

# Setup Stripe and accept a payment

Presentation



Gjergj Kadriu

# Setup Stripe

# Set up Stripe

Use Stripe's official libraries to access the Stripe API from your application:

Ruby Python PHP Java Node Go .NET

Command Line

```
# Install with npm  
npm install stripe --save
```

Redirect your customer to Stripe Checkout

# Redirect your customer to Stripe Checkout

Add a checkout button to your website that calls a server-side endpoint to create a Checkout Session.

A Checkout Session is the programmatic representation of what your customer sees when they're redirected to the payment form. You can configure it with options such as:

- Line items to charge
- Currencies to use

checkout.html

```
1 <html>
2   <head>
3     <title>Buy cool new product</title>
4   </head>
5   <body>
6     <!-- Use action="/create-checkout-session.php" if your server is PHP based.
7     <form action="/create-checkout-session" method="POST">
8       <button type="submit">Checkout</button>
9     </form>
10  </body>
11 </html>
```

# Redirect your customer to Stripe Checkout (contd.)

You also need to specify `success_url`, a page on your website that Checkout returns your customer to after they complete the payment. You can optionally provide `cancel_url`, a page on your website that Checkout returns your customer to if they cancel the payment process.

After creating a Checkout Session, redirect your customer to the URL returned in the response.

```
Ruby Python PHP Java Node Go .NET

1 // This example sets up an endpoint using the Express framework.
2 // Watch this video to get started: https://youtu.be/rPR2a76XnAc.
3
4 const express = require('express');
5 const app = express();
6 const stripe = require('stripe')('sk_test_51NdeLXHBRcUg9jl1JFG...K0xCoj0Xi00Gxg5Tt0C');
7
8 app.post('/create-checkout-session', async (req, res) => {
9   const session = await stripe.checkout.sessions.create({
10     line_items: [
11       {
12         price_data: {
13           currency: 'usd',
14           product_data: {
15             name: 'T-shirt',
16           },
17           unit_amount: 2000,
18         },
19         quantity: 1,
20       },
21     ],
22     mode: 'payment',
23     success_url: 'http://localhost:4242/success',
24     cancel_url: 'http://localhost:4242/cancel',
25   });
26
27   res.redirect(303, session.url);
28 });
29
30 app.listen(4242, () => console.log(`Listening on port ${4242}!`));
```

# Redirect your customer to Stripe Checkout (contd.)

Note: By default, Stripe enables cards and other prevalent payment methods that can help you reach more customers, and you can turn on or turn off payment methods right from the Stripe Dashboard. Stripe evaluates the currency, payment method restrictions, and other parameters to determine the list of supported payment methods to show in Checkout.

Test your endpoint by starting your web server (for example, localhost:4242) and running the following command:

Command Line

```
$ curl -X POST -is "http://localhost:4242/create-checkout-session" -d ""
```

You should see a response in your terminal that looks like this:

Command Line

```
$ HTTP/1.1 303 See Other
> Location: https://checkout.stripe.com/c/pay/cs_test_...
> ...
```

Testing



# Testing

- Click the checkout button.
- You're redirected to the Stripe Checkout payment form.

If your integration isn't working:

- Open the Network tab in your browser's developer tools.
- Click the checkout button and confirm it sent an XHR request to your server-side endpoint (POST /create-checkout-session).
- Verify the request is returning a 200 status.
- Use `console.log(session)` inside your button click listener to confirm the correct data returned.

# Show a success page

It's important for your customer to see a success page after they successfully submit the payment form. Host this success page on your site. Create a minimal success page:

success.html

```
1 <html>
2   <head><title>Thanks for your order!</title></head>
3   <body>
4     <h1>Thanks for your order!</h1>
5     <p>
6       We appreciate your business!
7       If you have any questions, please email
8       <a href="mailto:orders@example.com">orders@example.com</a>.
9     </p>
10  </body>
11 </html>
```

# Next, update the Checkout Session creation endpoint to use this new page:

It's important for your customer to see a success page after they successfully submit the payment form. Host this success page on your site. Create a minimal success page:

```
curl  Stripe CLI  Ruby  Python  PHP  Java  Node  Go  .NET
server.js

1 // Set your secret key. Remember to switch to your live secret key in production.
2 // See your keys here: https://dashboard.stripe.com/apikeys
3 const stripe = require('stripe')('sk_test_51NdeLXHBRcUg9jlJF6...K0xCojOXi00Gxg5Tt0C');
4
5 const session = await stripe.checkout.sessions.create({
6   line_items: [
7     {
8       price_data: {
9         currency: 'usd',
10        product_data: {
11          name: 'T-shirt',
12        },
13        unit_amount: 2000,
14      },
15      quantity: 1,
16    },
17  ],
18  mode: 'payment',
19  success_url: 'http://localhost:4242/success.html',
20  cancel_url: 'http://localhost:4242/cancel.html',
21 });
```

# Testing

- Click your checkout button.
- Fill out the payment details with the test card information:
  - Enter 4242 4242 4242 4242 as the card number.
  - Enter any future date for card expiry. Enter any 3-digit number for CVC.
  - Enter any billing postal code.
- Click **Pay**.
- You're redirected to your new success page.

# Testing (cotd.)

Next, find the new payment in the Stripe Dashboard.

Successful payments appear in the Dashboard's list of payments.

When you click a payment, it takes you to the payment details page.

The Checkout summary section contains billing information and the list of items purchased, which you can use to manually fulfill the order.

# Theory

<https://stripe.com/files/payments/guide/Payment-methods-guide.pdf>

# What is the basic knowledge that everyone should have about Bank?

Presentation

What's the difference between a debit and a credit account?



# What's the difference between a debit and a credit account?

A debit account is one which you have deposited a certain amount of money in which you can, later on, withdraw and spend money . A credit account is one where you essentially withdraw money that you have not deposited but are essentially borrowing from your bank. You will, later on, be required to pay back this amount at an interest. bank is offering credit services with installments up to 12 months interest free at selected merchants for any transaction with a minimum spend (spent) as well as debit accounts that offer you competitive interest on your money.

What's the difference between a checking (current) and a saving account?

# What's the difference between a checking (current) and a saving account?

Both are debit accounts. A checking account allows you to write cheques, as well as normally withdraw from your balance. A saving account allows you to deposit and withdraw cash as well as earn an interest on the deposited balance. bank is offering one of the highest interest rates on savings accounts in private as well an interest bearing current account.

# What is a minimum balance fee?

Every bank requires a minimum amount deposited in your account. If the balance falls below this amount, a certain minimum balance fee is withdrawn.

## Checking Accounts vs Savings Accounts

### Checking Accounts

Account held at a financial institution that allows you to make deposits and withdrawals

Typically no cap on transactions

May or may not be interest-bearing



VS.

### Savings Accounts

Account designed for holding funds intended to save, not for day-to-day transactions

Banks pay savers an annual percentage yield (APY) as an incentive for keeping their money in their savings accounts

Limited to a maximum of six withdrawals per month, if you exceed this you'll typically pay a fee

Unlimited savings accounts withdrawals are allowed only when they're made in-person, via mailed request, or at an ATM



# What is a bank statement?

A bank statement shows your monthly transactions on your accounts/credit cards, where you either deposited or withdrawn money from your account or purchased using your credit card. It gets mailed to your address or your email monthly and you can also request it from certain ATMs or sign up for Internet Banking service and get access 24/7 on your accounts. It helps you keep track of your account balance or credit card activities and remaining balance. don't be too shy to make any inquiries and always go for a bank that offers simple solutions and has your best interest in mind.



## Bank Statement

*['bʌŋk 'stāt-mənt]*

A document that is typically sent by a bank to an account holder every month, summarizing all the transactions of an account during the month.



END OF PRESENTATION

# Theory

[https://www.quora.com/What-is-the-basic-knowledge-that-everyone-should-have-about-Bank/answer/Kumaresan-L-2?no\\_redirect=1](https://www.quora.com/What-is-the-basic-knowledge-that-everyone-should-have-about-Bank/answer/Kumaresan-L-2?no_redirect=1)

# Stripe common resources

Presentation



Gjergj Kadriu



What is a Charge?

# What is a Charge?

The Charge object represents a single attempt to move money into your Stripe account.

## ENDPOINTS

**POST** /v1/charges

**GET** /v1/charges/:id

**POST** /v1/charges/:id

**POST** /v1/charges/:id/capture

**GET** /v1/charges

**GET** /v1/charges/search

What is a PaymentIntent /  
Customer

# What is a PaymentIntent

A PaymentIntent guides you through the process of collecting a payment from your customer. We recommend that you create exactly one Payment Intent for each order or customer session in your system.

```
"amount": 1099,  
"amount_capturable": 0,  
"amount_details": {  
  "tip": {}  
},  
"amount_received": 0,  
"application": null,  
"application_fee_amount": null,  
"automatic_payment_methods": null,  
"canceled_at": null,  
"cancellation_reason": null,  
"capture_method": "automatic",  
"client_secret": "pi_1EUmy5285d61s2cIUDDd7XEQ_secret_ZWIYZAGWyZlh",  
"confirmation_method": "automatic",  
"created": 1556596161,  
"currency": "cad",  
"customer": null,  
"description": null,  
"invoice": null,  
"last_payment_error": null,  
"latest_charge": null,  
"livemode": false,  
"metadata": {},  
"next_action": null,  
"on_behalf_of": null,  
"payment_method": null,  
"payment_method_options": {},  
"payment_method_types": [  
  "card"  
],  
"processing": null,  
"receipt_email": null,  
"review": null,  
"setup_future_usage": null,  
"shipping": null,  
"statement_descriptor": null,  
"statement_descriptor_suffix": null,  
"status": "requires_payment_method",  
"transfer_data": null,  
"transfer_group": null  
}
```

# What is a Customer?

Customer object represents a customer of your business. It lets you create recurring charges and track payments that belong to the same customer.


## THE CUSTOMER OBJECT

```
{
  "id": "cus_QQo3ZChwp016fr",
  "object": "customer",
  "address": null,
  "balance": 0,
  "created": 1691764571,
  "currency": "cad",
  "default_source": null,
  "delinquent": false,
  "description": null,
  "discount": null,
  "email": null,
  "invoice_prefix": "681AD2B",
  "invoice_settings": {
    "custom_fields": null,
    "default_payment_method": null,
    "footer": null,
    "rendering_options": null
  },
  "livemode": false,
  "metadata": {},
  "name": null,
  "next_invoice_sequence": 1,
  "phone": null,
  "preferred_locales": [],
  "shipping": null,
  "tax_exempt": "none",
  "test_clock": null
}
```

# Bonus: Success and Cancel page

```
Ruby Python PHP Java Node Go .NET

1 // This example sets up an endpoint using the Express framework.
2 // Watch this video to get started: https://youtu.be/rPR2aJ6XnAc.
3
4 const express = require('express');
5 const app = express();
6 const stripe = require('stripe')('sk_test_51NdeLXHBRcUg9jlJFG...K0xCoj0Xi00Gxg5Tt0C')
7
8 app.post('/create-checkout-session', async (req, res) => {
9   const session = await stripe.checkout.sessions.create({
10     line_items: [
11       {
12         price_data: {
13           currency: 'usd',
14           product_data: {
15             name: 'T-shirt',
16           },
17           unit_amount: 2000,
18         },
19         quantity: 1,
20       },
21     ],
22     mode: 'payment',
23     success_url: 'http://localhost:4242/success',
24     cancel_url: 'http://localhost:4242/cancel',
25   });
26   res.redirect(303, session.url);
27 });
28
29
30 app.listen(4242, () => console.log('Listening on port ${4242}!'));
```



# Add parameters to success url

Ruby Python PHP Java Node Go .NET



```
1  const session = await stripe.checkout.sessions.create({  
2    success_url: "http://localhost:4242.com/success",  
3    success_url: "http://localhost:4242/order/success?session id={CHECKOUT SESSION ID}",  
4    // other options...,  
5  });
```

