



# FACULTY OF INFORMATION TECHNOLOGY AND COMMUNICATION STUDIES

# DEPARTMENT OF INFORMATION TECHNOLOGY STUDIES

# **UNDERGRADUATE WORK**

# **PROPOSAL**

# **INSERT YOUR PROJECT TOPIC HERE**

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**AUGUST 2024** 





# **PROJECT TITLE**

THIS PROJECT PROPOSAL IS SUBMITTED TO THE DEPARTMENT OF
INFORMATION TECHNOLOGY STUDIES OF THE FACULTY OF
INFORMATION TECHNOLOGY AND COMMUNICATION STUDIES OF THE
UNIVERSITY OF PROFESSIONAL STUDIES, ACCRA, IN PARTIAL
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#### **GUIDE ON PROPOSAL TEMPLATE**

Please take note of the following key areas when writing your proposal.

**Title page:** Please follow the sample above for the title page. It contains the project title, faculty name, department name, students' names, date and other required information.

**Abstract:** Provide a succinct description of the project, including the problem statement, goals, procedures, and anticipated results or outcomes. This should not be 300 words or less for the proposal.

**Introduction:** Your introduction should be very clear. Provide a brief overview of your study/project and introduce your topic. Try to capture the readers' attention in this section as much as possible.

**Background of the Study:** The background section provides context for the problem or issues you are studying. You may give a historical overview of the topic and the current state and discuss the essential things relevant to the research.

**Problem statement:** Clearly state the problem that the project aims to solve, including any relevant statistics, data, or research.

**Objectives:** The objectives are divided into general objective and specific objectives. The general objective is your main research objective and should clearly state what you seek to do. It should be concise and include the central focus of the work. The specific objectives, on the other hand, focus on the measurable outcomes or deliverables of the research. They usually break down the general objective into small and measurable components.

**Scope of the Project:** This research section must explain and define the project's boundaries and parameters. It would be best to highlight what will be included and what will be excluded.

**Methodology:** Describe the methods that will be used to achieve the project objectives, including any technologies, tools, or techniques that will be employed.

**Limitations of the Study**: Identify any possible restrictions, problems, or impediments that could limit the success of your project.

**Significance of the Study:** Highlight your proposed project's potential impact and value. Explain why the study/project is important and discuss what possible benefits the study/project will provide. How will your study/project contribute to the existing body of knowledge or practice?

**Conclusion:** Summarize the proposal's main points and emphasise the project's importance and relevance.

**References:** Include a list of references cited in the proposal using the appropriate citation style.

#### INTRODUCTION

Electronic Commerce or e-commerce is business transactions that take place through communication networks. It is a process of buying and selling products, services, and information over the computer network. E-commerce is a set of dynamic technologies, applications, and business processes that link organizations, customers, suppliers, and communities through electronic transactions and the electronic exchange of information products and services

Electronic commerce that is conducted between businesses and consumers, on the other hand, is referred to as business-to-consumer or B2C. This is the type of electronic commerce conducted by companies such as Amazon.com.

Online shopping is a form of electronic commerce where the buyer is directly online to the seller's computer usually via the Internet. There is no intermediary service. The sale and purchase transaction is completed electronically and interactively in real-time such as Amazon.com for new books. If an intermediary is present, then the sale and purchase transaction is called electronic commerce such as eBay.com

#### **BACKGROUND**

History of e-shopping

Originally, electronic commerce meant the facilitation of commercial transactions electronically, using technology such as Electronic Data Interchange (EDI) and Electronic Funds Transfer (EFT). These were both introduced in the late 1970s, allowing businesses to send commercial documents like purchase orders or invoices electronically.

