



# CONSUMER TO CONSUMER PRODUCT TRADING WITH STRATEGIC CONSUMER BEHAVIOUR USING PRIVATE BLOCK CHAIN TECHNIQUE

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## Abstract

Technological improvements have brought about a boom in the recognition of consumer-to-consumer product trading (C2C-PT). It is doubtful how C2C-PT impacts the manufacturer (called the "firm") and customers within the market. We consequently construct analytical models to discover this problem. We do not forget a case in which a company develops and sells a product to customers inside the market. Consumers have their own heterogeneous random valuations of the product and are strategic in the sense that they're forward-searching application maximizers. The firm makes the top-rated choice on the product promotion charge.

We examine the effects of C2C-PT on each the firm and clients. We select the most appropriate purchasing option for the consumer and establish the most desirable pricing policy for the company. We show that the presence of C2C-PT may both advantage and hurt the firm and consumers. At the same time, the patron's strategic conduct will always cause damage to the firm. Most interestingly, we prove that strategic buying behaviour is not continually useful to consumers themselves.

## LITERATURE SURVEY

### Online Expert-Based Prediction For Cognitive Radio Secondary Markets

The growing importance of wireless communications drives an increasing interest in dynamic access to spectrum resources. This requires efficient management policies that allow spectrum sharing between licensed primary users (PU) and unlicensed secondary users (SU). On such scenario, PUs shall preserve their

usage priority right over any SU. Also, no SU shall interfere on any PU. Technical viability can be achieved through Cognitive Radio devices that adjust their operating parameters adaptively.[1]

### **Secondary spectrum oligopoly market over large locations**

We investigate a secondary spectrum market where each primary owns a channel over large number of locations. Each primary sells its channel to the secondaries in exchange of a price. However, the secondaries can not transmit simultaneously at interfering locations. A primary must select a price and a set on non-interfering locations for its available channel where the availability of a channel for sale evolves randomly.[2]

### **Board's human capital resource and internationalization of emerging market firm**

To improve our understanding of the strategic role of the board in emerging market firms (EMFs), we investigate the role of the board's human capital resource in a firm's internationalization. Integrating the monitoring role (to reduce agency costs) and the resource provisioning role (to augment strategic resource base) of the board, we propose that the board's aggregate education and professional experience influence the degree of international expansion of EMFs. Further, the board's knowledge heterogeneity and skill heterogeneity play a contingent role from a resource orchestration perspective.[3]

### **Price Competition in Spectrum Markets: How Accurate Is the Continuous Prices Approximation**

Dynamic Spectrum Access technology enables two types of users to operate on a channel- primary users, which have prioritized access to the channel and secondary users, which can use the channel when it is not in use by the primaries. We consider a scenario in which multiple primaries own bandwidth in a large region (e.g., a state), which is divided into smaller locations (e.g., towns). A primary that has unused bandwidth in a time slot would like to lease it out to secondary's at a set of mutually non-interfering locations in return for a fee.[4]

### **The maturity of relationship management and firm performance**

A relationship approach to business is well recognized by both academia and business practitioners. Though a superficial understanding of this concept makes it hard to separate firms which are truly relationship-oriented from those, which only declare relationships as their priority, while being prevalingly transaction-oriented. Consequently, the correlation between the relationship approach and firm performance is studied in the absence of a relationship management maturity definition of what undermines the plausibility of this concept.[5]

### **Consumer Marketing Strategy and E-Commerce in the Last Decade: A Literature Review**

E-commerce is deemed as the sale and purchase of goods and services through the internet in exchange for money and data transfer to complete the transactions. E-commerce is at the forefront of transforming marketing strategies, based on new technologies, and facilitates product information and improved decision-making. In this way, marketing strategy increasingly require large amounts of information to better understand

client needs, which raises the question of choosing the right marketing strategy to better fit consumer expectations.[6]

### Matching supply and demand in a sharing economy: Classification, computational complexity ,and application

The sharing economy, i.e., the cooperative consumption of goods and services offered by private households or companies via online market places, gains more and more attention. Most sharing platforms coordinate transactions by generating each consumer an individual list of suited and available resources to choose from. If plenty online requests arrive rather simultaneously and compete for the scarce shared resources, however, an optimization-based coordination of supply and demand promises much better matches [7]

### Purchasing, pricing, and quick response in the presence of strategic consumers

We consider a retailer that sells a product with uncertain demand over a finite selling season. The retailer sets an initial stocking quantity and, at some predetermined point in the season, optimally marks down remaining inventory. We modify this classic setting by introducing three types of consumers: myopic consumers, who always purchase at the initial full price; bargain-hunting consumers, who purchase only if the discounted price is sufficiently low; and strategic consumers, who strategically choose when to make their purchase[8]