# stripe DOCS

## Add success and cancel routes

```
is example sets up an endpoint using the Express framework.  
atch this video to get started: https://youtu.be/rPR2aJ6XnAc.  
  
express = require('express');  
app = express();  
stripe = require('stripe')('sk_test_4eC39HqLyjWDarjtT1zdp7dc')  
  
post('/create-checkout-session', async (req, res) => {  
  const session = await stripe.checkout.sessions.create({  
    ...  
    success_url: 'http://localhost:4242/order/success',  
    cancel_url: 'http://localhost:4242/cancel',  
  });  
  
  res.redirect(303, session.url);  
});  
  
app.get('/order/success', async (req, res) => {  
  const session = await stripe.checkout.sessions.retrieve(req.query.session_id);  
  const customer = await stripe.customers.retrieve(session.customer);  
  
  res.send(`<html><body><h1>Thanks for your order, ${customer.name}!</h1></body></html>`);  
});  
  
app.get('/cancel', (req, res) => {  
  res.send(`<html><body><h1>Your order has been canceled!</h1></body></html>`);  
});  
  
app.use();  
  
app.listen(4242, () => console.log(`Listening on port ${4242}!`));
```



# Final: add get route

```
const stripe = require('stripe')('sk_test_4eC39HqLyjWDarjtT1zdp7dc')

app.get("/create-checkout-session", async (req, res) => {
  return res.send(`
    <html>
      <head>
        <title>Checkout</title>
      </head>
      <body>
        <form action="/create-checkout-session" method="POST">
          <button type="submit">Checkout</button>
        </form>
      </body>
    </html>
  `)
})

app.post('/create-checkout-session', async (req, res) => {
  const session = await stripe.checkout.sessions.create({
    ...
    success_url: 'http://localhost:4242/order/success',
    cancel_url: 'http://localhost:4242/cancel',
  });

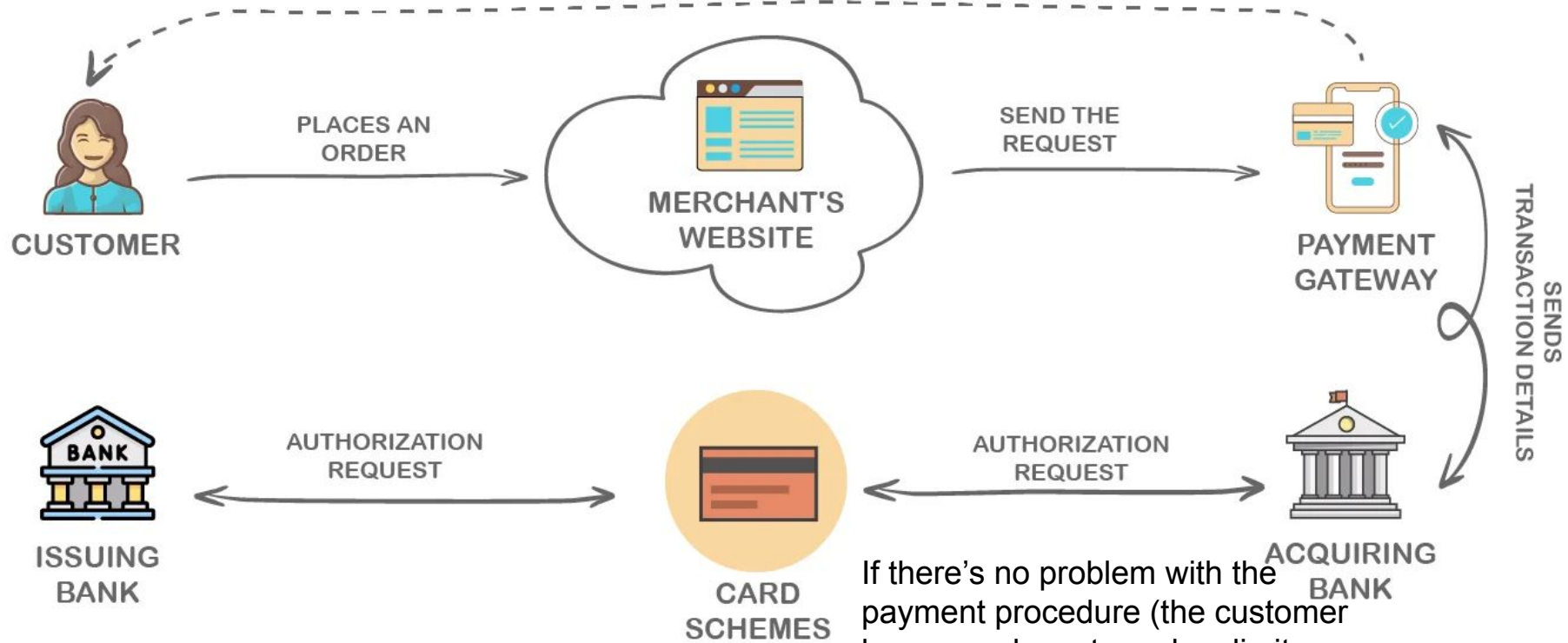
  res.redirect(303, session.url);
});

app.get('/order/success', async (req, res) => {
  ...
});

app.get('/cancel', (req, res) => {
  ...
})
```

What's the process  
between user  
making a payment  
on a website and a  
successful  
transaction?

Let's take a routine  
scenario when a  
customer wants to buy  
something online. Here's  
a look at payment  
architecture at work:



If there's no problem with the payment procedure (the customer has enough costs and no limit on a card), the issuing bank informs Payment Gateway about a successful transaction. That's when the user gets an online receipt and receives an order confirmation.

What does payment  
gateway have to  
comply with?

- PCI DSS Level 1: to avoid identity theft
- PSD2 (stands for “Payment Services Directive”): to regulate the third-party financial providers
- KYC (stands for “Know Your Customer”): to run verification account checks from time to time
- AML (stands for “Anti-Money Laundering”): to protect the accounts from criminal monetary activity.

different payment  
gateways and  
common examples

Hosted PG	Self-hosted PG	API hosted PG	Local bank integration gateways
During checkout, clients go to the Payment Service Provider (PSP) site.	The payment form is inside the merchant's site, not on PSP	The merchant's website sends the client's information to PG through the API interface	The customers put their payment info on the bank's website
Paypal, Amazon Pay, Unicorn Payment	QuickBooks Commerce's B2B Payments, Shopify Payments	Stripe, Razorpay, Instamojo, PayU	Authorize.Net, Payza, SecurionPay



# What is the efficiency of payment systems?

An efficient, secure and reliable payment system reduces the cost of exchanging goods and services. It is an essential tool for the effective implementation of monetary policy, and the smooth functioning of money and capital markets.

# Payment Instruments

Non-Cash Payment Instruments: Definition, Types, and Benefits

# Payment Instrument definition

“Payment instrument” means a personalised device(s) and/or set of procedures agreed between the payment service user and the payment service provider and used in order to initiate a payment order.



Payment Technology Law

<https://paytechlaw.com> › [glossary](#) › [payment-instrument](#) ⋮

[Payment instrument](#) | [Glossary](#) | [PayTechLaw](#) | [FinTechLawyers](#)

# Cash



## Cash



In economics, cash is money in the physical form of currency, such as banknotes and coins. In bookkeeping and financial accounting, cash is kept in a wallet. Current assets comprising currency or currency equivalents that can be accessed immediately or near-immediately. [Wikipedia](#)

Feedback

# Cheque



ClearTax

<https://cleartax.in> › ... › Banking › Cheque ⋮

## Definition, Understanding, and Why Cheque is Important?

A cheque is a **bill of exchange in which one party orders the bank to transfer the money to the bank account of another party**. It is a negotiable instrument that ...

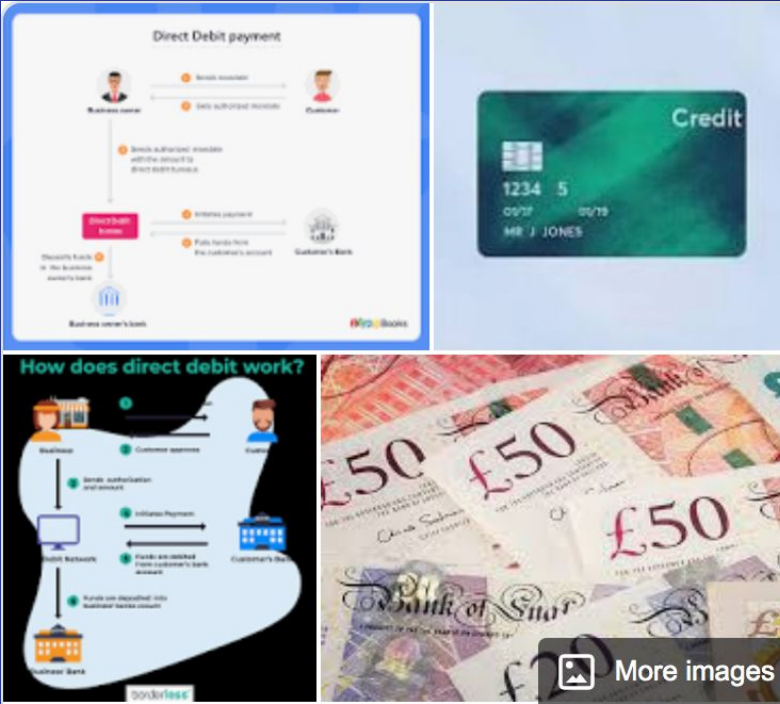
# Credit Transfer

## Transfer credit



Transfer credit, credit transfer, and advanced standing are the terms used by colleges and universities for the procedure of granting credit to a student for educational experiences or courses undertaken at another institution. This is a subset of recognition of prior learning. [Wikipedia](#)

# Direct Debit



**Direct Debit payment**

Business owner → Service provided → Customer

Service provided → Service authorized → Business owner's bank

Business owner's bank → Service payment → Customer's bank

Customer's bank → Funds transfer → Business owner's bank

**How does direct debit work?**

Business → Customer approves → Business

Business → Service authorization → Business

Business → Initial Payment → Customer's bank

Customer's bank → Funds are debited → Business

Business → Funds are deposited into → Business bank account

**Direct debit**

A direct debit or direct withdrawal is a financial transaction in which one organisation withdraws funds from a payer's bank account. [Wikipedia](#)

# Bank Card

A bank card is a card that is linked to a depository account, including ATM cards and debit cards. Similar to other kinds of cards, bank cards can be used for e-commerce purchases and other kinds of spending, with the amount deducted directly from the account at the time of transaction.



Investopedia

<https://www.investopedia.com> › ... › Banking



**Bank Card: Overview, Features, Incentives - Investopedia**



# Payment Channel

Payment channels are simply the way in which merchants accept payments and get them verified by banks or other payment providers. These could include anything from credit and debit online card payments, automated clearing houses or any one of the growing number of payment methods businesses are willing to take on. Apr 7, 2022



NCR

<https://www.ncr.com> › choose-right-payment-channel

What is a payment channel? | NCR Payments Primer

# Back to payment instruments

In general, non-cash payment instruments can be divided into three categories: paper-based, card-based, and electronic-based. All three are the realization of payment system evolution driven by technological innovations and business models, community traditions, and current policies. The following are three categories of non-cash payment instruments:



# Paper Based

## Check

- A check is a paper-based non-cash payment instrument in the form of an order for disbursement of customer funds. Stated on the check is the amount of funds withdrawal for the account holder or other designated name. Next, the bank will process fund disbursement based on the amount.

## Demand deposit

- Similar to checks, demand deposit is also paper-based non-cash payment instruments in the form of an order to the bank. The difference is, it is not used to withdraw funds, but to transfer the stated amount of funds from a customer's account to another customer's account.