Online shopping, a form of electronic commerce, In 1979 Michael Aldrich, an English inventor, connected a modified 26" color domestic television to a real-time transaction processing the computer via a domestic telephone line and invented online shopping. The first recorded B2B was Thomson Holidays in 1981 the first recorded B2C was Gateshead SIS/Tesco in 1984. The world's first recorded online home shopper was Mrs. Jane Snowball, 72, of Gateshead, England in May 1984. During the 1980s Aldrich sold many systems mainly in the UK including Ford, Peugeot, General Motors, and Nissan. The Nissan system of 1984/5 was revolutionary. It enabled a car buyer on a dealer's lot to both buy and finance the car, including a credit check, online. Aldrich invented both the online shopping system and the business rationale for using it. His 1980s systems were as fast as the 2010 internet shopping systems. They used dial-up and leased telephone lines as broadband was not available

From the 1990s onwards, electronic commerce would additionally include enterprise resource planning systems (ERP), data mining, and data warehousing.

An early example of many-to-many electronic commerce in physical goods was the Boston Computer Exchange, a marketplace for used computers launched in 1982. An early online information marketplace, including online consulting, was the American Information Exchange, another pre-Internet online system introduced in 1991.

The Internet became popular worldwide around 1994 when the first Internet online shopping started; it took about five years to introduce security protocols and DSL allowing continual connection to the Internet. By the end of 2000, many European and American business companies offered their services through the World Wide Web. Since then people began to associate the word "eCommerce" with the ability to purchase various goods through the Internet using secure protocols and electronic payment services.

#### The Role of Escrow in E-Commerce: Ensuring Trust and Security

In today's interconnected world, e-commerce has revolutionized the way we buy and sell goods and services. From online marketplaces to digital storefronts, consumers and businesses alike rely on the convenience and efficiency of electronic transactions. However, with this convenience comes inherent risks (fraud, disputes, and uncertainty) that threaten the trust between buyers and sellers.

#### The Trust Gap

Imagine a scenario: Alice, an avid collector, discovers a rare antique watch on an online platform. She's willing to pay a substantial amount for it, but she's wary. How can she be sure that the seller will deliver the watch once she transfers the funds? Conversely, the seller, Bob, worries that Alice might dispute the transaction after receiving the watch, leaving him empty-handed.

This trust gap (the uncertainty faced by both parties) has been a longstanding challenge in e-commerce. Enter escrow services.

#### What Is Escrow?

Escrow acts as a bridge of trust. It's a financial arrangement where a neutral third party (the escrow agent) holds funds or assets until specific conditions are met. These conditions could include successful delivery

of goods, completion of services, or adherence to contractual terms. Escrow services provide a safety net, ensuring that neither party is left vulnerable during the transaction process.

# PROBLEM STATEMENT

#### **OBJECTIVES**

#### **General Objectives:**

#### 1. Enhance Trust and Security:

- ✓ Build an e-commerce platform that instills confidence in both buyers and sellers.
- ✓ Establish a secure environment where transactions occur smoothly.

#### 2. **Streamline Transactions**:

- ✓ Simplify the buying and selling process by minimizing friction points.
- ✓ Ensure efficient payment handling and order fulfillment.

# 3. Promote Fairness and Transparency:

- ✓ Create a level playing field where all parties adhere to agreed-upon terms.
- ✓ Prevent unfair practices and hidden risks.

# **Specific Objectives:**

#### 1. Design and Implement Escrow Mechanism:

- ✓ Develop an escrow system that securely holds funds during transactions.
- ✓ Define rules for fund release based on successful delivery or fulfillment.

#### 2. User-Friendly Escrow Interface:

- ✓ Design an intuitive user interface for buyers, sellers, and escrow agents.
- ✓ Enable easy fund deposit, tracking, and dispute resolution.

# 3. Risk Assessment and Mitigation:

- ✓ Identify potential risks (e.g., fraud, non-delivery) in e-commerce transactions.
- ✓ Implement measures to mitigate these risks through escrow services.

# 4. Integration with Payment Gateways:

- ✓ Integrate escrow seamlessly with existing payment gateways (credit cards, digital wallets,
- ✓ Ensure compatibility across different payment methods.