### SYSTEM DESIGN

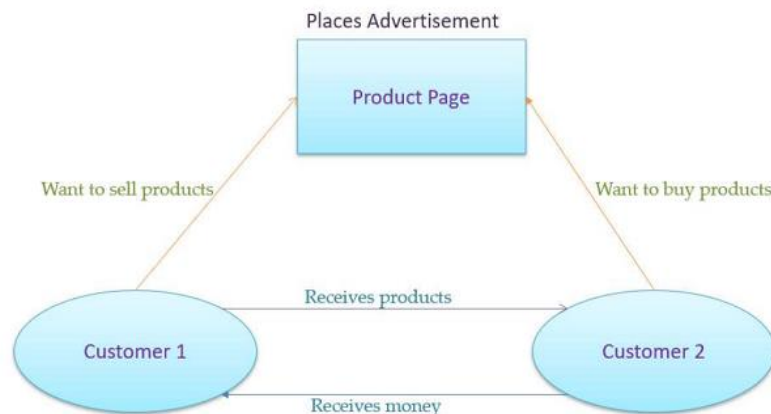


Fig 1: system design

### IMPLEMENTATION

#### MODULE NAME

- **USER**
  - REGISTER & USER
  - USER ADD PRODUCT
  - FIX PRICE & SALE THE PRODUCT
  - SEARCH PRODUCT

- BUY PRODUCT
- MAKE PAYMENT

- ADMIN

- LOGIN
- VIEW ADDED PRODUCT
- APPROVE
- GET COMMISION
- MAITAIN ACCOUNT BALANCE

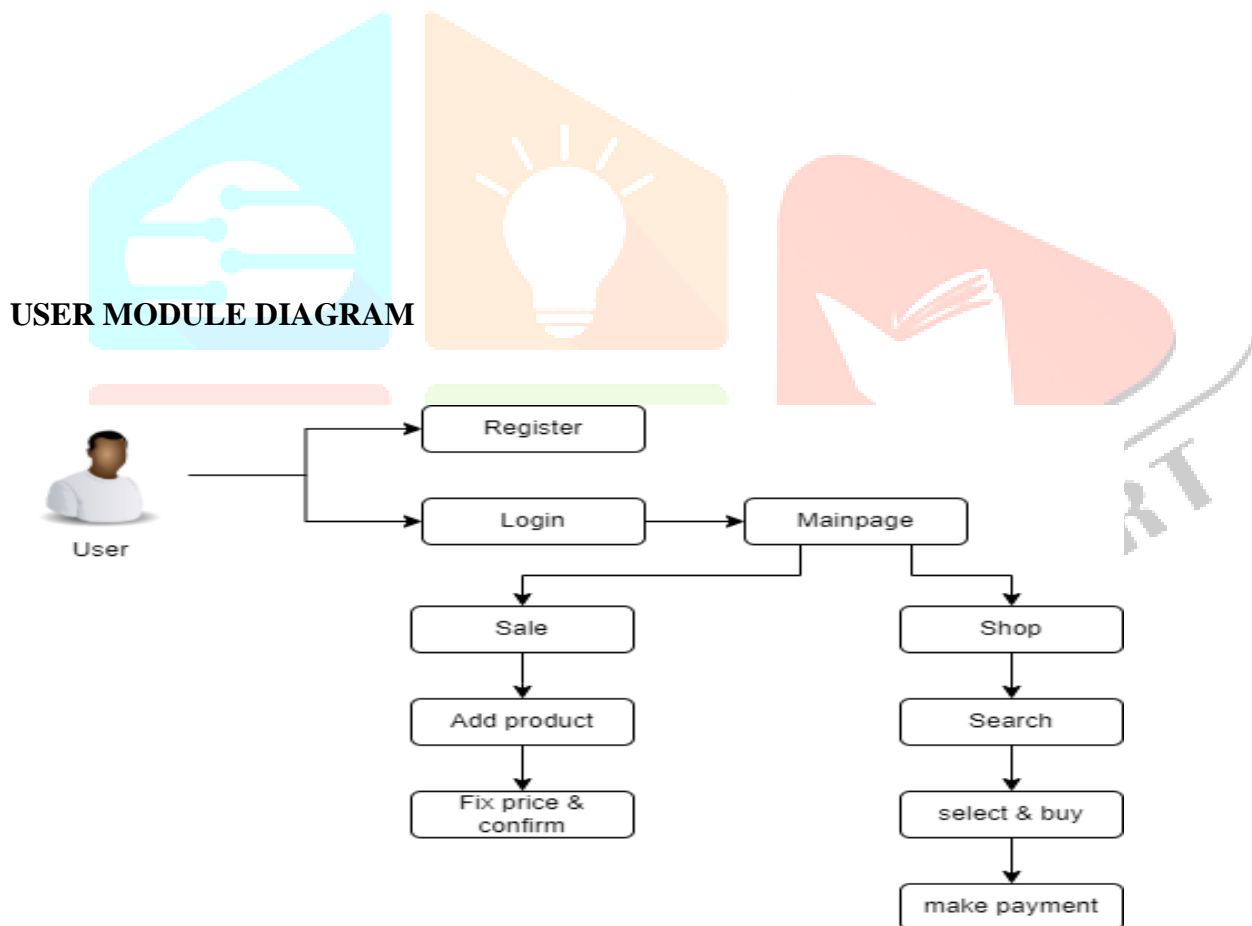


Fig 2.1: module process

**ADMIN MODULE DIAGRAM**

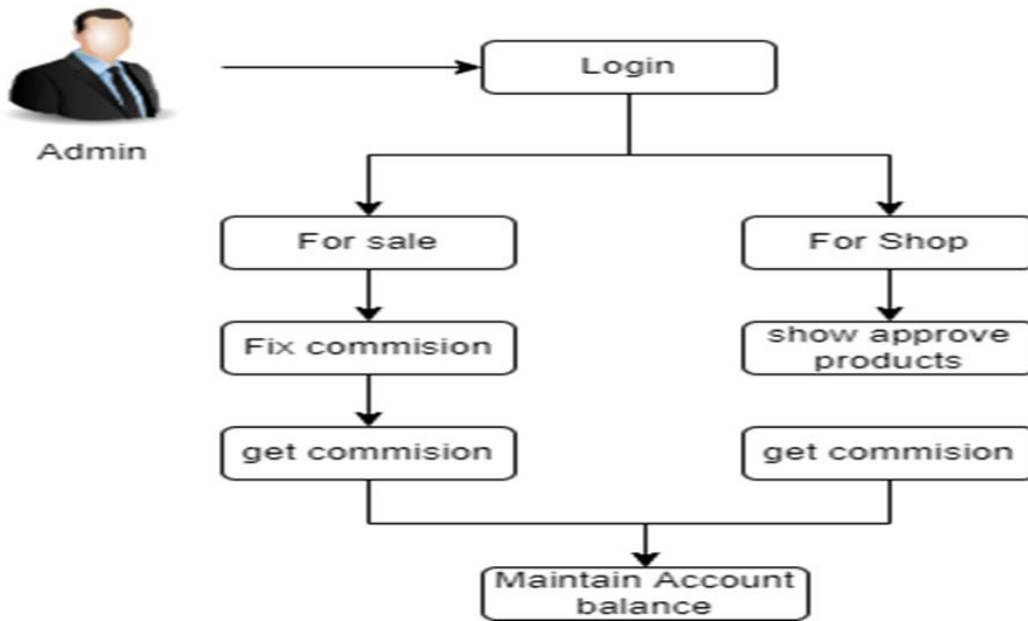


Fig 2.2: admin process

**PREFORMACE ANALYSIS**

**PERFORMANCE OF EXISTING SYSTEM**

In the existing system the security percentage is comparatively low when compared to proposed system. There may be a possibility of leakage of users data and transaction details. While the security percentage is low hackers can easily hack the system. Efficiency of the system is also not good when compared to proposed system. Transformation of money from buyer to seller is not trustable.



Fig 3: performance result (existing process)

**PERFORMANCE OF PROPOSED SYSTEM**

In Proposed system the security percentage is high because of the use of blockchain. Hence blockchain is used the hackers cannot be able to break the chain of the block. So the chance of hacking is low. Since the chance of hacking is low the leakage of data is not possible. In proposed system the security is high the trading awareness in online is high. Efficiency of the proposed is high More the number of security the more people will show interest to trade the products



Fig 4: performance result (proposed process)

**COMPARATIVE PERFORMANCES**

In Proposed system, we have security to avoid the data leakage and transaction card details with the use of blockchain code. It may tend to the people to do consumer to consumer trading in online. Proposed system will increases the number of people in product trading through online. Since the existing system do not have the enough security, the people will not show the interest to do the product trading.



Fig 5: performance result (comparison)

## CONCLUSION

Consumer-to-consumer is a source of communication for companies to Customers, and a way to solve Customers' problems through a community effort. Companies can find out future trends, and can work towards zero complaints by understanding Customer issues, and ensuring Customer problems do not re-occur. consumer-to-consumer is the buying and selling of goods and services, or the transmitting of funds or data, over an electronic network, primarily the internet. These business transactions occur either as business-to-business (B2B), business-to-consumer (B2C), Consumer-to-consumer or consumer-to-business

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