# Card based

## Credit Card

- A credit card is a non-cash payment instrument that uses a debt mechanism, much like a debit note. However, because it uses a card, the process is much easier.

To optimally use a credit card, you need to know the transaction amount that has been made due to a debt limit within a certain period. At the end of the period, the accumulated debt will deduct funds in your account according to the debt you used.

## Debit Card


- A debit card is a customer's balance-based non-cash payment instrument. There is a certain limit for each type of debit card issued by each bank where customers save. With a debit card, customers can withdraw funds or make transfers via ATM without going to the bank.

Bank BRI supports the convenience of non-cash payments via debit cards through the BRI Direct Debit service. With this feature, you only need to register the card once. After that, you just have to enter the OTP code in each transaction, giving much convenience while securing your transaction.

# Electronic-based (E-money)

Electronic-based non-cash payment instruments are better known as electronic money (e-money). With its prepaid nature, customers can fill in their e-money balance according to their needs.

In addition to being practical and always at hand, e-money can also be used to make transactions with small denominations in the right amount. Hence, you don't have to bother receiving change when you do the transaction at minimarkets or grocery stores that provide access to e-money payments.



Overall, there are two types of electronic money, namely card-based and server-based.

## Card based

- Physically, card-based electronic money is very similar to a debit card or credit card. However, this type of e-money function is only for making payment transactions.

An example of card-based electronic money is BRIZZI. As a substitute for cash, you can use BRIZZI card at any merchant that provides access to e-money payments. In addition, you can also use it to pay for e-tolls, parking, and tickets for public transportation such as Transjakarta buses or KRL. You only need to top-up your BRIZZI card based on the required nominal before making a payment.

## Server based

- Did you know 'e-wallet'? Well, e-wallet or digital wallets are in fact still part of e-money. To use an e-wallet, you only need internet access to the bank's server. This is the main reason why e-wallet is referred to as server-based electronic money.

In contrast to card-based e-money, using an e-wallet is easier because you just need to install a digital wallet application on your smartphone. Various e-wallet applications have been integrated with banks in Indonesia, one of which is Bank BRI through BRI Virtual Account (BRIVA). With BRIVA, you can easily top-up your balance to your e-wallet.



# Cash

Money has been part of human history for at least the past 5,000 years in some form or another.



**What is Cash?**

**Cash Accounting**  
(Cash & Receipts)  
An accounting method where payment receipts recorded during the period in which they are received and expenses are recorded in the period in which they are incurred.

[More images](#)

## Cash

In economics, cash is money in the physical form of currency, such as banknotes and coins. In bookkeeping and financial accounting, cash is kept in a wallet. Current assets comprising currency or currency equivalents that can be accessed immediately or near-immediately. [Wikipedia](#)

Feedback

# Cash

the use of metal for money can be traced back to Babylon before 2000 BCE, standardized and certified coinage may not have existed until the 7th century BCE. According to many historians, it was during this time that the kingdom of Lydia (in present-day Turkey) issued the first regulated coins.



# Assaying

Assaying is analysis of the chemical composition of metals. The discovery of the touchstone for assaying helped the popularisation of metal-based commodity money and coinage. Any soft metal, such as gold, can be tested for purity on a touchstone. As a result, the use of gold for as commodity money spread from Asia Minor, where it first gained wide usage.

A touchstone allows the amount of gold in a sample of an alloy to be estimated. In turn this allows the alloy's purity to be estimated. This allows coins with a uniform amount of gold to be created.

# Barter

With barter, an individual possessing any surplus of value, such as a measure of grain or a quantity of livestock, could directly exchange it for something perceived to have similar or greater value or utility, such as a clay pot or a tool, however, the capacity to carry out barter transactions is limited in that it depends on a coincidence of wants. For example, a farmer has to find someone who not only wants the grain he produced but who could also offer something in return that the farmer wants.

# Payment Cards

In the late 20th century, payment cards such as credit cards and debit cards became the dominant mode of consumer payment in the First World. The BankAmericard, launched in 1958, became the first third-party credit card to acquire widespread use and to be accepted in shops and stores all over the United States, soon followed by the Mastercard and the American Express.

# Digital Currency

The development of computer technology in the second part of the twentieth century allowed money to be represented digitally. By 1990, in the United States, all money transferred between its central bank and commercial banks was in electronic form. By the 2000s most money existed as digital currency in banks' databases.

# Cryptocurrencies

In 2008, Bitcoin was proposed by an unknown author/s under the pseudonym of Satoshi Nakamoto. It was implemented the same year. Its use of cryptography allowed the currency to have a trustless, non-fungible and tamper resistant distributed ledger called a blockchain. It became the first widely used decentralized, peer-to-peer, cryptocurrency. Other comparable systems had been proposed since the 1980s. The protocol proposed by Nakamoto solved what is known as the double-spending problem without the need of a trusted third-party.

**Double-spending** is a fundamental flaw in a digital cash protocol in which the same single digital token can be spent more than once.

Since Bitcoin's inception, thousands of other cryptocurrencies have been introduced.



# What Are the Top 10 Strongest Currencies?

1. Kuwaiti Dinar (KWD)
2. Bahraini Dinar (BHD)
3. Omani Rial (OMR)
4. Jordanian Dinar (JOD)
5. British Pound (GBP)
6. (tie) Cayman Islands Dollar (KYD)  
(tie) Gibraltar Pound (GIP)
- 7.
8. (tie) Swiss Franc (CHF)  
(tie) Euro (EUR)
- 9.
10. U.S. Dollar (USD)

# Cheque

A cheque, or check, is a document that orders a bank (or credit union) to pay a specific amount of money from a person's account to the person in whose name the cheque has been issued.

# Nature of a cheque

A cheque is a negotiable instrument instructing a financial institution to pay a specific amount of a specific currency from a specified transactional account held in the drawer's name with that institution. Both the drawer and payee may be natural persons or legal entities.

# History

The cheque had its origins in the ancient banking system, in which bankers would issue orders at the request of their customers, to pay money to identified payees. Such an order was referred to as a bill of exchange.

The use of bills of exchange facilitated trade by eliminating the need for merchants to carry large quantities of currency (for example, gold) to purchase goods and services.

# Parts of a cheque

The four main items on a cheque are:

- Drawer: the person or entity whose transaction account is to be drawn. Usually, the drawer's name and account is preprinted on the cheque, and the drawer is usually the signatory.
- Payee: the person or entity who is to be paid the amount.
- Drawee: the bank or other financial institution where the cheque can be presented for payment. This is usually preprinted on the cheque.
- Amount: the currency amount. The amount and currency (e.g., dollars, pounds, etc.) usually must be written in words and in figures. The currency is usually the local currency, but may be a foreign currency.

# Attached documents

Cheques sometimes include additional documents. A page in a chequebook may consist of both the cheque itself and a stub or counterfoil – when the cheque is written, only the cheque itself is detached, and the stub is retained in the chequebook as a record of the cheque. Alternatively, cheques may be recorded with carbon paper behind each cheque, in ledger sheets between cheques or at the back of a chequebook, or in a completely separate transaction register that comes with a chequebook.

# Declining use

Cheque usage has been declining for some years, both for point of sale transactions (for which credit cards, debit cards or mobile payment apps are increasingly preferred) and for third party payments (for example, bill payments), where the decline has been accelerated by the emergence of telephone banking, online banking, and mobile banking.



# Variations on regular cheques



# Cashier's cheques and bank drafts

Cashier's cheques and banker's drafts, also known as bank cheques, banker's cheques or treasurer's cheques, are cheques issued against the funds of a financial institution rather than an individual account holder.

# Certified cheque

When a certified cheque is drawn, the bank operating the account verifies there are currently sufficient funds in the drawer's account to honour the cheque. Those funds are then set aside in the bank's internal account until the cheque is cashed or returned by the payee. Thus, a certified cheque cannot "bounce", and its liquidity is similar to cash, absent failure of the bank.

# Payroll cheque

A cheque used to pay wages may be referred to as a payroll cheque. Even when the use of cheques for paying wages and salaries became rare, the vocabulary "pay cheque" still remained commonly used to describe the payment of wages and salaries. Payroll cheques issued by the military to soldiers, or by some other government entities to their employees, beneficiaries, and creditors, are referred to as warrants.

# Warrants

Warrants look like cheques and clear through the banking system like cheques, but are not drawn against cleared funds in a deposit account. A cheque differs from a warrant in that the warrant is not necessarily payable on demand and may not be negotiable.[32] They are often issued by government entities such as the military to pay wages or suppliers. In this case they are an instruction to the entity's treasurer department to pay the warrant holder on demand or after a specified maturity date.

# Traveller's cheque

A traveller's cheque is designed to allow the person signing it to make an unconditional payment to someone else as a result of paying the issuer for that privilege. Traveller's cheques can usually be replaced if lost or stolen, and people frequently used them on holiday instead of cash as many businesses used to accept traveller's cheques as currency. The use of credit or debit cards has begun to replace the traveller's cheque as the standard for vacation money due to their convenience and additional security for the retailer. As a result, many businesses no longer accept traveller's cheques.

# Money or postal order

A cheque sold by a post office, bank, or merchant such as a grocery store for payment in favour of a third party is referred to as a money order or postal order. These are paid for in advance when the order is drawn and are guaranteed by the institution that issues them and can only be paid to the named third party. This was a common way to send low value payments to third parties, avoiding the risks associated with sending cash by post, prior to the advent of electronic payment methods.

# Oversized cheques

Oversized cheques are often used in public events such as donating money to charity or giving out prizes such as Publishers Clearing House. The cheques are commonly 18 by 36 inches (46 cm × 91 cm) in size; however, according to the Guinness Book of World Records, the largest ever is 12 by 25 metres (39 ft × 82 ft).



# Payment vouchers

In the US some public assistance programmes such as the Special Supplemental Nutrition Program for Women, Infants and Children, or Aid to Families with Dependent Children make vouchers available to their beneficiaries, which are good up to a certain monetary amount for purchase of grocery items deemed eligible under the particular programme. The voucher can be deposited like any other cheque by a participating supermarket or other approved business.



# Credit Transfer

Credit transfer can refer to:

- The transfer of money from one account to another, also called a wire transfer
- The procedure of granting credit to a student for studies completed at another school, is also called transfer credit or advanced standing

# Wire transfer

**Wire transfer, bank transfer, or credit transfer**, is a method of **electronic funds transfer** from one **person or entity** to another. A wire transfer can be made from one **bank account** to another bank account, or through a transfer of cash at a cash office.

The first widely used service for wire transfers was launched by **Western Union** in 1872 on its existing **telegraph** network. Once a sender had paid money to one telegraph office, the operator could transmit a message and "wire" the money to another office, using **passwords** and code books to authorize the release of the funds to a recipient at that location.

# Transfer credit

**Transfer credit**, **credit transfer**, and **advanced standing** are the terms used by colleges and universities for the procedure of granting credit to a student for educational experiences or courses undertaken at another institution. This is a subset of recognition of prior learning (which also includes prior work or non-institutional experience for credit).

"Advanced standing" is also used to describe the status of a student granted credit, as distinct from normal course entrants who commence the stream of study at the beginning.

# Direct Debit



**Hemanth Chandra**

I used Visa, RuPay, Mastercard cards · Author has **132** answers and **429.5K** answer views · 8y



Related **What is a debit card?**

Originally Answered: what is debit card?

Suppose you have a bank account with bank and you have some money in it. If you want to withdraw some money from the account, you have to go to bank and give a cheque and get money.

To reduce this process, banks have come up with a card called debit card. This card will be unique and it will be linked with your bank account. So, if you want to withdraw money from your account, you can just use this card in the ATM and get the cash. Also, this card can be used at different shopping places where the swipe machine (PoS) will be available.

