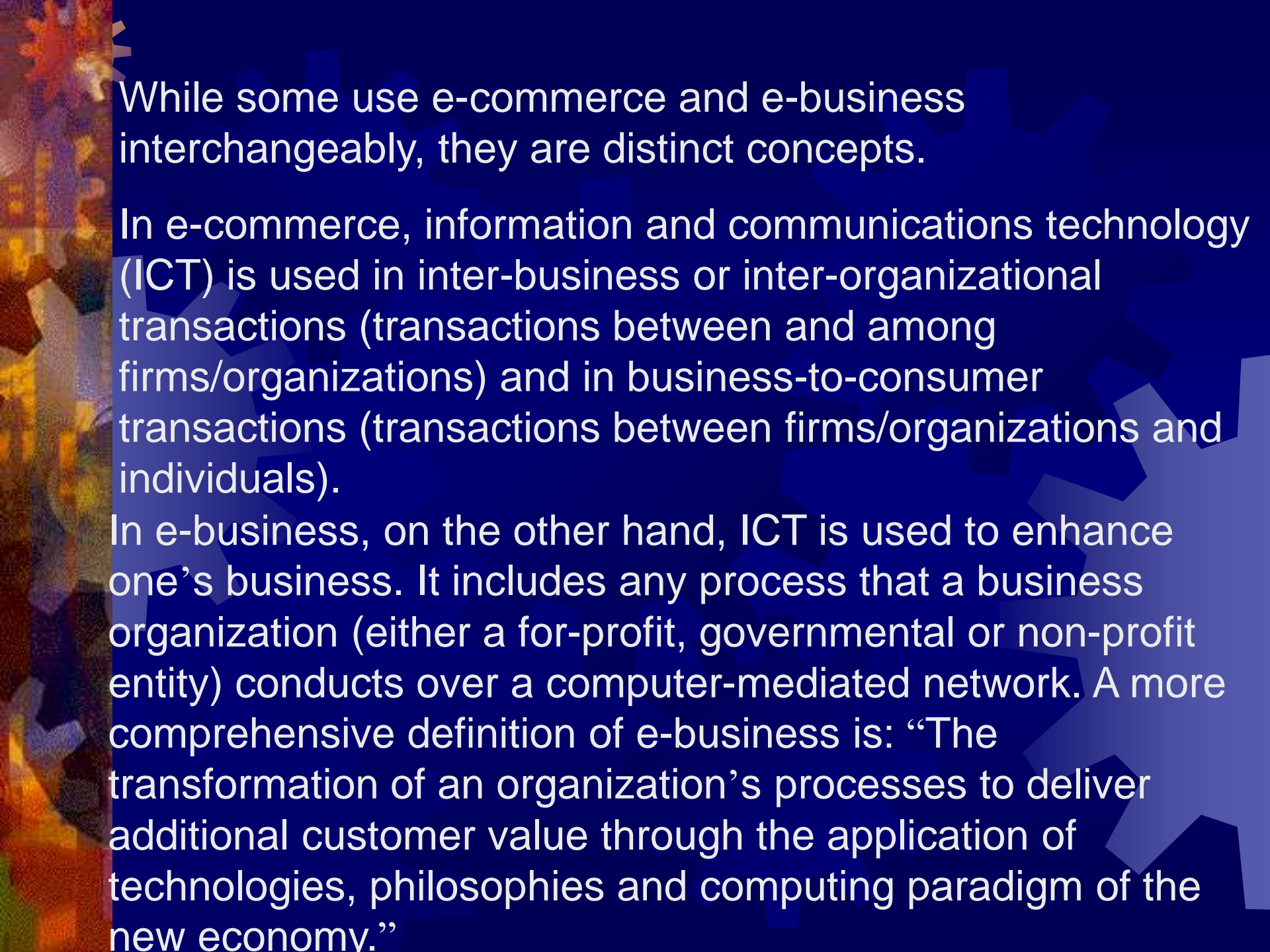




E - Commerce

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Railway Staff College



While some use e-commerce and e-business interchangeably, they are distinct concepts.

In e-commerce, information and communications technology (ICT) is used in inter-business or inter-organizational transactions (transactions between and among firms/organizations) and in business-to-consumer transactions (transactions between firms/organizations and individuals).

In e-business, on the other hand, ICT is used to enhance one's business. It includes any process that a business organization (either a for-profit, governmental or non-profit entity) conducts over a computer-mediated network. A more comprehensive definition of e-business is: "The transformation of an organization's processes to deliver additional customer value through the application of technologies, philosophies and computing paradigm of the new economy."

E-Commerce Activities

Inbound Logistics	Procurement of Raw Material, vendor selection, on-line ordering, chasing of supplies for just-in-time delivery
Operations	Manufacturing of goods / services, collection and processing of data related to manufacturing the product
Outbound Logistics	Shipping of the product to the customer
Marketing and Sales	Advertising, Product promotion, sales, managing distribution channels

E-Commerce Activities

Service	After-sales service to customer, warranty repairs, handling returned products
Payments	Collecting payments for products delivered, handling refunds in case of returned products, Payments to suppliers of RM, etc

Driving force behind E-Commerce Strategies

(Study by Ernst & Young)

- ❖ Most companies don't have a clear idea
- ❖ Only 1% of the companies listed "selling more products and services" over the Internet as a top e-commerce goal
- ❖ 33% listed retaining existing customers and 23% reducing operational costs
- ❖ 40% hadn't coordinated their web offerings with their other distribution channels
- ❖ 70% had not come up with a pricing strategy for their e-commerce efforts
- ❖ Most companies plan for 45-50% increase in their technology budgets for e-commerce

Earning Profile

(Year 2008 – 09)

Year	Booking		
	No. of Tickets	Passengers	Service Charges
2002 -03	1.99 lakh	4.17 lakh	77.84 lakhs
2003 – 04	7.28 lakh	15.29lakh	3.61 crores
2004 – 05	12.81 lakh	28.85 lakh	6.40 crores
2005 – 06	25.74 lakh	54.04 lakh	12.54 crores
2006 – 07	68.27 lakh	1.31crore	26.28 crores
2007 – 08	1.89 crores	3.51 crores	43.74 crores
2008 – 09	4.40 crores	7.98 crores	83.27 crores

