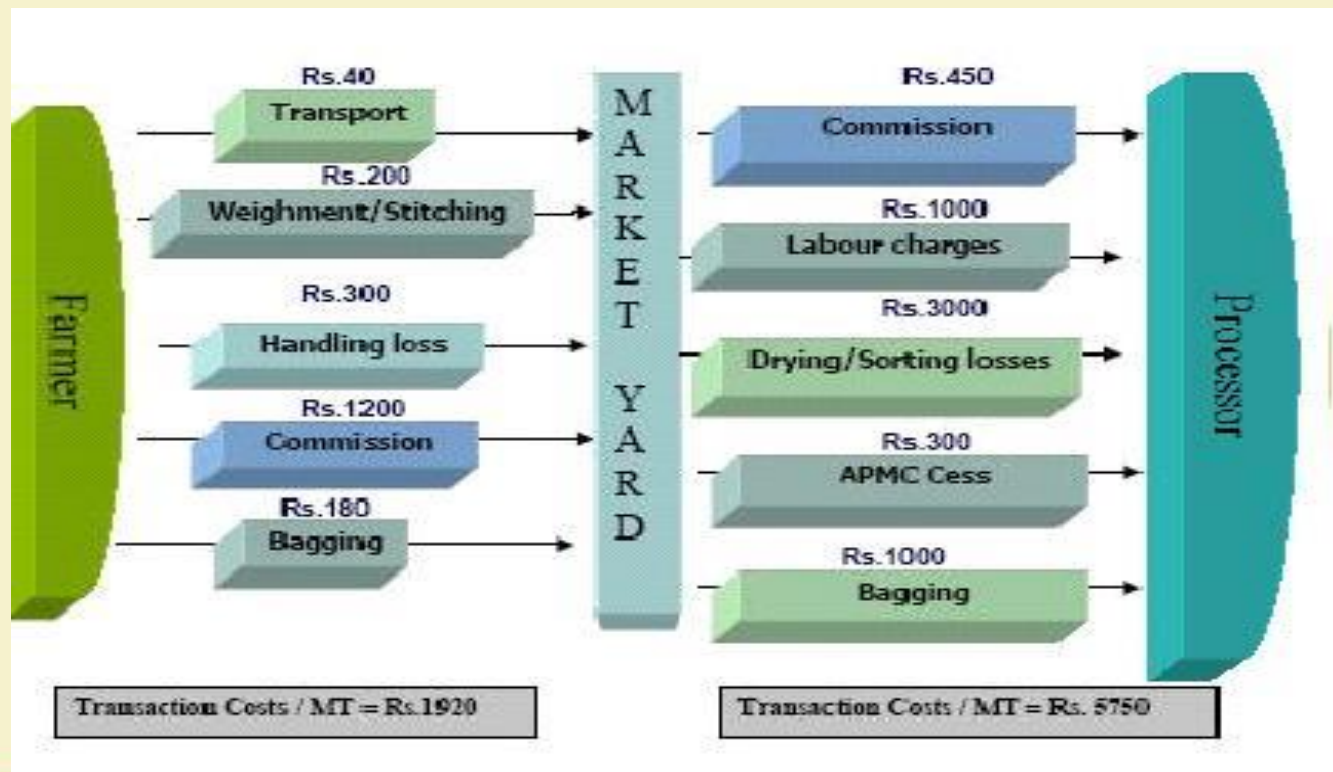
# Procurement System after implementation of e-Choupal