Only thing is that you can only withdraw whatever money is present in your bank account and not more than that.

1.6K views · View upvotes



3



# Direct Debit

A **direct debit** or **direct withdrawal** is a financial transaction in which one organisation withdraws funds from a payer's bank account.<sup>[1]</sup> Formally, the organisation that calls for the funds ("the payee") instructs their bank to collect (i.e., debit) an amount directly from another's ("the payer's") **bank account** designated by the payer and pay those funds into a bank account designated by the payee. Before the payer's banker will allow the transaction to take place, the payer must have advised the bank that they have authorized the payee to directly draw the funds. It is also called **pre-authorized debit** (PAD) or **pre-authorized payment** (PAP). After the authorities are set up, the direct debit transactions are usually processed electronically.

# Direct Debit - Origins

[Alastair Hanton](#), a British banker and maths graduate, found that traditional banking methods of paying in cheques were incredibly costly. His answer was to gain permission from customers to take payment directly from their bank account. After six years of campaigning, the high-street banks finally agreed in 1964. By the end of the decade, the savings made using this method meant that direct debit had come into general use in the UK. <sup>[3]</sup>

# Direct Debit - Authorization

A direct debit instruction must in all cases be supported by some sort of authorization for the payee to collect funds from the payer's account. There are generally two methods to set up the authorization:

## Fees

In all countries, fees for direct debits are much lower than for credit cards. Credit cards charge a percentage of the transaction (2.5% to 3%) and sometimes a per-transaction fee (about \$0.25). In contrast, direct debit fees are \$0.15 to \$0.20 per transaction on the U.S.'s Automated Clearing House (ACH) network, and £0.20 to £0.40 per transaction on the U.K.'s New Payment System Operator (NPSO) network.<sup>[4]</sup> Fees vary between providers. Some offer flat rates while others have additional charges and monthly or yearly fees.<sup>[5]</sup>

# Bank Card

A **bank card** is typically a **plastic card** issued by a **bank** to its clients that performs one or more of a number of services that relate to giving the client access to a **bank account**.

Physically, a bank card will usually have the client's name, the issuer's name, and a unique card number printed on it.<sup>[1]</sup> It will have a **magnetic strip** on the back enabling various machines to read and access information.<sup>[2]</sup> Depending on the issuing bank and the preferences of the client, this may allow the card to be used as an **ATM card**, enabling transactions at automated teller machines; or as a **debit card**, linked to the client's bank account and able to be used for making purchases at the **point of sale** with a bank card using a **payment terminal**.



# Payment terminal

A **payment terminal**, also known as a **point of sale (POS) terminal**, **credit card machine**, **PIN pad**, **EFTPOS terminal** (or by the older term as **PDQ terminal** which stands for "Process Data Quickly"<sup>[1]</sup>), is a device which interfaces with **payment cards** to make **electronic funds transfers**. The terminal typically consists of a secure keypad (called a **PINpad**) for entering **PIN**, a screen, a means of capturing information from payments cards and a network connection to access the **payment network** for authorization.

A payment terminal allows a **merchant** to capture required **credit** and **debit card** information and to transmit this data to the **merchant services** provider or **bank** for authorization and finally, to transfer funds to the merchant.

# Payment terminal



PAX Technology S90 credit  
card terminal with a Visa  
card inserted.

# Thanks!

Contact:

Gjergj Kadriu

gk210076k@riinvest.net

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



# React-JWT Troubleshooting

Presentation



# Table 'node\_mysql\_jwt.users' doesn't exist

Make sure to apply:

- node-jwt.sql into the database with name of your choosing

# Stuck on node ./bin/www

Make sure to have:

- JWT\_SECRET set in .env FILE ( not .env.example )

# Stuck on node ./bin/www

Make sure to have:

- JWT\_SECRET set in .env FILE ( not .env.example )
- DB credentials are set right
-

**REACT:** Module not found: Error: Can't resolve '../auth.service' in 'C:\Users\Gjergj Kadriu\Projects\stripecourse\react-jwt\src\components'

You can try:

- Adding '../services/auth.service' instead of just '../auth.service'

Reason: current directory does not actually contain the service



**REACT:** Module not found: Error: Can't resolve '../auth.service' in 'C:\Users\Gjergj Kadriu\Projects\stripecourse\react-jwt\src\components'

You can try:

- Adding '../services/auth.service' instead of just '../auth.service'

Reason: current directory does not actually contain the service

# REACT: Uncaught runtime errors

## Uncaught runtime errors:

### ERROR

```
Cannot destructure property 'basename' of 'react__WEBPACK_IMPORTED_MODULE_0__useContext(...)' as it is null.  
TypeError: Cannot destructure property 'basename' of 'react__WEBPACK_IMPORTED_MODULE_0__useContext(...)' as it is null.  
    at LinkWithRef (http://localhost:3001/static/js/bundle.js:39664:5)  
    at renderWithHooks (http://localhost:3001/static/js/bundle.js:26809:22)  
    at updateForwardRef (http://localhost:3001/static/js/bundle.js:29380:24)  
    at beginWork (http://localhost:3001/static/js/bundle.js:31427:20)  
    at HTMLUnknownElement.callCallback (http://localhost:3001/static/js/bundle.js:16401:18)  
    at Object.invokeGuardedCallbackDev (http://localhost:3001/static/js/bundle.js:16445:20)  
    at invokeGuardedCallback (http://localhost:3001/static/js/bundle.js:16502:35)  
    at beginWork$1 (http://localhost:3001/static/js/bundle.js:36376:11)  
    at performUnitOfWork (http://localhost:3001/static/js/bundle.js:35623:16)  
    at workLoopSync (http://localhost:3001/static/js/bundle.js:35546:9)
```

# REACT: Uncaught runtime errors

You can try:

- On App.js (main file),
  - Add: `import { BrowserRouter } from 'react-router-dom';`
  - Change `<div>` starting/ending tag with `<BrowserRouter></BrowserRouter>`

# Still stuck?

Don't hesitate to reach out to my email: [gk210076k@riinvest.net](mailto:gk210076k@riinvest.net).

Make sure to include your name, your questions and an ending to your email to keep it professional.

# What is a Portal?

Portal is a term, generally synonymous with gateway, for a World Wide Web site that is a major starting site for users when they get connected to the Web.

There are general portals and specialized or niche portals. Examples of general portals: Yahoo, Excite, Netscape, Lycos, CNET, Microsoft Network, and America Online's AOL.com.

# Web portals are sometimes classified as horizontal or vertical.

- A horizontal portal is used as a platform to several companies in the same economic sector or to the same type of manufacturers or distributors.
- A vertical portal (also known as a "vortal") is a specialized entry point to a specific market or industry niche, subject area, or interest. Some vertical portals are known as "vertical information portals" (VIPs) VIPs provide news, editorial content, digital publications, and e-commerce capabilities. In contrast to traditional vertical portals, VIPs also provide dynamic multimedia applications including social networking, video posting, and blogging.

# Meaning and Features of Business model

Business model is the most discussed and least understood aspect of the web. There is so much talk about how the web changes traditional business models. But there is little clear-cut evidence of exactly what this means.

Basically, a business model is the method of doing business by which a company can sustain itself -- that is, generate revenue. The business model spells-out how a company makes money by specifying where it is positioned in the value chain.

# E-Business Concept

The e-business concept describes the rationale of the business, its goals and vision, and products or offerings from which it will earn revenue. A successful concept is based on a market analysis that identifies customers likely to purchase the product and how much they are willing to pay for it.



# Value Proposition

The value proposition describes the value that the company will provide to its customers and, sometimes, to others as well. With a value proposition the company attempts to offer better value than competitors so that the buyer will benefit most with this product.

A value proposition may include one or more of the following points:

- Reduced price
- Improved service or convenience such as the "1 click" checkout
- Speed of delivery and assistance
- Products that lead to increased efficiency and productivity
- Access to a large and available inventory that presents options for the buyer

- Providing value in an e-business uses the same approach as providing value in any business, although it may require different capabilities. But common to both are the customers who seek out value in a business transaction. The value proposition helps focus the business on the well-being of the customer, where it remains in successful companies.
- Value Delivery through Integration Of Activities

# Sources of Revenue

Depending on the business model, several revenue sources may be available to an ebusiness. Many online businesses will have a three or four of these sources. A mix of revenue sources is often referred to as a revenue model but may be mistakenly called a business model.

# Sources of Revenue

Some of these sources of revenue are:

- Advertising
- Affiliation
- Agent commissions
- Licensing
- Sales commissions
- Sales profits
- Sponsorship
- Subscription
- Syndication
- Use Fees

# E-Business Models

- An e-business model is simply the approach a company takes to become a profitable business on the Internet. There are many buzzwords that define aspects of electronic business, and there are subgroups as well, such as content providers, auction sites and pure-play Internet retailers in the business-to-consumer space.

# E-Business Models

E-Commerce or Electronics Commerce business models can generally be categorized into the following types.

- Business - to - Business (B2B)
- Business - to - Consumer (B2C)
- Consumer - to - Consumer (C2C)
- Consumer - to - Business (C2B)
- Business - to - Government (B2G)
- Government - to - Business (G2B)
- Government - to - Citizen (G2C)

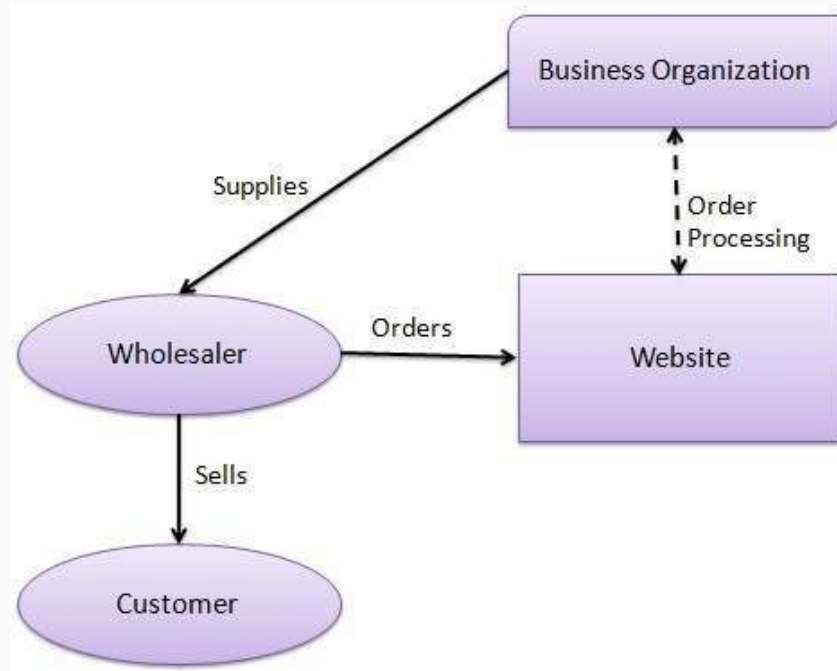
# Business - to -Business (B2B)

A type of commerce transaction that exists between businesses, such as those involving a manufacturer and wholesaler, or a wholesaler and a retailer is known as Business-to-Business (B2B). It refers to business that is conducted between companies, rather than between a company and individual consumers.

IBM, Hewlett Packard (HP), CISCO, Dell are the examples of B2B.



# Business - to -Business (B2B)



# The B2B model can be supplier centric, buyer centric or intermediary centric models

## Supplier Centric Model

- In this model, a supplier sets up the electronic commerce market place. Various customers interact with the supplier at its electronic market place. The supplier is generally a dominant supplier. He may provide customized solutions and pricing to fit the needs of buyers. Intel and Cisco have been adopting the supplier centric Model.