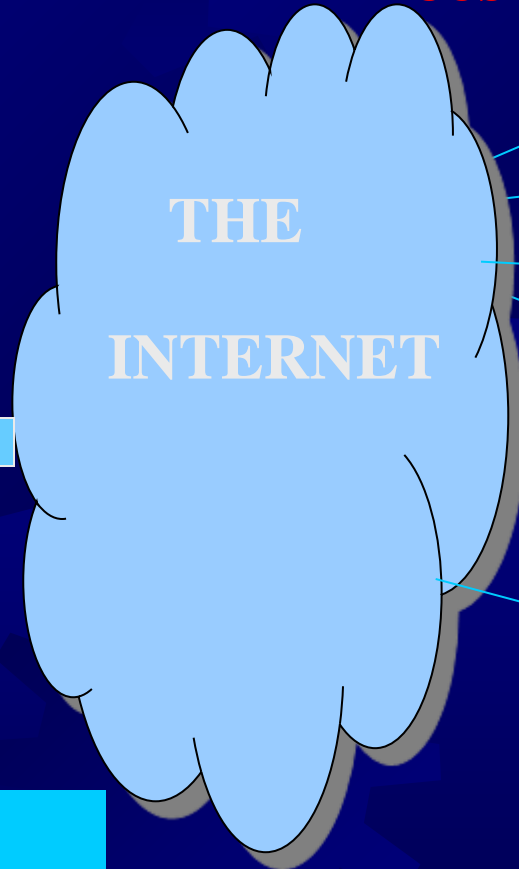
*There is reduction in the service charges