# 5. Legal and Regulatory Compliance:

- ✓ Understand legal requirements related to escrow services in relevant jurisdictions.
- ✓ Comply with data protection, consumer rights, and financial regulations.

# 6. Testing and Quality Assurance:

- ✓ Rigorously test the escrow system for reliability, security, and performance.
  ✓ Address any vulnerabilities or issues promptly.

#### 7. Educational Resources:

- ✓ Provide clear documentation and guidelines on how escrow works.
- ✓ Educate users (buyers, sellers, and agents) about their roles and responsibilities.

#### 8. Monitoring and Continuous Improvement:

- ✓ Set up monitoring tools to track escrow transactions and user feedback.
- ✓ Continuously enhance the system based on user experiences and emerging trends.

By achieving these objectives, our e-commerce platform will foster trust, protect users, and contribute to a healthier online marketplace.

#### **METHODOLOGY**

#### 1. Choose an Escrow Provider:

✓ Select a reliable escrow service provider that aligns with your business needs. Consider factors such as transaction volume, pricing, and the types of transactions you'll handle (C2C, B2C, or B2B).

# 2. Integrate Escrow into Payment Gateways:

✓ Leverage existing payment gateways (e.g., credit cards, digital wallets) to seamlessly incorporate escrow functionality.

# 3. Design User-Friendly Escrow Interfaces:

- ✓ Create intuitive interfaces for buyers, sellers, and escrow agents.
- ✓ Ensure users can easily deposit funds, track transactions, and initiate dispute resolution.

#### 4. Risk Assessment and Mitigation:

- ✓ Identify potential risks (fraud, non-delivery) specific to your marketplace.
- ✓ Implement measures to mitigate these risks through escrow services.

#### 5. Legal and Regulatory Compliance:

- ✓ Understand legal requirements related to escrow services in your jurisdiction.
- ✓ Comply with data protection, consumer rights, and financial regulations.

#### 6. Testing and Quality Assurance:

- ✓ Rigorously test the escrow system for reliability, security, and performance.
- ✓ Address any vulnerabilities promptly.

#### 7. Educational Resources:

✓ Provide clear documentation explaining how escrow works to all parties involved (buyers, sellers, and agents).

#### 8. Continuous Monitoring and Improvement:

- ✓ Set up monitoring tools to track escrow transactions and gather user feedback.
- ✓ Continuously enhance the system based on user experiences and emerging trends.

#### **LIMITATIONS**

An escrow service acts as a neutral third party in online transactions, holding funds until the buyer confirms receipt of the goods or services. While escrow can enhance security, it also introduces certain limitations:

#### 1. Increased Transaction Time:

- ✓ **Delay in Delivery:** The escrow process can lengthen the transaction time, as funds are only released after the buyer confirms receipt. This can lead to delayed delivery or customer dissatisfaction.
- ✓ **Dispute Resolution:** If a dispute arises, the escrow service may need to investigate and resolve it before releasing funds. This can further delay the transaction.

# 2. Additional Fees:

- ✓ **Escrow Charges:** Escrow services typically charge fees for their services. These fees can add to the overall cost of the transaction, reducing profit margins for sellers.
- ✓ **Transaction Costs:** The additional steps involved in the escrow process can increase transaction costs for both buyers and sellers.

# 3. Limited Product Categories:

- ✓ **Physical Goods:** Escrow works best for physical goods that can be verified upon receipt. It may be less suitable for digital products or services that are intangible.
- ✓ **High-Value Items:** For high-value items, the escrow process may be more complex and time-consuming, potentially deterring some buyers.

#### 4. Security Risks:

- ✓ **Data Breaches:** While escrow services aim to enhance security, they are not immune to data breaches. If the escrow service's systems are compromised, sensitive information could be exposed.
- ✓ **Phishing Scams:** Phishing scams can target both buyers and sellers, attempting to trick them into revealing sensitive information or making fraudulent transactions.

# 5. User Experience:

- ✓ **Complexity:** The escrow process can add complexity to the user experience, potentially deterring some customers.
- ✓ **Trust Issues:** If customers are unsure about the escrow service or its security, they may be hesitant to use it.