# The B2B model can be supplier centric, buyer centric or intermediary centric models

## Buyer centric Model

- In this model, big business organisations with high volume purchase capacity create an electronic commerce market place. The online electronic commerce marketplace is used by the buyer for placing requests for quotations and carrying out the entire purchase process. The US government and the General Electric Trading Process Network are examples of buyer-centric model.

# The B2B model can be supplier centric, buyer centric or intermediary centric models

## Intermediary – centric model

- In this model, a third party sets up the electronic commerce market place. The third party attracts both buyer and seller to interact with each other at its market place. The buyer places their request interacts with each other and reaches a final decision in purchase or sale of goods.

# Advantages of B2B

- Instant purchases
- Increased revenue
- Expands company's presence
- Closer business relationships

# The Disadvantages of a B2B

- Limited Market
- Long Purchase Decision Time
- Inverted Power Structure
- Sales Process

# Business - to - Consumer (B2C)

As the name suggests, it is the model involving business and consumers over the internet. B2C means selling directly to the end consumer or selling to an individual rather than a company. Website following B2C business model sells its product directly to a customer. A customer can view products shown on the website of business organization. The customer can choose a product and order the same. Website will send a notification to the business organization via email and organization will dispatch the product/goods to the customer. B2C is also known as internet retailing or E-trailing.

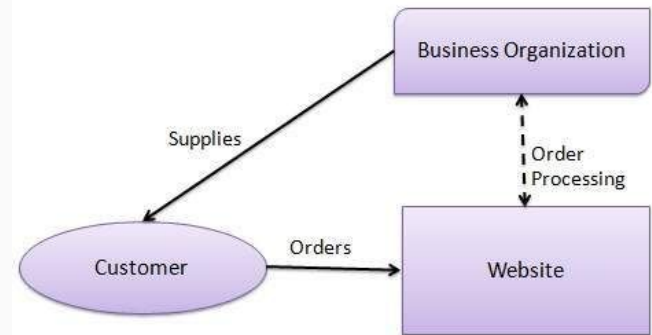
# Following are the key features of a B2C Model

- Heavy advertising required to attract large number of customers.
- High investment in terms of hardware/software.
- Support or good customer care service



# Following are the key features of a B2C Model

- Heavy advertising required to attract large number of customers.
- High investment in terms of hardware/software.
- Support or good customer care service



# Advantages of E-Commerce for B2C Businesses

Benefits of B2C e-commerce can be considered either from the viewpoint of the consumer or from that of the business.

# Advantages of E-Commerce for B2C Businesses

From the consumer side, benefits include:

1. Access to goods and services from home or other remote locations.
2. The possibility of lower cost of goods and services.
3. Access to a greater variety of goods and services on offer.
4. Consumers can shop at any time of day, from the privacy of their own home. The internet has been called “the mall that never sleeps.”
5. So many choices – Consumers can shop for basically any item they can think of! Airline tickets, groceries, clothing, and even medicine!
6. 6. Hassle free – Consumers can shop online without dealing with annoying sales people, fighting the congestion of shopping malls, and driving 10 different places to find one thing.

# Advantages of E-Commerce for B2C Businesses

From the business side, benefits include:

1. Lower transaction costs associated with sales.
2. Access to global markets and hence to more potential customers.
3. Can reach worldwide market with unlimited volume of customers.
4. Can display information, pictures, and prices of products or services without spending a fortune on colourful advertisements.
5. In some cases, makes order processing an easier task than before.
6. Can operate on decreased, little, or even no overhead

# Disadvantage of E-Commerce for B2C Businesses

1. The competition is so fast for the web. There can literally be thousands of places a customer can go and purchase the same product.
2. Technology problem can cause problems to operate the site properly, resulting in losing customers and sales.
3. Catalogue Inflexibility: The catalogue needs to regenerate every time when there is some new information or items to add in.
4. Limited Market Place: Normally, customer will be from locally and limited to certain area.
5. High Sales Cycle: Usually, a lot of phone calls and mailings are needed.
6. Required Higher Cost of Doing Business: Cost regarding inventory, employees, purchasing costs, and order-processing costs associated with faxing, phone calls, and data entry, and even physical stores increase transaction costs.
7. Inefficient Business Administration: Store inventory levels, shipping and receiving logs, and other business administration tasks might need to be categorized and updated manually in and done only when have time. This cause the information might not the latest or updated.
8. Need to employ number of staff: Need staffs that give customer service and sales support service.

# Disadvantages for the consumer

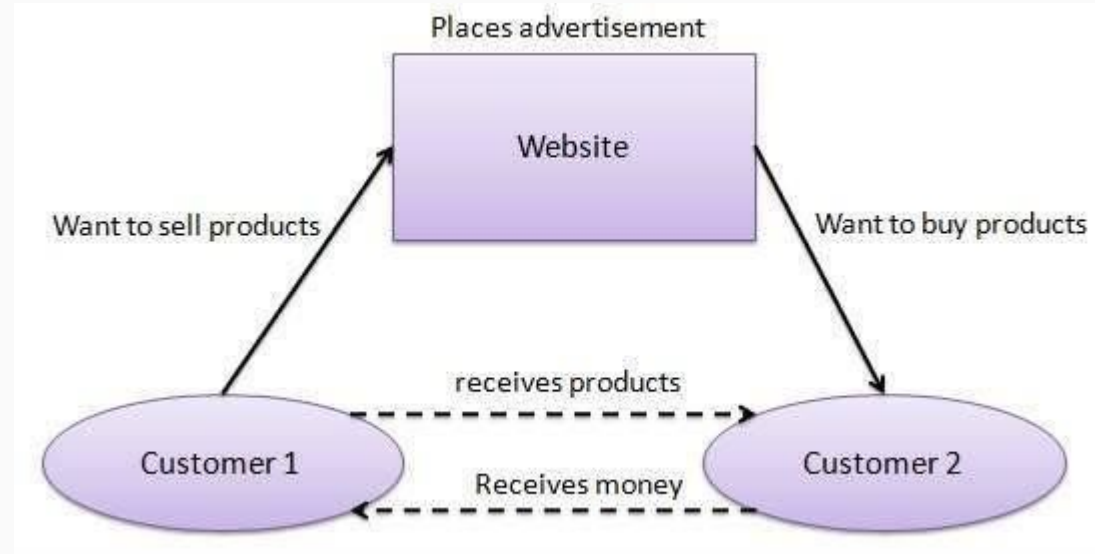
1. Security issue: probably the number one reason why people don't purchase online. Credit card information is very sensitive and must be handled by someone the customer can trust. Scams, frauds and rip-off are not uncommon on the web.
2. Customer services: consumer are not always satisfied with their purchases and when buying online.

# Consumer - to - Consumer (C2C)

Customer to Customer (C2C), sometimes known as Consumer to Consumer, ECommerce involves electronically-facilitated transactions between individuals, often through a third party. One common example is online auctions, such as Ebay, where an individual can list an item for sale and other individuals can bid to purchase it. Auction sites normally charge commission to the sellers using them. They act purely as intermediaries who match buyers with sellers and they have little control over the quality of the products being offered, although they do try to prevent the sale of illegal goods, such as pirate CDs or DVDs.

Website following C2C business model helps consumer to sell their assets like residential property, cars, motorcycles etc. or rent a room by publishing their information on the website.

# Consumer - to - Consumer (C2C)





# Advantages of C2C E-Commerce

- It is always available so that consumers can have access to whenever they feel like shopping
- There is regular updating of the website
- Consumers selling products to other consumers benefit from the higher profitability that result from selling directly to one another
- There is a low transaction cost; sellers can post their goods over the internet at a cheaper rate far better than higher price of renting a space in a store
- Customer can directly contact sellers and do without an intermediary

# Disadvantages of C2C E-Commerce

- Payment made has no guarantee
- There could be theft as scammers might try to create their website with names of some famous C2C websites such as eBay to attract customers.
- There is lack of controlling quality of the products. C2C e-commerce websites must update their technologies to suit the current happenings in their business. It is everybody's wish to buy or sell without any threat to their security. C2C e-commerce websites to upgrade their security measures to arrest the situation of scammers and fraudsters that pose threat to the security of consumers and sellers. C2C e-commerce websites should increase their payment technology to allow consumers to purchase products at ease.

# Consumer - to -Business (C2B)

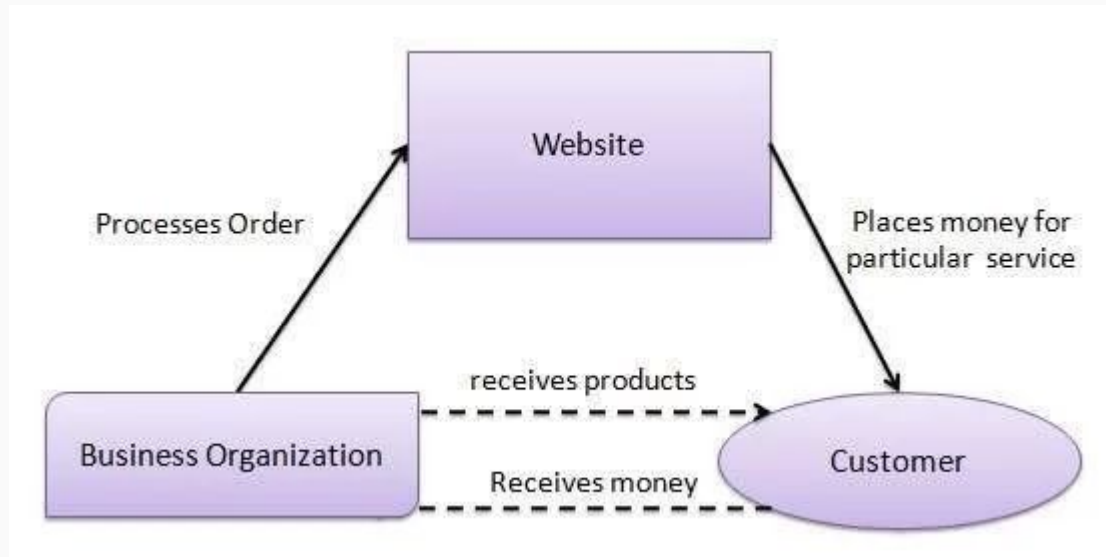
Customer to Business (C2B), sometimes known as Consumer to Business, is the most recent E-Commerce business model. In this model, individual customers offer to sell products and services to companies who are prepared to purchase them. This business model is the opposite of the traditional B2C model.

C2B (Customer to Business) is a model where initiative comes from the customers (consumers) and enterprises are the target group.

# General features of C2B

- Direct action.
- Collaborative consumption.
- Detailed segmentation.
- Interaction.
- Reciprocity.
- Bi-directionality

# C2B Diagram



# Advantages of C2B

1. Could be described in terms of paths, nodes, properties
2. Could be graphic, examples could be generated.
3. One single place for all Magnolia configurable elements.
4. Could still be linked to java doc

# Business-to-Government (B-to-G)

Business-to-government (B2G) e-commerce is concerned with the need for business to sell goods or services to governments or government agencies. Such activities include supplying the army, police force, hospitals and schools with products and services. Furthermore, businesses will often compete in an online environment for contracts to provide services to the public on behalf of the government. Such services may include the collection of taxes, and the supply of public services. The exchange of information, services and products between business organizations and government agencies on-line. This may include,

- E-procurement services, in which businesses learn about the purchasing needs of agencies and provide services.
- A virtual workplace in which a business and a government agency could coordinate the work on a contracted project by collaborating on-line to coordinate on-line meetings, review plans and manage progress.
- Rental of on-line applications and databases designed especially for use by government agencies

# Summary

An electronic business model is an important baseline for the development of ecommerce system applications.

Essentially, it provides the design rationale for e-commerce systems from the business point of view. However, how an e-business model must be defined and specified is a largely open issue.