WEB BASED
INTERFACE TO PRS



COMM.
CHANNEL

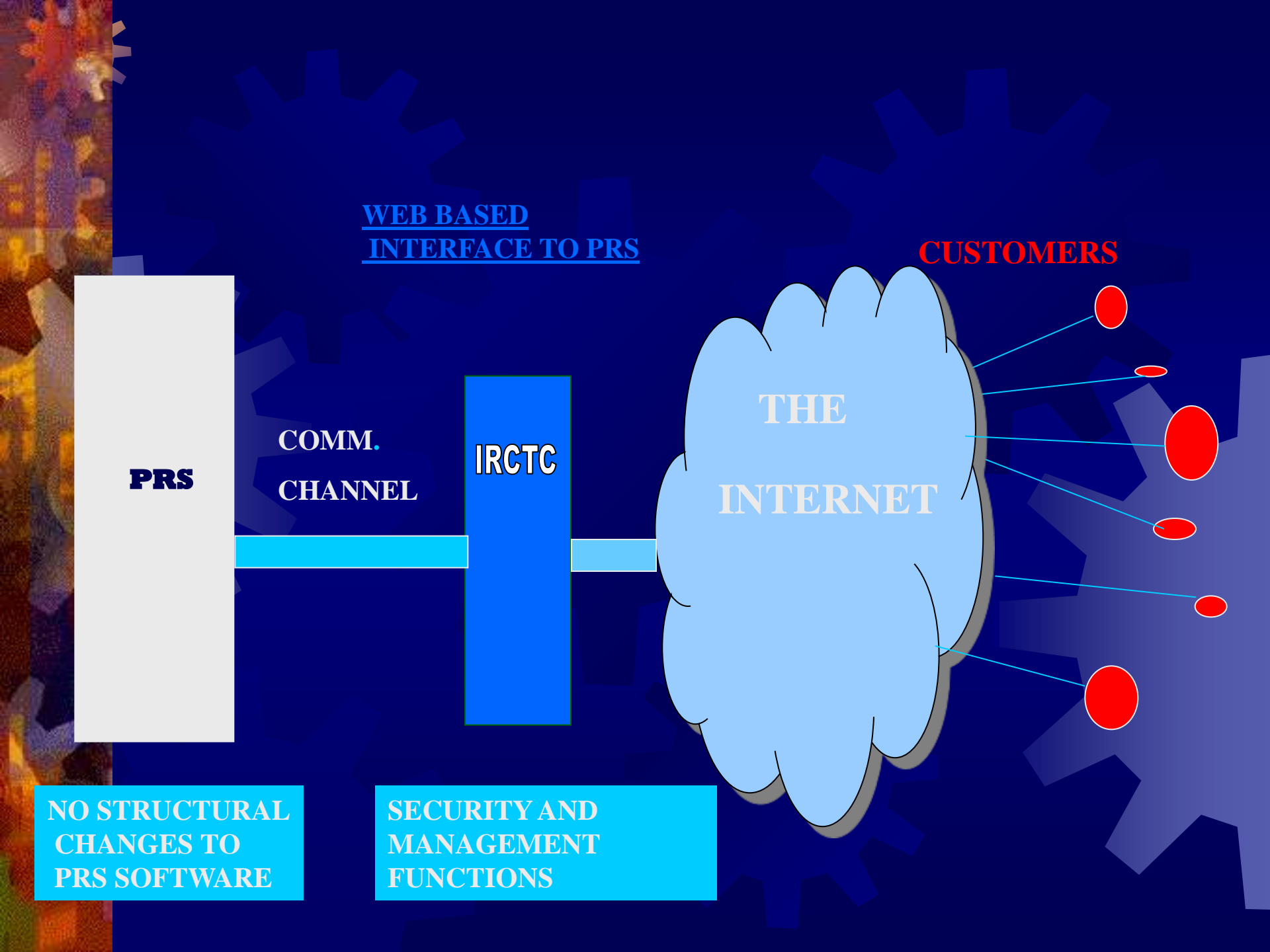
IRCTC



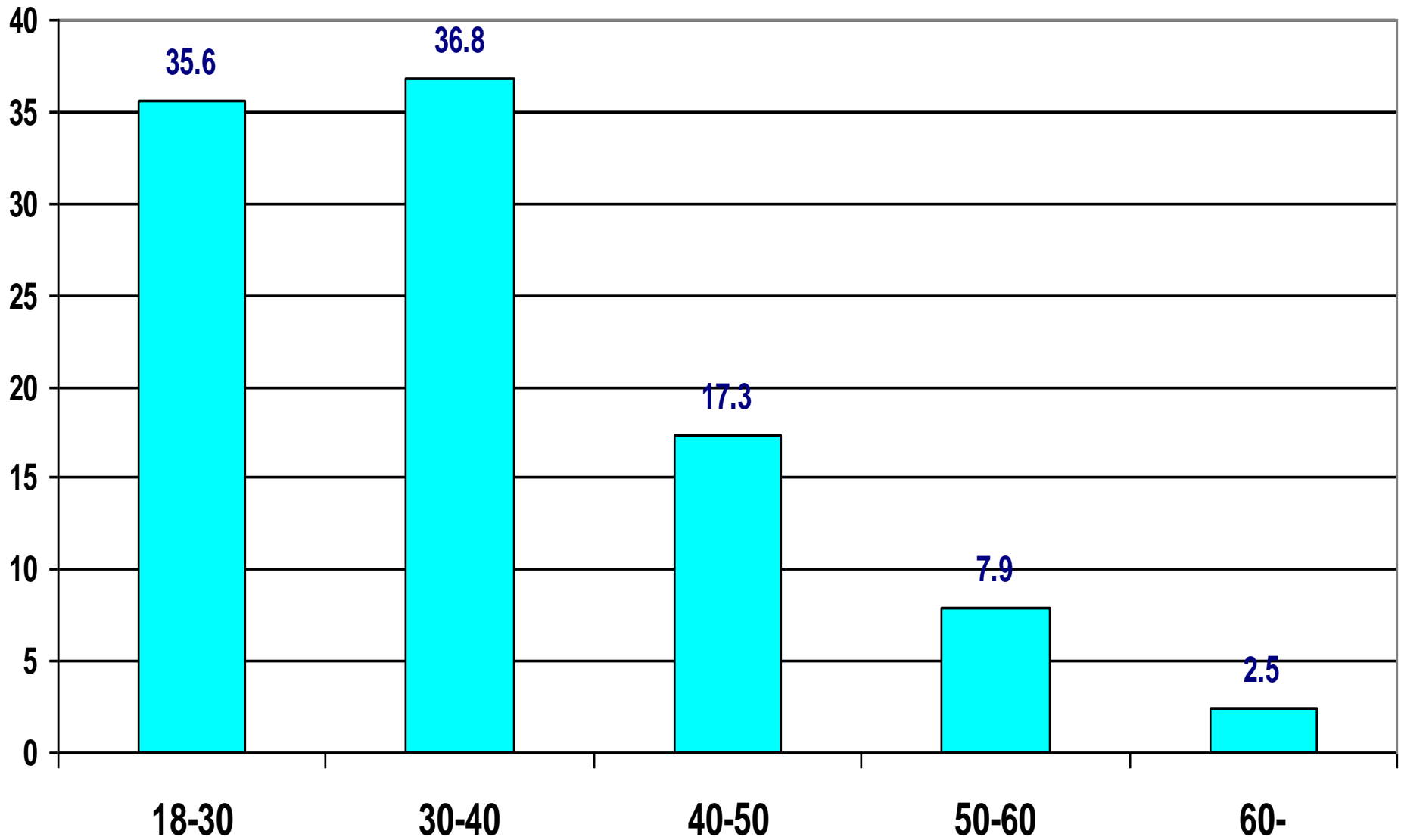
CUSTOMERS

**NO STRUCTURAL
CHANGES TO
PRS SOFTWARE**

**SECURITY AND
MANAGEMENT
FUNCTIONS**



Age-wise Distribution(%) of Transacting Users



FOIS

- ★ **Notice of Allotment and Arrival**
- ★ Details of allotment are available on Zonal Railways website
- ★ Customers can have access to their consignment pipeline and therefore get a reasonable forecast
- ★ With the integration of Control Office Application with Rake Management System the process will become on line

FOIS - Contd.

- ★ Documentation of loading and delivery is on line in Terminal Management System
- ★ E-payment of Freight has also been operationalized

FOIS - Contd.

★ E-PAYMENT OF FREIGHT

- ★ Till 31.3.09, 141, Tripartite Agreements between Zonal Railways, Customer and Banks, have been made on line
- ★ All scheduled nationalized banks can participate
- ★ On completion of transaction at the TMS location the option for E-Payment will be communicated to the Bank through FOIS Central Server and on receipt of confirmation of payment credited to IR's account the terminal will print a paid RR

Profile of Industry covered under E-Payment March 2009

	Total Frt. In TMS (Crores)	E-Payment (Crores)	%age
Foodgrains	108.55	72.26	66.57
Cement	354.38	244.67	69.04
Coal	1578.09	443.86	28.13
I&S	272.38	121.83	44.73
POL	238.60	59.55	24.96
Fertilizer	130.40	90.93	69.74
Iron Ore	312.03	53.14	17.03



What was the first form of e-commerce?

EDI

Electronic Data Interchange

Business to Business Transactions

- Paper Invoices
- Purchase Orders
- Requests For Quotations
- Bills of lading
- Receiving Reports

Comprise 75% of all information exchanged in B2B transactions

- 
- 1960 – Exchanging transaction information on punched card or magnetic tapes
 - 1968 – Transportation Data Coordination Committee
 - 1970 – Transfer of data over telephone lines
 - 1979 – ANSI Accredited Standards Committee (ASC – X12)
 - 1987 - United Nation published the first standard
UN/EDIFACT
EDI for Administration, Commerce and Transport

Further information - [UN/EDIFACT](#)

Some E-Commerce sites

Amazon.com	B2C	Books, CDs, Home Goods
Barnesandnoble.com	B2C	Books, music, magazines
Cisco.com	B2B	Switches, Routers, Modems
Dell.com	B2C B2B	PCs, PC components
E-Bay.com	B2C C2C	Advertisements exchange On-line auctions
Waterhouse.com	B2C B2B	Discount broker, financial services



What is E-Commerce

Putting it in a simple language,

E-Commerce means using the Internet to conduct business

Why ?