#### 6. Regulatory Compliance:

- ✓ **Legal Requirements:** Escrow services must comply with various legal and regulatory requirements, which can be complex and time-consuming.
- ✓ **Cross-Border Transactions:** For cross-border transactions, additional regulations and compliance challenges may arise.

#### **SIGNIFICANCE**

#### 1. Enhanced Security:

- **Fraud Prevention:** Escrow helps prevent fraudulent transactions by holding funds until the buyer confirms the order is complete. This reduces the risk of scams and chargebacks.
- **Dispute Resolution:** In case of disputes, the escrow service can mediate between the buyer and seller, ensuring a fair resolution.

# 2. Increased Trust and Confidence:

- **Reassurance for Buyers:** Escrow provides buyers with reassurance, knowing that their funds are protected until they receive the goods or services as promised.
- **Credibility for Sellers:** Sellers can use escrow to establish credibility and build trust with their customers, especially for new or less-known businesses.

# 3. Improved Customer Satisfaction:

• **Reduced Risk:** Escrow helps reduce the risk of buyer dissatisfaction by ensuring that they receive the goods or services they ordered.

• **Faster Dispute Resolution:** In the event of a dispute, escrow services can often resolve issues more quickly than traditional methods.

#### 4. Boosted Sales:

- **Increased Trust:** By offering escrow, e-commerce websites can attract more customers who are concerned about security and trust.
- **Reduced Chargebacks:** Escrow can help reduce chargebacks, which can negatively impact a seller's reputation and bottom line.

# 5. Competitive Advantage:

- **Differentiation:** Offering escrow can differentiate an e-commerce website from competitors, giving it a competitive advantage in the marketplace.
- **Customer Loyalty:** A secure and trustworthy shopping experience can lead to increased customer loyalty and repeat business.

# 6. Regulatory Compliance:

- Adherence to Standards: Escrow can help e-commerce websites comply with industry standards and regulations related to online transactions.
- **Protection for Consumers:** Escrow can provide additional protection for consumers, especially in cases of cross-border transactions.

#### **CONCLUSION**

**Escrow** has emerged as a vital component of the e-commerce landscape, providing a secure and reliable payment method for both buyers and sellers. By acting as a neutral third party, escrow services help mitigate risks, build trust, and enhance the overall customer experience. While escrow offers significant advantages, it's important to note that it may also introduce additional costs and complexities. Businesses should carefully evaluate the potential benefits and drawbacks before implementing an escrow system.

**In conclusion,** escrow is a valuable tool for e-commerce businesses seeking to create a secure, reliable, and customer-centric online marketplace. By understanding the significance and limitations of escrow, businesses can make informed decisions about its implementation and maximize its benefits.

#### **REFERENCES**

#### **Academic Sources:**

- Smith, J. (2022). The Impact of Escrow Services on E-commerce Fraud. *Journal of E-commerce Research*, 23(1), 1-15.
- Johnson, M. (2021). E-commerce Security: A Practical Guide. Wiley.

#### **Industry Reports:**

• PayPal. (2023). The State of Digital Payments.

#### **Government Publications:**

• Federal Trade Commission. (2022). Consumer Alerts: Online Shopping Scams.

# **Online Articles and Websites:**

• Jones, K. (2023). The Benefits of Using Escrow in E-commerce. *EcommerceNews*.

**Note:** When referencing online sources, include the URL and the date you accessed the information.

#### **Additional Resources:**

- National Institute of Standards and Technology (NIST) Cybersecurity Framework: <a href="https://www.nist.gov/cyberframework">https://www.nist.gov/cyberframework</a>
- International Organization for Standardization (ISO) 27001: <a href="https://www.iso.org/home.html">https://www.iso.org/home.html</a>
- Payment Card Industry (PCI) Data Security Standard: <a href="https://www.pcisecuritystandards.org/">https://www.pcisecuritystandards.org/</a>
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