# Key Terms

1. Portal is a doorway, entrance, or gate, especially one that is large and imposing. It is a Website considered as an entry point to other websites by providing access to a search engine.
2. The term portal space is used to mean the total number of major sites competing to be one of the portals.
3. Business model is the method of doing business by which a company can sustain itself -- that is, generate revenue

# Key Terms

1. E-Business model is simply the approach a company takes to become a profitable business on the Internet
2. B2B: A type of commerce transaction that exists between businesses
3. B2C: It is the model involving business and consumers over the internet
4. C2B: In this model, individual customers offer to sell products and services to companies who are prepared to purchase them.
5. Mobile commerce: Buying and selling of goods and services through wireless technology-i.e., handheld devices such as cellular telephones and personal digital assistants (PDAs)

# Basic Concept of E-Commerce

Presentation



# Introduction

Transacting or facilitating business on the Internet is called ecommerce. Ecommerce is short for "electronic commerce."

# Introduction

Transacting or facilitating business on the Internet is called ecommerce. Ecommerce is short for "electronic commerce."

# Introduction

Any form of business transaction conducted electronically is ecommerce.

# Examples of Ecommerce



# Online Shopping

Buying and selling goods on the Internet is one of the most popular examples of ecommerce. Sellers create storefronts that are the online equivalents of retail outlets. Buyers browse and purchase products with mouse clicks. Though Amazon.com is not the pioneer of online shopping, it is arguably the most famous online shopping destination.



# Electronic Payments

When you are buying goods online, there needs to be a mechanism to pay online too. That is where payment processors and payment gateways come into the picture. Electronic payments reduce the inefficiency associated with writing and mailing checks. It also does away with many of the safety issues that arise due to payment made in currency notes.

# Online Auctions

When you think online auction, you think eBay. Physical auctions predate online auctions, but the Internet made auctions accessible to a large number of buyers and sellers. Online auctions are an efficient mechanism for price discovery. Many buyers find the auction shopping mechanism much interesting than regular storefront shopping.

# Internet Banking

Today it is possible for you to perform the entire gamut of banking operations without visiting a physical bank branch. Interfacing of websites with bank accounts, and by extension credit cards, was the biggest driver of ecommerce.

# Online Ticketing

Air tickets, movie tickets, train tickets, play tickets, tickets to sporting events, and just about any kind of tickets can be booked online. Online ticketing does away with the need to queue up at ticket counters.

# Types of Ecommerce

Ecommerce can be classified based on the type of participants in the transaction:

# Business to Business (B2B)

B2B ecommerce transactions are those where both the transacting parties are businesses, e.g., manufacturers, traders, retailers and the like.

# Business to Consumer (B2C)

When businesses sell electronically to end-consumers, it is called B2C ecommerce.

# Consumer to Consumer (C2C)

Some of the earliest transactions in the global economic system involved barter -- a type of C2C transaction. But C2C transactions were virtually non-existent in recent times until the advent of ecommerce. Auction sites are a good example of C2C ecommerce.



# Benefits of Ecommerce

The primary benefits of ecommerce revolve around the fact that it eliminates limitations of time and geographical distance. In the process, ecommerce usually streamlines operations and lowers costs.

On some platforms, ecommerce has shown the promise of explosive growth. Two such examples are:

- M-Commerce Mcommerce is short for "mobile commerce." The rapid penetration of mobile devices with Internet access has opened new avenues of ecommerce for retailers.
- F-Commerce Fcommerce is short for "Facebook commerce." The immense popularity of Facebook provides a captive audience to transact business.

We can come up with four primary e-commerce types

# Business to Business E-commerce (B2B E-commerce)

In this type of e-commerce, both participants are businesses. As a result, the volume and value of B2B e-commerce can be huge. An example of business to business e-commerce could be a manufacturer of gadgets sourcing components online.

# Business to Consumer Ecommerce (B2C Ecommerce)

When we hear the term e-commerce, most people think of B2C e-commerce. That is why a name like Amazon.com pops up in most discussions about e-commerce. Elimination of the need for physical stores is the biggest rationale for business to consumer e-commerce. But the complexity and cost of logistics can be a barrier to B2C e-commerce growth.

# Consumer to Business Ecommerce (C2B Ecommerce)

On the face of it, C2B e-commerce seems lop-sided. But online commerce has empowered consumers to originate requirements that businesses fulfill. An example of this could be a job board where a consumer places her requirements and multiple companies bid for winning the project. Another example would be a consumer posting his requirements of a holiday package, and various tour operators making offers.

# Consumer to Consumer Ecommerce (C2C E-commerce)

The moment you think of C2C e-commerce eBay.com comes to mind. That is because it is the most popular platform that enables consumers to sell to other consumers. Since eBay.com is a business, this form of e-commerce could also be called C2B2C ecommerce (consumer to business to consumer e-commerce)

Employees can be regarded as a special type of consumer. That would give rise to a new type of e-commerce: B2E (Business to Employee e-commerce).



if we consider Government to be separate entity, as also Citizens, we can come up with many more types of e-commerce: B2G (Business to Government), G2B (Government to Business), G2E (Government to Employee), G2G (Government to Government), G2C (Government to Citizen), C2G (Citizen to Government).

# Order Fulfillment

If your third party logistics provider did not provide you with a platform to place orders and monitor delivery, you would lose control over your logistics. As customers demand faster and more accurate delivery cycles, your ability to manage logistics can be a key differentiator and competitive advantage. Hence B2B systems that enable and monitor order fulfillment are indispensable.

# How Does B2B Ecommerce Yield Benefits?

At its core, business to business ecommerce helps because of two primary processes:

- It Enables Data Exchange
  - Being able to transmit and synchronize data electronically is at the heart of all the benefits that B2B ecommerce provides.
- It Reduces Cycle Time
  - As a consequence of real-time data exchange, comparison and monitoring algorithms, and autotriggered business processes, cycle times have been reduced substantially. In turn, this has led to higher productivity, lowered costs, improved quality, and faster delivery.

# Who Sets Up B2B Ecommerce Websites?

Any business can set up a B2B ecommerce website.

And if the business is not big enough to have their own online B2B setup, they can participate as vendors in online marketplaces.

# Buyers

If you are a buyer, you can set up a website where you post your requirements, and sellers send in proposals. This would make sense for large buyers.

# Sellers

As a large seller, you can set up a B2B ecommerce website where buyers browse through your offerings and place orders. This sort of ecommerce has many similarities with B2C (business to consumer) ecommerce.

# Marketplaces

Marketplaces are intermediaries that attempt to match buyers and sellers. Unlike a handful of large buyers and sellers, most businesses find it easier to transact at marketplaces.

# Still stuck?

Don't hesitate to reach out to my email: [gk210076k@riinvest.net](mailto:gk210076k@riinvest.net).

Make sure to include your name, your questions and an ending to your email to keep it professional.



# Direct-to-consumer

Presentation

# Preknowledge: Goods

In **economics**, **goods** are items that satisfy human **wants**<sup>[1]</sup> and provide **utility**, for example, to a **consumer** making a purchase of a satisfying **product**. A common distinction is made between goods which are transferable, and **services**, which are not transferable.<sup>[2]</sup>

# Preknowledge: Service

A **service** is an act or use for which a consumer, firm, or government is **willing** to pay.<sup>[1]</sup> Examples include work done by barbers, doctors, lawyers, mechanics, banks, insurance companies, and so on. **Public services** are those that society (nation state, fiscal union or region) as a whole pays for. Using **resources**, **skill**, ingenuity, and experience, service providers benefit service consumers. Services may be defined as intangible acts or performances whereby the service provider provides value to the customer.

# Preknowledge: Consumer

A **consumer** is a person or a group who intends to order, or use purchased **goods**, products, or **services** primarily for personal, **social**, family, household and similar needs, who is not directly related to entrepreneurial or business activities. The term most commonly refers to a person who purchases goods and services for personal use.

# Preknowledge: Wholesaling

**Wholesaling** or **distributing** is the sale of goods or **merchandise** to retailers; to **industrial**, commercial, **institutional** or other professional business users; or to other **wholesalers (wholesale businesses)** and related subordinated services. In general, it is the sale of **goods** in **bulk** to anyone, either a person or an organization, other than the end consumer of that merchandise. Wholesaling is buying goods in bulk quantity, usually directly from the manufacturer or source, at a discounted rate. The retailer then sells the goods to the end consumer at a higher price making a profit.

# Preknowledge: Manufacturing

**Manufacturing** is the creation or production of goods with the help of equipment, labor, machines, tools, and chemical or biological processing or formulation. It is the essence of the secondary sector of the economy.<sup>[1][unreliable source?]</sup> The term may refer to a range of human activity, from handicraft to high-tech, but it is most commonly applied to industrial design, in which raw materials from the primary sector are transformed into finished goods on a large scale. Such goods may be sold to other manufacturers for the production of other more complex products (such as aircraft, household appliances, furniture, sports equipment or automobiles), or distributed via the tertiary industry to end users and consumers (usually through wholesalers, who in turn sell to retailers, who then sell them to individual customers).

# Preknowledge: Profit

**Profit**, in **accounting**, is an **income** distributed to the **owner** in a **profitable market production** process (**business**). Profit is a measure of **profitability** which is the owner's major interest in the income-formation process of market production. There are several profit measures in common use.

# Preknowledge: Supply chain

A **supply chain**, sometimes expressed as a "supply-chain",<sup>[1]</sup> is a complex **logistics** system that consists of facilities that convert raw materials into **finished products** and distribute them<sup>[2]</sup> to end consumers<sup>[3]</sup> or end **customers**.<sup>[4]</sup> Meanwhile, **supply chain management** deals with the flow of goods within the supply chain in the most efficient manner.<sup>[5]</sup>



# Preknowledge: Retail

**Retail** is the sale of **goods** and **services** to **consumers**, in contrast to **wholesaling**, which is sale to business or institutional customers. A **retailer** purchases goods in large quantities from **manufacturers**, directly or through a wholesaler, and then sells in smaller quantities to consumers for a **profit**. Retailers are the final link in the **supply chain** from producers to consumers.

# Preknowledge: Merchandising

**Merchandising** is any practice which contributes to the sale of **products** to a retail **consumer**. At a retail in-store level, merchandising refers to displaying products that are for sale in a creative way that entices customers to purchase more items or products.

# Preknowledge: Manufacturing

**Manufacturing** is the creation or production of goods with the help of equipment, labor, machines, tools, and chemical or biological processing or formulation. It is the essence of the secondary sector of the economy.<sup>[1][unreliable source?]</sup> The term may refer to a range of human activity, from handicraft to high-tech, but it is most commonly applied to industrial design, in which raw materials from the primary sector are transformed into finished goods on a large scale. Such goods may be sold to other manufacturers for the production of other more complex products (such as aircraft, household appliances, furniture, sports equipment or automobiles), or distributed via the tertiary industry to end users and consumers (usually through wholesalers, who in turn sell to retailers, who then sell them to individual customers).

# Preknowledge: Institution

**Institutions** (singular: **institution**) are humanly devised structures of rules and norms that shape and constrain individual behavior.<sup>[1][2][3][4]</sup> All definitions of institutions generally entail that there is a level of persistence and continuity.<sup>[5]</sup> Laws, rules, social conventions and norms are all examples of institutions.<sup>[6]</sup> Institutions vary in their level of formality and informality.<sup>[7][8]</sup>

# Preknowledge: Bulk Sale

A **bulk sale**, sometimes called a **bulk transfer**, is when a **business** sells all or nearly all of its **inventory** to a single buyer and such a sale is not part of the **ordinary course of business**. This type of action is often used in an attempt to dodge **creditors** who intend to seize such business's inventory; in order to protect the purchaser from claims made by **creditors** of the seller, the seller must usually complete an **affidavit** outlining its secured and unsecured creditors, which must usually be filed with a government department, such as a court office. Such procedures are outlined in the **bulk sales act** of most jurisdictions. If the buyer does not complete the registration process for a bulk sale, creditors of the seller may obtain a declaration that the sale was invalid against the creditors and the creditors may take possession of the goods or obtain judgment for any proceeds the buyer received from a subsequent sale.