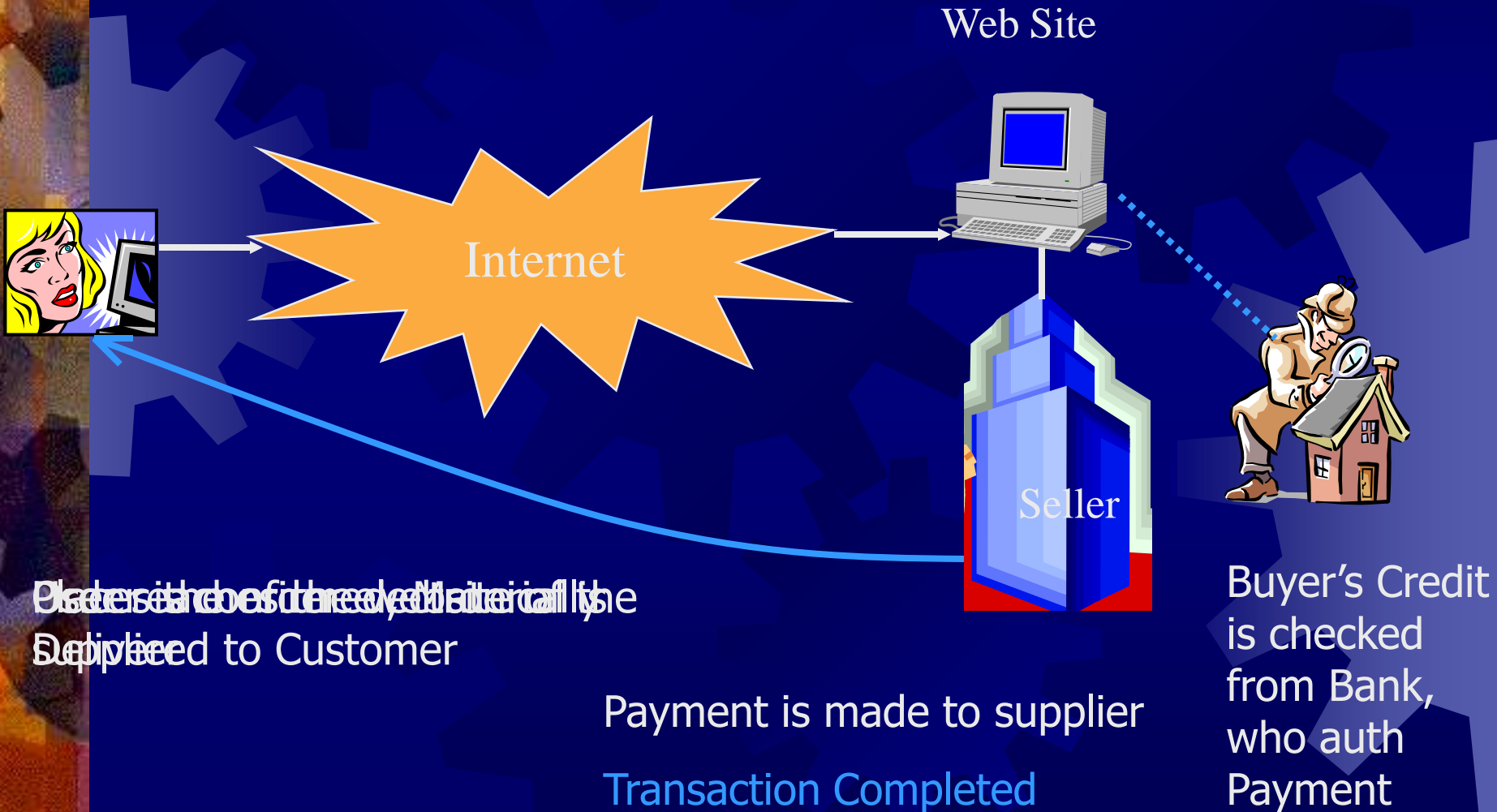
To achieve the following goals :

- ✦ Reach new markets
- ✦ Create new products or services
- ✦ Build customer loyalty
- ✦ Make the best use of technology
- ✦ Achieve market leadership and competitive advantage
- ✦ Enrich human capital

Some Acronyms & Terminologies

- ☀ LAN
- ☀ WAN
- ☀ Internet
- ☀ Intranet
- ☀ Extranet
- ☀ ISP
- ☀ Search Engine
- ☀ Shopping Cart
- ☀ Comparison Shopping
- ☀ B2C
- ☀ B2B
- ☀ C2C
- ☀ EDI

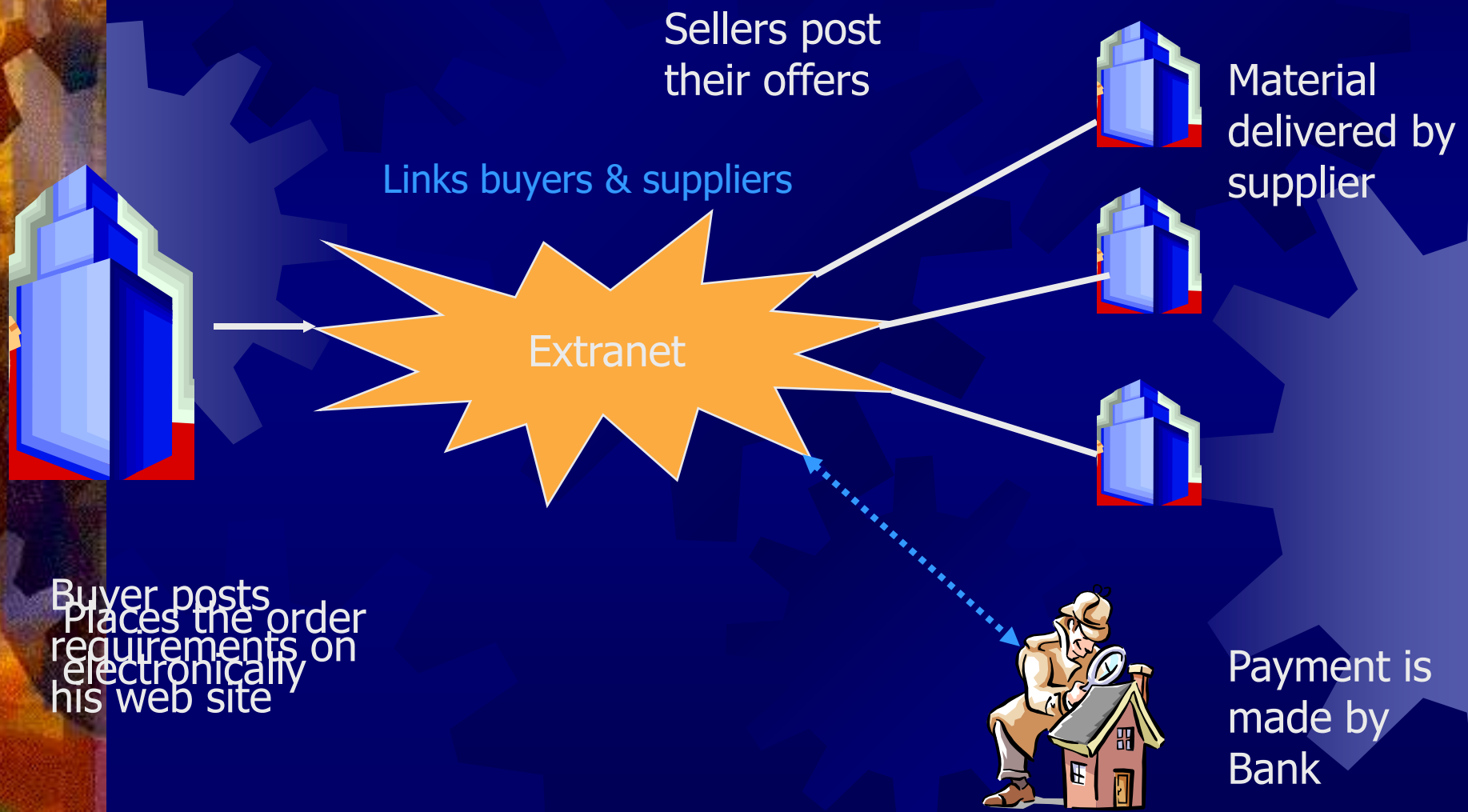
How does B2C work ?