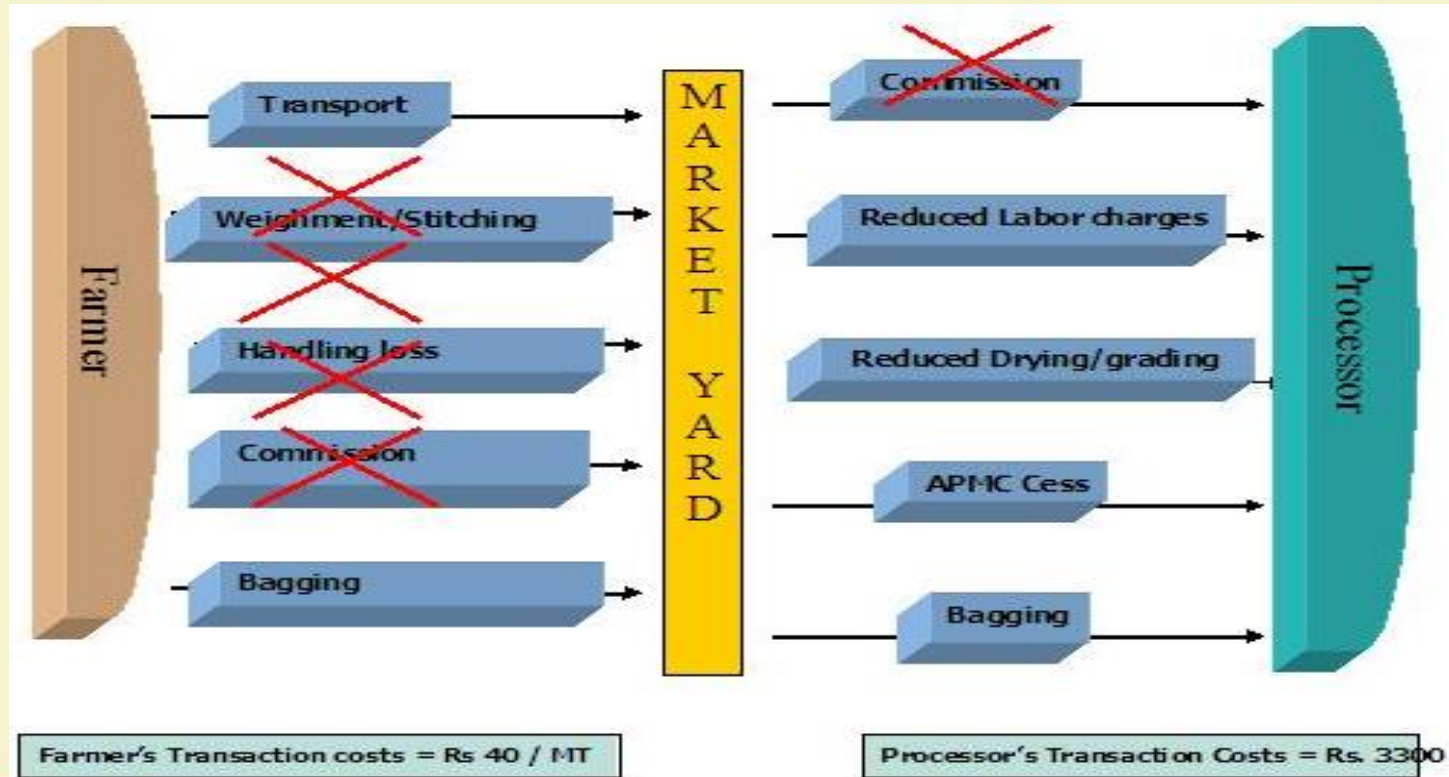
# Benefit-Cost analysis of the Current and Proposed system

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## A. Existing Supply Chain



## B. Proposed e-Supply Chain





## Farmer's Gains

- i. Significant savings in transaction costs and higher price realization-2.5% higher or \$6 per tonne.
- ii. The new setup offers a more consistent and efficient information system to the farmers→ daily access to prices at several nearby *mandis* →make the critical decision of when and where to sell his crop.
- iii. The transaction at the hub will also be much faster than at the *mandi*, usually taking no more than two or three hours.
- iv. Electronic weighing scales are accurate and not susceptible to sleight of hand like the manual weighing system at the *mandi*.

- v. No need to bag produce → avoids the associated loss of produce by intentional spillage.
- vi. Recognition as not just simply agricultural producers, but integral business partners in the supply process.
- vii. Farmers also can make use of the information available to them through the portal to improve yields.
- viii. Seed, fertilizer, and consumer products offered them through e-portal cost substantially less than through other local sources such as village traders.
- ix. Net result has been that while the area under soy cultivation has increased, the total procurement made at the mandis has decreased

## Processor's benefits

- i. The Processor no longer needs to go through layers of intermediaries → reduction in transaction costs.
- ii. The current system → unprofessional and corrupt business environment → agri- sector seems unattractive to the private sector. This has greatly limited the ability of these companies to rationalize this sector.
- iii. Able to directly interact with the farmer which was not possible in the present mandi system. The fact that the farmer is treated as a business partner goes a long way in winning over his trust and respect.
- iv. Direct procurement from the farmer → high product quality and lesser losses in handling and transportation.
- v. Enables the Processor to influence the farmer to introduce newer better farming techniques, better agricultural inputs etc. which is beneficial to all the parties concerned.

# References

- <http://www.nethistory.info/History%20of%20the%20Internet/dotcom.html>
- <http://www.thebubblebubble.com/dot-com-bubble/>
- <https://flatworldbusiness.wordpress.com/flat-education/previously/web-1-0-vs-web-2-0-vs-web-3-0-a-bird-eye-on-the-definition/dotcom-bubble/>
- Teece, D.J., 2010. Business models, business strategy and innovation. *Long range planning*, 43(2), pp.172-194.

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