# Preknowledge: Wholesaling

**Wholesaling** or **distributing** is the sale of goods or **merchandise** to retailers; to **industrial**, commercial, **institutional** or other professional business users; or to other **wholesalers** (**wholesale businesses**) and related subordinated services. In general, it is the sale of **goods** in **bulk** to anyone, either a person or an organization, other than the end consumer of that merchandise. Wholesaling is buying goods in bulk quantity, usually directly from the manufacturer or source, at a discounted rate. The retailer then sells the goods to the end consumer at a higher price making a profit. [2]

# Review: E-Commerce

**E-commerce (electronic commerce)** is the activity of electronically buying or selling of products on online services or over the Internet. E-commerce draws on technologies such as mobile commerce, electronic funds transfer, supply chain management, Internet marketing, online transaction processing, electronic data interchange (EDI), inventory management systems, and automated data collection systems. E-commerce is in turn driven by the technological advances of the semiconductor industry, and is the largest sector of the electronics industry.

# Review: Online shopping

**Online shopping** is a form of **electronic commerce** which allows consumers to directly buy **goods** or **services** from a seller over the **Internet** using a **web browser** or a **mobile app**. Consumers find a product of interest by visiting the **website** of the retailer directly or by searching among alternative vendors using a **shopping search engine**, which displays the same product's availability and pricing at different e-retailers. As of 2020, customers can shop online using a range of different computers and devices, including **desktop computers**, **laptops**, **tablet computers** and **smartphones**.



# Review: Electronics

**Electronics** is a scientific and engineering discipline that studies and applies the principles of **physics** to design, create, and operate devices that manipulate **electrons** and other **charged particles**. Electronics is a subfield of **electrical engineering**, but it differs from it in that it focuses on using **active devices** such as **transistors**, **diodes**, and **integrated circuits** to control and amplify the flow of **electric current** and to convert it from one form to another, such as from **alternating current** (AC) to **direct current** (DC) or from **analog** to **digital**.<sup>[1]</sup> Electronics also encompasses the fields of **microelectronics**, **nanoelectronics**, **optoelectronics**, and **quantum electronics**, which deal with the fabrication and application of electronic devices at microscopic, nanoscopic, optical, and quantum scales.

## Review: Product (business)

In marketing, a **product** is an object, or system, or service made available for **consumer** use as of the consumer demand; it is anything that can be offered to a **market** to satisfy the desire or need of a **customer**.<sup>[1]</sup> In **retailing**, products are often referred to as **merchandise**, and in **manufacturing**, products are bought as **raw materials** and then sold as **finished goods**. A **service** is also regarded as a type of product.

# Review: Internet

The **Internet** (or **internet**)<sup>[a]</sup> is the global system of interconnected **computer networks** that uses the **Internet protocol suite** (TCP/IP)<sup>[b]</sup> to communicate between networks and devices. It is a **network of networks** that consists of private, public, academic, business, and government networks of local to global scope, linked by a broad array of electronic, wireless, and **optical networking** technologies. The Internet carries a vast range of information resources and services, such as the interlinked **hypertext** documents and **applications** of the **World Wide Web** (WWW), **electronic mail**, **telephony**, and **file sharing**.

# Preknowledge: Retail

**Retail** is the sale of **goods** and **services** to **consumers**, in contrast to **wholesaling**, which is sale to business or institutional customers. A **retailer** purchases goods in large quantities from **manufacturers**, directly or through a wholesaler, and then sells in smaller quantities to consumers for a **profit**. Retailers are the final link in the **supply chain** from producers to consumers.

# Introduction

**Direct-to-consumer (DTC)** or **business-to-consumer (B2C)** is the business model of selling products directly to customers and thereby bypassing any third-party **retailers**, **wholesalers**, or any other middlemen. Direct-to-consumer sales are usually transacted **online**, but direct-to-consumer brands may also operate physical retail spaces as a complement to their main e-commerce platform in a **clicks-and-mortar** business model.

# History

# History

Direct-to-consumer became immensely popular during the **dot-com bubble** of the late 1990s when it was mainly used to refer to online retailers who sold products and services to consumers through the Internet.<sup>[1]</sup>

# History



## Advantages and disadvantages

Direct-to-consumer enjoys lower costs compared to physical retail, as it has reduced the number of different business components like **employees**, purchasing cost, mailing confirmation, **renting** or establishing a **physical store**.<sup>[2]</sup>

## Advantages and disadvantages

DTC enables smaller companies to compete with large and successful companies in terms of **price**, availability of the products, and quality since costs are lower.<sup>[3]</sup> Direct-to-consumer sales can drive stronger **brand loyalty** and customer retention.<sup>[1]</sup>

## Advantages and disadvantages

The main risks in the online Direct-to-consumer are expanding **liability** risk, cyber risk and more **supply chain** demands. DTC exposes a business to tasks that would otherwise be taken up by **wholesalers** and retailers, such as shipping, labelling, and **cybersecurity**. **Data privacy** and cybersecurity are especially important in online businesses. Accepting online payments can make DTC businesses a target for hackers and cyber criminals, exposing them to the risks of fraudulent payments and false chargebacks.

# Still stuck?

Don't hesitate to reach out to my email: [gk210076k@riinvest.net](mailto:gk210076k@riinvest.net).

Make sure to include your name, your questions and an ending to your email to keep it professional.

# Direct-to-consumer

Presentation

# Preknowledge:Dot-com bubble

The **dot-com bubble** (or **dot-com boom**) was a [stock market bubble](#) in the late 1990s. The period coincided with massive growth in [Internet](#) adoption, a proliferation of available [venture capital](#), and the rapid growth of valuations in new dot-com [startups](#).

# Preknowledge:Dot-com bubble

The **dot-com bubble** (or **dot-com boom**) was a [stock market bubble](#) in the late 1990s. The period coincided with massive growth in [Internet](#) adoption, a proliferation of available [venture capital](#), and the rapid growth of valuations in new dot-com [startups](#).

# Preknowledge: Transport

**Transport** (in [British English](#)) or **transportation** (in [American English](#)) is the intentional [movement](#) of humans, animals, and [goods](#) from one location to another. [Modes of transport](#) include [air](#), [land](#) ([rail](#) and [road](#)), [water](#), [cable](#), [pipelines](#), and [space](#). The field can be divided into [infrastructure](#), [vehicles](#), and [operations](#). Transport enables human [trade](#), which is essential for the development of [civilizations](#).



# Preknowledge: Electricity

**Electricity** is the set of physical phenomena associated with the presence and motion of matter that has a property of electric charge. Electricity is related to magnetism, both being part of the phenomenon of electromagnetism, as described by Maxwell's equations. Various common phenomena are related to electricity, including lightning, static electricity, electric heating, electric discharges and many others.

# Preknowledge: Train

A **train** (from Old French *trahiner*, from Latin *trahere*, "to pull, to draw"<sup>[1]</sup>) is a series of connected **vehicles** that run along a **railway track** and **transport people** or **freight**. Trains are typically pulled or pushed by **locomotives** (often known simply as "engines"), though some are self-propelled, such as **multiple units**. Passengers and cargo are carried in **railroad cars**, also known as wagons. Trains are designed to a certain **gauge**, or distance between rails. Most trains operate on **steel** tracks with steel wheels, the low friction of which makes them more efficient than other forms of transport.

# Preknowledge: Car

A **car**, or an **automobile**, is a **motor vehicle** with **wheels**. Most definitions of *cars* say that they run primarily on **roads**, **seat** one to eight people, have four **wheels**, and mainly transport **people**, not **cargo**.<sup>[1][2]</sup>

# Preknowledge: Airplane

An **airplane** (American English), or **aeroplane** (Commonwealth English), informally **plane**, is a fixed-wing aircraft that is propelled forward by thrust from a jet engine, propeller, or rocket engine. Airplanes come in a variety of sizes, shapes, and wing configurations. The broad spectrum of uses for airplanes includes recreation, transportation of goods and people, military, and research. Worldwide, commercial aviation transports more than four billion passengers annually on airliners<sup>[1]</sup> and transports more than 200 billion tonne-kilometers<sup>[2]</sup> of cargo annually, which is less than 1% of the world's cargo movement.<sup>[3]</sup> Most airplanes are flown by a pilot on board the aircraft, but some are designed to be remotely or computer-controlled such as drones.

# History

Direct-to-consumer became immensely popular during the [dot-com bubble](#) of the late 1990s when it was mainly used to refer to online retailers who sold products and services to consumers through the Internet.<sup>[1]</sup>

# History

This business model originated before modern [transportation](#) and [electricity](#) when people consumed locally due to geographical distance and business competition was more limited.

# History

As new modes of transport kept emerging ([steamboat](#), [train](#), [automobile](#), [airplane](#)), consumers gained access to a wider variety of goods and service providers, increasing business competition.

# History

The emergence of the Internet further increased access to many different types of goods and services, and increased competition meant that businesses had to put additional effort to win and keep customers.



# Preknowledge: Employee

An **employee** contributes labour and expertise to an endeavor of an **employer** or of a person conducting a business or undertaking (PCB)<sup>[2]</sup> and is usually hired to perform specific duties which are packaged into a **job**. In a corporate context, an employee is a person who is hired to provide services to a **company** on a regular basis in exchange for **compensation** and who does not provide these services as part of an **independent business**.<sup>[3]</sup>

# Preknowledge: Renting

**Renting**, also known as **hiring**<sup>[1]</sup> or **letting**<sup>[2]</sup> is an agreement where a payment is made **for the use of a good**, service or **property** owned by another over a fixed period of time. To maintain such an agreement, a rental agreement (or **lease**) is signed to establish the roles and expectations of both the **tenant** and **landlord**. There are many different types of leases.<sup>[3]</sup> The type and terms of a lease are decided by the landlord and agreed upon by the renting tenant.

# Preknowledge: Brick and mortar

**Brick and mortar** (or **B&M**) is an organization or business with a physical presence in a building or other structure. The term *brick-and-mortar business* is often used to refer to a company that possesses or leases [retail shops](#), factory production facilities, or warehouses for its operations.<sup>[1]</sup> More specifically, in the jargon of [e-commerce](#) businesses in the 2000s, brick-and-mortar businesses are companies that have a physical presence (e.g., a [retail shop](#) in a building) and offer face-to-face customer experiences.

# Preknowledge: Price

A **price** is the (usually not negative) **quantity** of **payment** or **compensation** expected, required, or given by one **party** to another in return for **goods** or **services**. In some situations, the price of production has a different name. If the product is a "good" in the commercial exchange, the payment for this product will likely be called its "price". However, if the product is "service", there will be other possible names for this product's name. For example, the graph on the bottom will show some situations <sup>[1]</sup> A good's price is influenced by production **costs**, **supply** of the desired item, and **demand** for the product. A price may be determined by a **monopolist** or may be imposed on the firm by market conditions.

# Preknowledge: Brand Loyalty

In **marketing**, **brand loyalty** describes a **consumer's** positive feelings towards a **brand**, and their dedication to **purchasing** the brand's **products** and/or **services** repeatedly, regardless of deficiencies, a **competitor's** actions, or changes in the environment. It can also be demonstrated with other behaviors such as positive **word-of-mouth** advocacy.<sup>[1]</sup> **Corporate brand** loyalty is where an individual buys products from the same manufacturer repeatedly and without wavering, rather than from other suppliers.<sup>[2]</sup> Loyalty implies dedication and should not be confused with **habit**, its less-than-emotional engagement and commitment. **Businesses** whose financial and ethical values (for example, **ESG** responsibilities) rest in large part on their brand loyalty are said<sup>[by whom?]</sup> to use the **loyalty business model**.