B2C model

- ✱ Purchaser can be anywhere
- ✱ Purchaser new to seller
- ✱ Seller may not be a producer
- ✱ Purchaser & Seller connected on Internet
- ✱ Modes of payment defined by seller
- ✱ Credit delivery is not given
- ✱ Seller uses a logistics supplier
- ✱ Return policy defined by seller

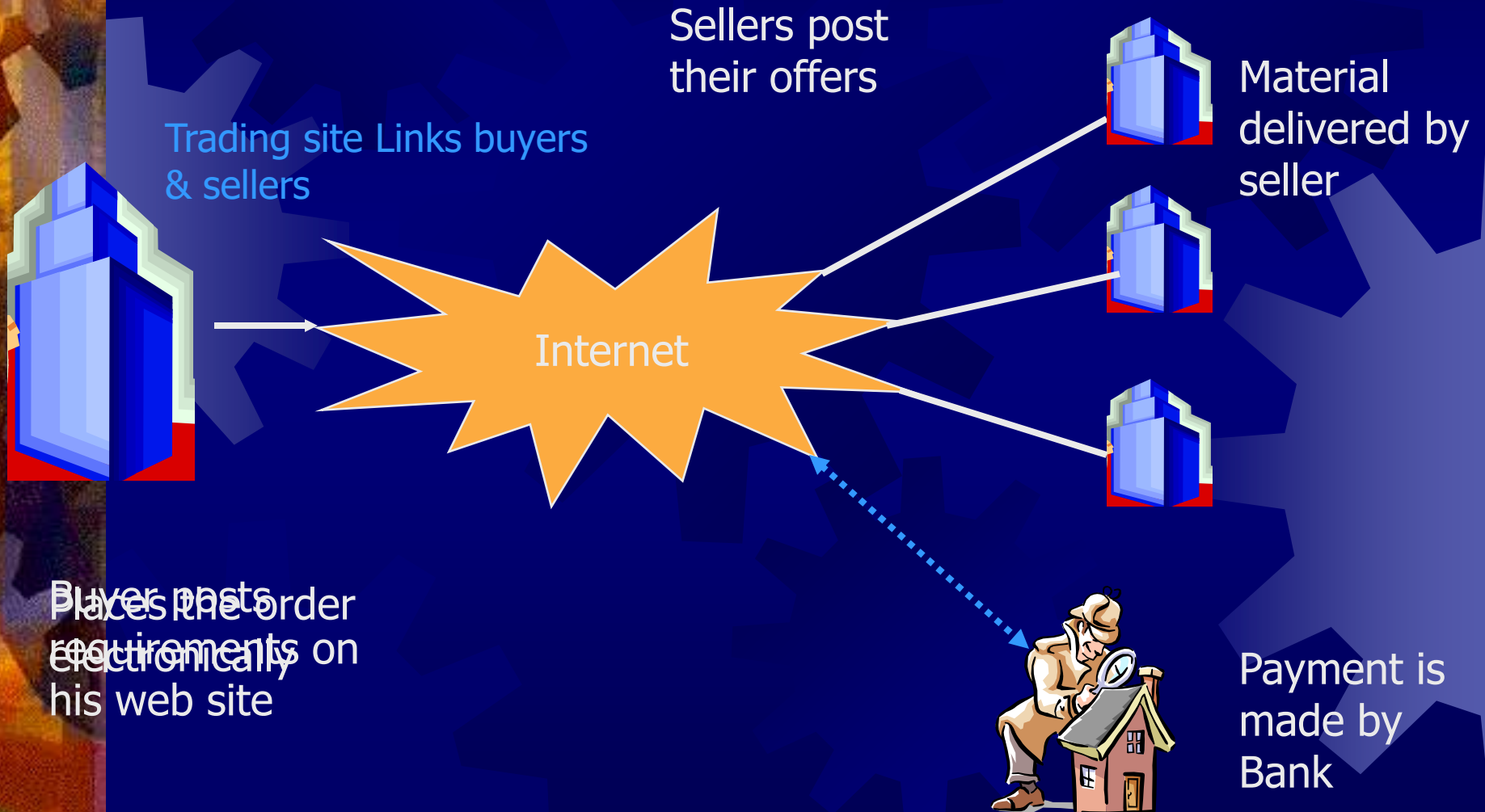
How does B2B work ?