# Preknowledge: Legal liability

In **law**, **liable** means "responsible or answerable in law; legally obligated".<sup>[1]</sup> **Legal liability** concerns both **civil law** and **criminal law** and can arise from various areas of law, such as **contracts**, **torts**, **taxes**, or fines given by **government agencies**. The **claimant** is the one who seeks to establish, or prove, liability.

# Preknowledge: Supply Chain

A **supply chain**, sometimes expressed as a "supply-chain",<sup>[1]</sup> is a complex **logistics** system that consists of facilities that convert raw materials into **finished products** and distribute them<sup>[2]</sup> to end consumers<sup>[3]</sup> or end **customers**.<sup>[4]</sup> Meanwhile, **supply chain management** deals with the flow of goods within the supply chain in the most efficient manner.<sup>[5]</sup>

# Preknowledge: Wholesaling

**Wholesaling** or **distributing** is the sale of goods or **merchandise** to retailers; to **industrial**, commercial, **institutional** or other professional business users; or to other **wholesalers** (**wholesale businesses**) and related subordinated services. In general, it is the sale of **goods** in **bulk** to anyone, either a person or an organization, other than the end consumer of that merchandise. Wholesaling is buying goods in bulk quantity, usually directly from the manufacturer or source, at a discounted rate. The retailer then sells the goods to the end consumer at a higher price making a profit. <sup>[2]</sup>



# Preknowledge: Computer security

**Computer security, cyber security, digital security or information technology security (IT security)** is the protection of **computer systems** and **networks** from attacks by malicious actors that may result in unauthorized information disclosure, theft of, or damage to **hardware**, **software**, or **data**, as well as from the **disruption** or misdirection of the services they provide.<sup>[1][2]</sup>

# Preknowledge: Information privacy

**Information privacy** is the relationship between the collection and dissemination of **data**, **technology**, the public **expectation of privacy**, **contextual information norms**, and the **legal** and **political** issues surrounding them. <sup>[1]</sup> It is also known as **data privacy**<sup>[2]</sup> or **data protection**.

# Preknowledge: Supply chain

A **supply chain**, sometimes expressed as a "supply-chain",<sup>[1]</sup> is a complex **logistics** system that consists of facilities that convert raw materials into **finished products** and distribute them<sup>[2]</sup> to end consumers<sup>[3]</sup> or end **customers**.<sup>[4]</sup> Meanwhile, **supply chain management** deals with the flow of goods within the supply chain in the most efficient manner.<sup>[5]</sup>

# Preknowledge: Supply chain

A **supply chain**, sometimes expressed as a "supply-chain",<sup>[1]</sup> is a complex **logistics** system that consists of facilities that convert raw materials into **finished products** and distribute them<sup>[2]</sup> to end consumers<sup>[3]</sup> or end **customers**.<sup>[4]</sup> Meanwhile, **supply chain management** deals with the flow of goods within the supply chain in the most efficient manner.<sup>[5]</sup>

## Advantages and disadvantages

Direct-to-consumer enjoys lower costs compared to physical retail, as it has reduced the number of different business components like **employees**, purchasing cost, mailing confirmation, **renting** or establishing a **physical store**.<sup>[2]</sup>

## Advantages and disadvantages

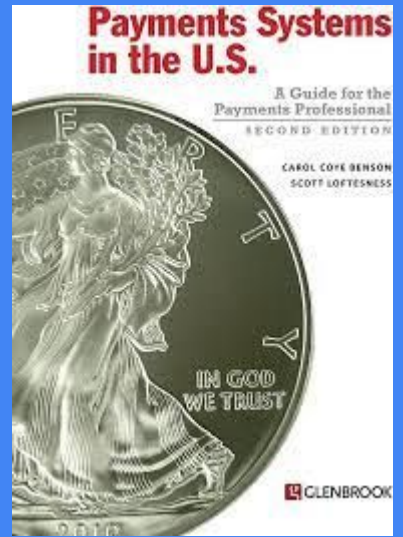
DTC enables smaller companies to compete with large and successful companies in terms of **price**, availability of the products, and quality since costs are lower.<sup>[3]</sup> Direct-to-consumer sales can drive stronger **brand loyalty** and customer retention.<sup>[1]</sup>

## Advantages and disadvantages

The main risks in the online Direct-to-consumer are expanding [liability](#) risk, cyber risk and more [supply chain](#) demands. DTC exposes a business to tasks that would otherwise be taken up by [wholesalers](#) and retailers, such as shipping, labelling, and [cybersecurity](#). [Data privacy](#) and cybersecurity are especially important in online businesses. Accepting online payments can make DTC businesses a target for hackers and cyber criminals, exposing them to the risks of fraudulent payments and false chargebacks. <sup>[4]</sup> The direct-to-consumer business model puts the entire burden of the [supply chain](#) onto the firm itself; rather than selling to only a few distributors, the products must be delivered to many individual customers.

# Core-Systems: Checking

Based on PAYMENTS SYSTEMS IN THE U.S.: A GUIDE FOR THE PAYMENTS PROFESSIONAL





## Preknowledge: Clearing house (finance)

A **clearing house** is a financial institution formed to facilitate the exchange (i.e., *clearance*) of payments, securities, or derivatives transactions. The clearing house stands between two clearing firms (also known as member firms or participants). Its purpose is to reduce the risk of a member firm failing to honor its trade settlement obligations.

# Preknowledge: Magnetic ink character recognition

**Magnetic ink character recognition code**, known in short as **MICR code**, is a [character recognition](#) technology used mainly by the banking industry to streamline the processing and clearance of cheques and other documents. MICR encoding, called the *MICR line*, is at the bottom of cheques and other vouchers and typically includes the document-type indicator, [bank code](#), [bank account number](#), cheque number, cheque amount (usually added after a cheque is presented for payment) and a control indicator. The format for the bank code and bank account number is country-specific.

# Preknowledge: Magnetic ink character recognition

**Magnetic ink character recognition code**, known in short as **MICR code**, is a [character recognition](#) technology used mainly by the banking industry to streamline the processing and clearance of cheques and other documents. MICR encoding, called the *MICR line*, is at the bottom of cheques and other vouchers and typically includes the document-type indicator, [bank code](#), [bank account number](#), cheque number, cheque amount (usually added after a cheque is presented for payment) and a control indicator. The format for the bank code and bank account number is country-specific.

# Preknowledge: Value chain

A **value chain** is a progression of activities that a firm operating in a specific industry performs in order to deliver a valuable **product** (i.e., **good** and/or **service**) to the end **customer**.

# Preknowledge: Value chain

A **value chain** is a progression of activities that a firm operating in a specific industry performs in order to deliver a valuable **product** (i.e., **good** and/or **service**) to the end **customer**.

# Transaction account

A **transaction account**, also called a **checking account**, **chequing account**, **current account**, **demand deposit account**, or **share draft account** at **credit unions**, is a deposit account or **bank account** held at a **bank** or other financial institution. It is available to the account owner "on demand" and is available for frequent and immediate access by the account owner or to others as the account owner may direct. Access may be in a variety of ways, such as cash withdrawals, use of **debit cards**, **cheques** and electronic transfer. In economic terms, the funds held in a transaction account are regarded as **liquid funds**. In **accounting** terms, they are considered as **cash**.

# History

# History

In [Holland](#) in the early 1500s, [Amsterdam](#) was a major trading and shipping city. People who had acquired large accumulations of cash began to deposit their money with *cashiers* to protect their wealth. These cashiers held the money for a fee. Competition drove cashiers to offer additional services, including paying out money to any person bearing a written order from a depositor to do so. They kept the note as proof of payment.



## Features and access

All transaction accounts offer itemised lists of all financial transactions, either through a [bank statement](#) or a [passbook](#). A transaction account allows the account holder to make or receive payments by:

- [ATM cards](#) (withdraw cash at any [Automated Teller Machine](#))
- [Debit card](#) (cashless direct payment at a store or merchant)
- [Cash](#) (deposit and withdrawal of [coins](#) and [banknotes](#) at a branch)
- [Cheque](#) and [money order](#) (paper instruction to pay)
- [Direct debit](#) (pre-authorized debit)
- [Standing order](#) (automatic regular funds transfers)
- [Electronic funds transfers](#) (transfer funds electronically to another account)
- [Online banking](#) (transfer funds directly to another person via internet banking facility)
-

## Branch access

Customers may need to attend a bank branch for a wide range of banking transactions including cash withdrawals and [financial advice](#). There may be restrictions on cash withdrawals, even at a branch. For example, withdrawals of cash above a threshold figure may require notice.

Many transactions that previously could only be performed at a branch can now be done in others ways, such as use of ATMs, online, mobile and telephone banking.

## Cost

Any cost or fees charged by the financial institution that maintains the account, whether as a single monthly maintenance charge or for each [financial transaction](#), will depend on a variety of factors, including the country's regulations and overall interest rates for lending and saving, as well as the financial institution's size and number of channels of access offered. This is why a [direct bank](#) can afford to offer low-cost or free banking, as well as why in some countries, transaction fees do not exist but extremely high lending rates are the norm. This is the case in the United Kingdom, where they have had free banking since 1984 when the then [Midland Bank](#), in a bid to grab market share, scrapped current account charges.<sup>[7][8]</sup> It was so successful that all other banks had no choice but offer the same or continue losing customers. Free banking account holders are now charged only if they use an add-on service such as an [overdraft](#).<sup>[4]</sup>

## Interest

Unlike savings accounts, for which the primary reason for depositing money is to generate interest, the main function of a transactional account is transactional. Therefore, most providers pay little or no interest on credit balances.

## Lending

Accounts can lend money in two ways: overdraft and offset mortgage.

An overdraft occurs when withdrawals from a bank account exceed the available balance. This gives the account a negative balance and in effect means the account provider is providing credit. If there is a prior agreement with the account provider for an overdraft facility, and the amount overdrawn is within this authorised overdraft, then interest is normally charged at the agreed rate. If the balance exceeds the agreed facility then fees may be charged and a higher interest rate might apply.

## Consumer reporting

In the United States, some consumer reporting agencies such as [ChexSystems](#), Early Warning Services, and [TeleCheck](#) track how people manage their checking accounts. Banks use the agencies to screen checking account applicants. Those with low debit scores are denied checking accounts because a bank cannot afford an account to be overdrawn.<sup>[\[10\]](#)[\[11\]](#)[\[12\]](#)</sup>

## Offset mortgage

An offset mortgage was a type of mortgage common in the United Kingdom used for the purchase of domestic property. The key principle is the reduction of interest charged by "offsetting" a credit balance against the mortgage debt. This can be achieved via one of two methods: either lenders provide a single account for all transactions (often referred to as a current account mortgage) or they make multiple accounts available, which let the borrower notionally split money according to purpose, whilst all accounts are offset each day against the mortgage debt.

# Automated clearing house

An **automated clearing house (ACH)** is a computer-based electronic network for processing transactions,<sup>[1]</sup> usually domestic low value payments, between participating **financial institutions**. It may support both **credit transfers** and **direct debits**.<sup>[2][3]</sup> The ACH system is designed to process batches of payments containing numerous transactions, and it charges fees low enough to encourage its use for low value payments.



# Automated clearing house

The first automated clearing house was [BACS](#) in the United Kingdom, which started processing payments in April 1968.<sup>[4]</sup>

# Bank card

A **bank card** is typically a **plastic card** issued by a **bank** to its clients that performs one or more of a number of services that relate to giving the client access to a **bank account**.

# Bank card

Physically, a bank card will usually have the client's name, the issuer's name, and a unique card number printed on it.

# Bank card

The first bank cards were ATM cards issued by [Barclays](#) in [London](#), in 1967, and by [Chemical Bank](#) in [Long Island, New York](#), in 1969.