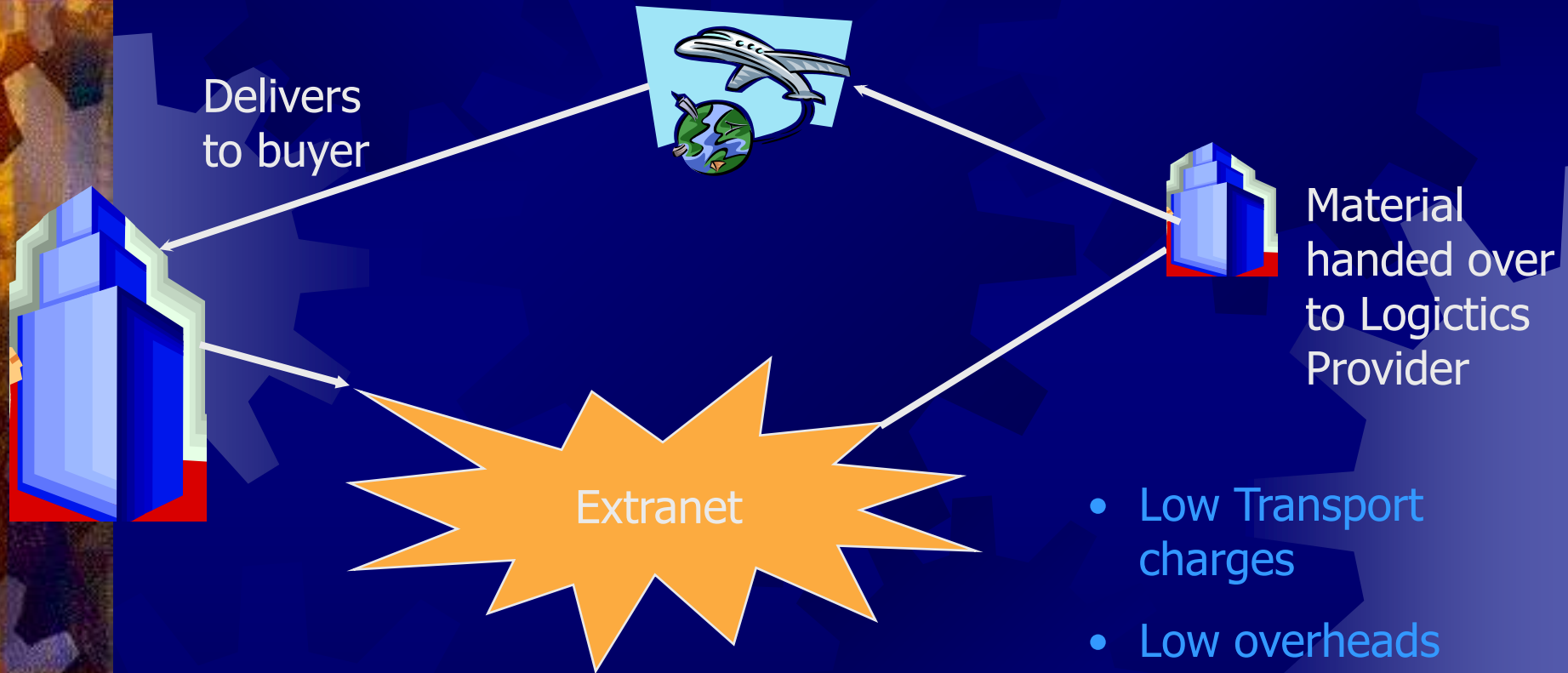
B2B model

- ✱ Purchaser can be anywhere
- ✱ Purchaser generally known to seller
- ✱ Seller is usually a producer
- ✱ Purchaser & Seller connected on extranet
- ✱ Exchange data over EDI
- ✱ Modes of payment agreed bet them
- ✱ Credit delivery may be given
- ✱ Seller may use a logistics provider
- ✱ Return policy agreed bet them

How does C2C work ?



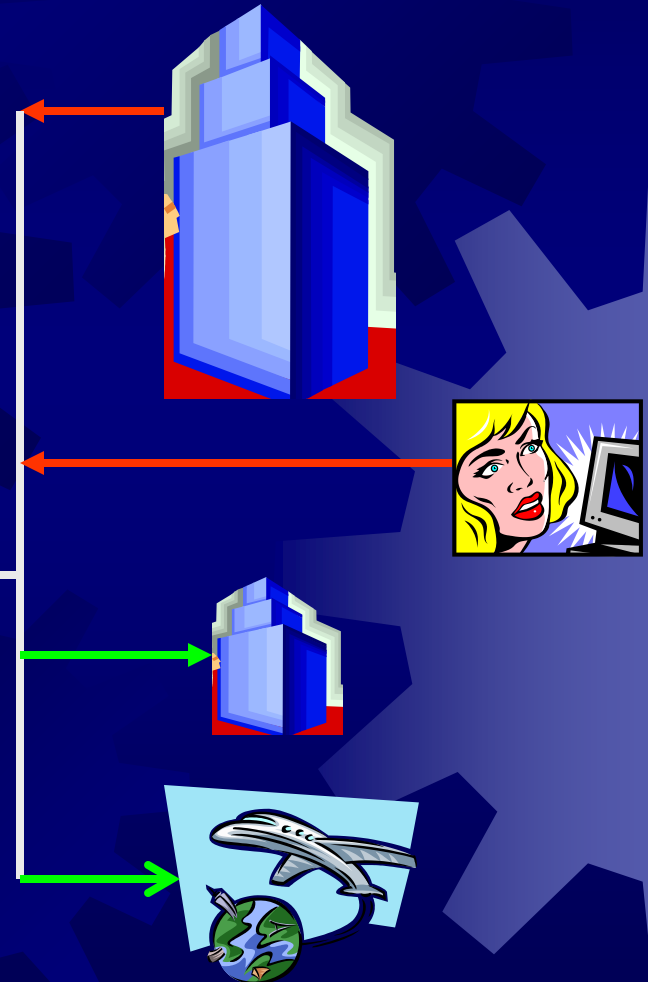
Role of Logistics Firms



- Low Transport charges
- Low overheads
- Speedier deliveries
- On-Line Tracking

Role of Banks

- Credit Check
- Debit Purchaser
- Credit Seller
- Credit Logistics provider
- Credit sub-contractor
- Earn from commissions



Payment Methods

- ☀ Online Funds Transfer
- ☀ Credit Cards
- ☀ Debit Cards
- ☀ Demand Drafts
- ☀ Cash on Delivery
- ☀ Buyer pays and Picks up
- ☀ Cheques

Essentially Required

- ✦ Sound Strategy
- ✦ Management Commitment
- ✦ Strong Tie-ups
- ✦ Good Web Site
- ✦ Logistics Providers
- ✦ Payment Gateways
- ✦ Security Mechanisms
- ✦ Reliable Suppliers
- ✦ EDI

Advantages of E-Commerce

Lower Cost	Cheaper advertising, sourcing, order processing, overall economy higher
Location Independence	Suppliers / Customers can be based anywhere in the world
24 X 7	Not limited by time restrictions in physical markets
Convenience	Both, to customer & seller
More information availability	Buyer can compare products easily, seller can hunt customers easily

Advantages of E-Commerce

Customisable	Seller can customise his web site depending on customer preferences
Scalability	Web sites can be scaled up easily to meet increased customer traffic. However, this can be a limitation also.
Leveler	Even a small business can compete

Limitations of E-Commerce

Security	Buyers are afraid of giving out credit card numbers
Data Security	Sellers are afraid of Virus, hacker attacks, and system crashes
Fulfillment problems	Difficult to fulfill orders on say 'Diwali season' / Christmas
Product related	Some products wont sell online
Vulnerability	As catalogs are online, they are available to competitors also
Un-addressed segments	It does not address the rural segments who are not E-enabled

Security Concerns

Viruses	Infect computers and cause holdups, data losses, slow websites, etc
Trojan Horses, Worms	Cause slowdown, even crashes of computers
Hackers	Break into the security system, steal or alter financial data with malicious intent
Phishers	Redirect to own site, capture Credit Card numbers and misuse them. Bring bad name to site
Phoneys	Key in fake purchase orders and disappear. Firm loses money.
Employees	Disgruntled or outgoing employees can walk away with sensitive data

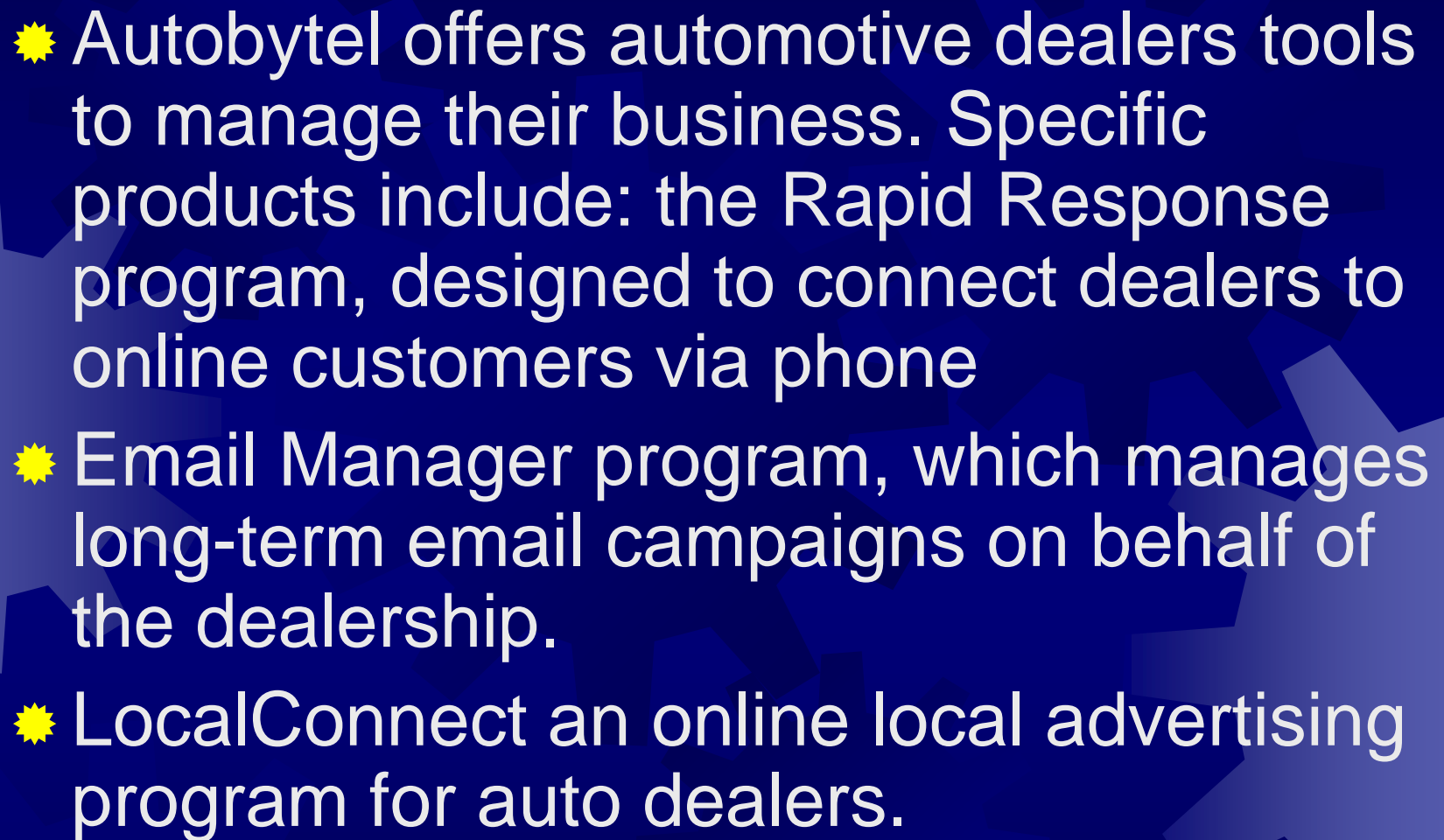
Tackling Security Concerns


Viruses	Anti-Virus Software Keep updating virus databases, backups
Trojan Horses, worms	Anti-Virus Software Keep updating virus databases, backups
Hackers	Strong Firewalls, switched Network, strong password policy
Phishers	User Education, Surveillance
Phoneys	User education
Employees	Legal Contracts applicable after he leaves, Internal Vigilance


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- ✦ Autobyte Inc. is an automotive media and marketing services company in the United States.
 - ✦ Located in Irvine, California, U.S.A. Autobyte Inc. was founded in 1995
 - ✦ On April 25, 2007 Autobyte was named one of California's 15 best technology innovators.
 - ✦ Currently, Autobyte owns and operates Car.com, AutoWeb.com, CarSmart.com, Autobyte.com and MyRide.com.

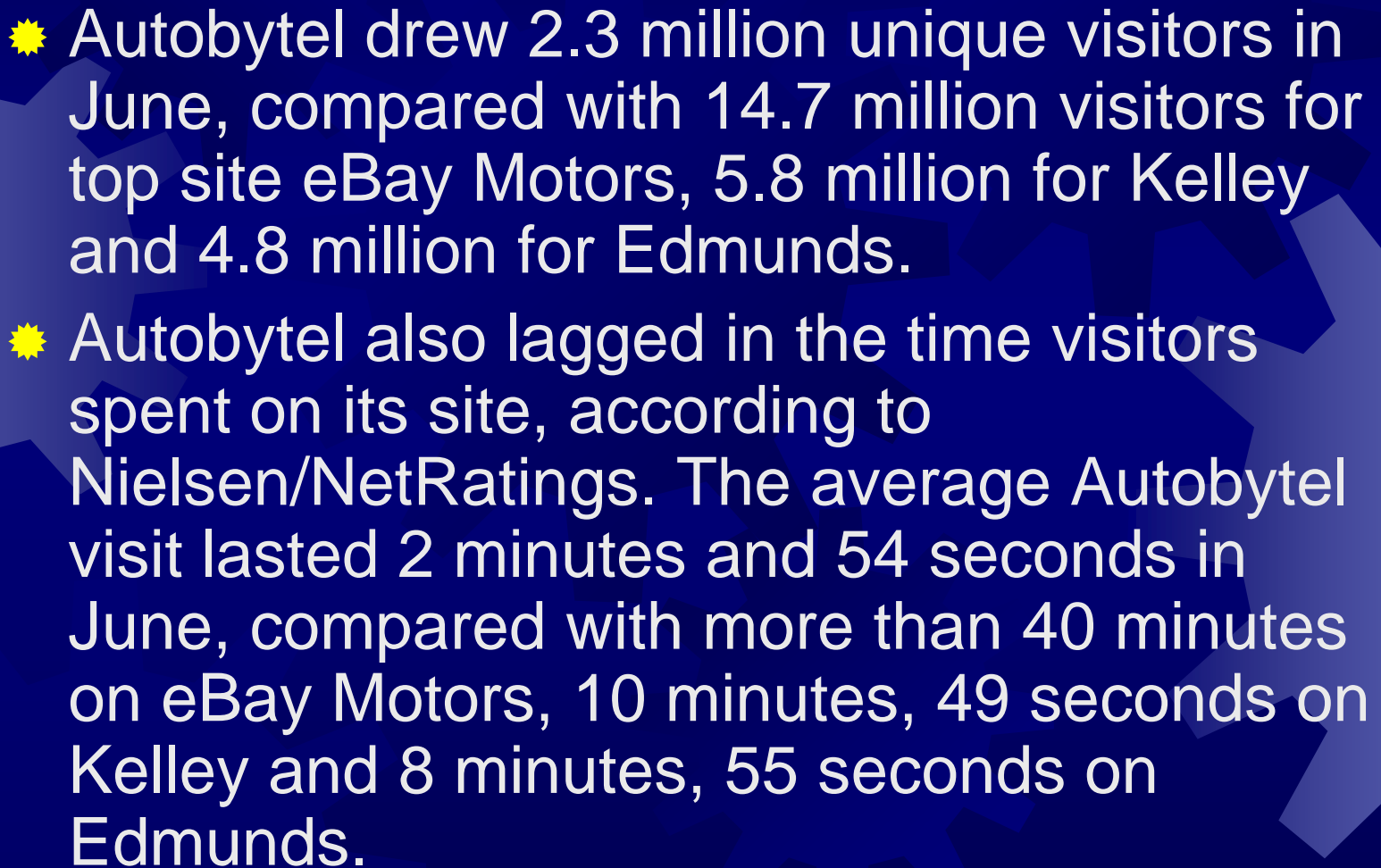
Advantages Of E-Commerce

- ✱ Networks with 23000 auto-dealers across USA
- ✱ Earns \$100 million per dollars in revenue through brokering
- ✱ Accounts for a quarter of all US sales of cars
- ✱ Internet car buyer saves 2% to 4% of cost of the car
- ✱ Marketing costs of car for dealers reduced from \$480 to \$140 per car

- 
- ✦ Autobytel offers automotive dealers tools to manage their business. Specific products include: the Rapid Response program, designed to connect dealers to online customers via phone
 - ✦ Email Manager program, which manages long-term email campaigns on behalf of the dealership.
 - ✦ LocalConnect an online local advertising program for auto dealers.

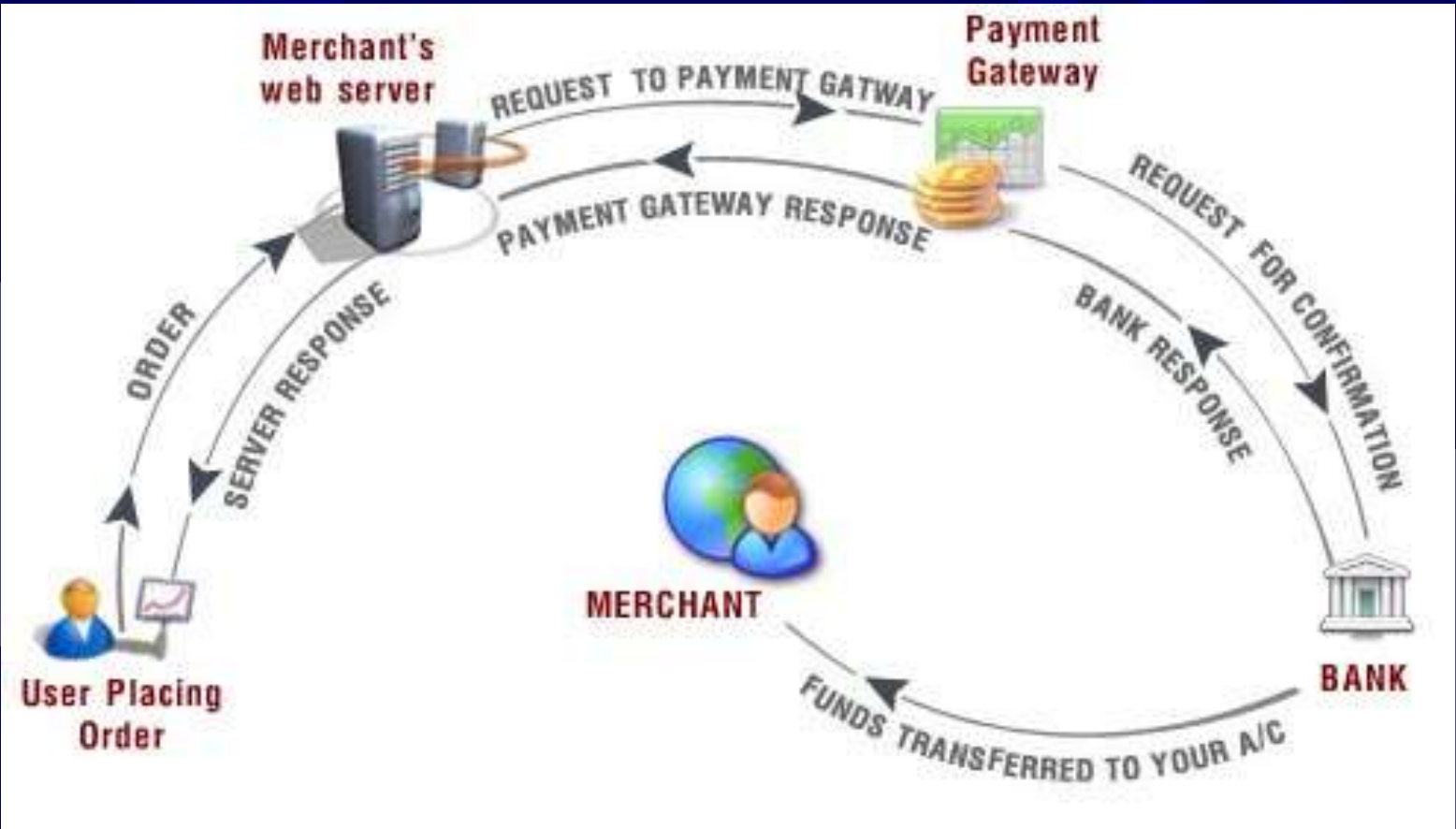
- 
- ★ Autobytel also offers the AutoReach Ad Network, an automotive ad network of third party Web publishers visited by millions of in-market automotive consumers.

- 
- ✦ Social networking sites – blogs also a part of web- sites
 - ✦ Such acts help to bring in brand loyalty to the web-sites
 - ✦ Helps the agency carrying on e - commerce to understand consumer behaviour and preferences better.....

- 
- ✦ Autobytel drew 2.3 million unique visitors in June, compared with 14.7 million visitors for top site eBay Motors, 5.8 million for Kelley and 4.8 million for Edmunds.
 - ✦ Autobytel also lagged in the time visitors spent on its site, according to Nielsen/NetRatings. The average Autobytel visit lasted 2 minutes and 54 seconds in June, compared with more than 40 minutes on eBay Motors, 10 minutes, 49 seconds on Kelley and 8 minutes, 55 seconds on Edmunds.

Would E-Commerce be successful for all commodities ?

- ✱ Commodity items – hard to distinguish soap, gas, etc
- ✱ Branded products – high quality, products that can be easily packaged & delivered
- ✱ Dell, Cisco more than 80 % business online
new paradigms emerging
- ✱ E-Commerce models less likely to be successful for perishable items, high cost items that require personal inspection



Payment gateway



धन्यवाद

