

# A Study on Popularity of Various Utilities of E-Payment Mechanism among Students

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**Abstract:** *An E-payment system is a way of making transactions or paying for goods and services through an electronic medium. The electronic payment system has grown tremendously over the last few decades due to the widely spread use of internet-based banking services. As the world advances more with technology development, we can see the rise of E-payment systems and payment processing devices. The present paper throws light upon the popularity of various utilities of e-payment Mechanism among students. It focuses on the utilities of E-payment Mechanism.*

**Keywords:** E-payment System, E-payment utilities, E-payment methods, popularity of E-payment among students

## 1. Introduction

An e-commerce payment system facilitates the acceptance of electronic payment for online transactions. Also known as a sample of Electronic Data Interchange (EDI), e-commerce payment systems have become increasingly popular due to the widespread use of the internet-based shopping and banking.

Over the years, Debit cards have become one of the most common forms of payment for e-commerce transactions. Almost 60% of online transactions were made with this payment type. It would be difficult for an online retailer to operate without supporting credit and debit cards due to their widespread use. Different type of security measures are adopted to secure online transactions, which includes use of the card verification number (CVN) which detects fraud by comparing the verification number printed on the signature strip on the back of the card with the information on file with the cardholder's issuing bank. Also online merchants have to comply with stringent rules stipulated by the credit and debit card service providers. Which means that merchants must have security protocol and procedures in place to ensure transactions are more secure. This can also include having a certificate from an authorized certification authority (CA) who provides PKI (public-key infrastructure) for securing credit and debit card transactions.

A large number of countries such as India and China have some problems to overcome in regard to credit card security, in the meantime; the use of smartcards has become extremely popular. A Smartcard is similar to a credit card; however, it contains an embedded 8-bit microprocessor and uses electronic cash with transfers from the consumers' card to the sellers' device. A popular smartcard initiative is the VISA Smartcard. Using the VISA Smartcard, you can transfer electronic cash to your card from your bank account, and you can then use your card at various retailers and on the internet.

There are companies that enable financial transactions to take place over the internet, such as PayPal. Many of the service providers permit consumers to establish an account quickly, and helps to transfer funds into their on-line accounts from a traditional bank account and vice versa. Also, the larger mediaries further allow transactions to and from credit card accounts.

## 2. Research Problem

Nowadays lot of technological advancements are being taking place. One of the most important among them is the change that has taken in the field of payment. With the development of technology and the widespread use of internet, a new payment system i.e. electronic payment system has come into use. It has changed the payment habit of people in almost every field. But some basic requirements such as certain electronic gadgets, basic computer knowledge, and access to internet etc. are needed for e payment. Also the security threats of e payment are not known by most the users. Nowadays young generations are the trend changers, they will show the way to others. They are now widely using their smart gadgets for making online payment and showing others, how to use E-payment Mechanism without losing privacy. So it is important to study the popularity of various E-payment utilities among students as they are using their knowledge and experience about E-payment gadgets and working mechanism to spread its use. The present study is conducted to know about the popularity of e-payment methods among students.

## 3. Objectives of the Study

Defining the objectives is a crucial part of any research. The major objective of the research is "to study the popularity of various utilities of E-payment Mechanism among students" The secondary objective that helps to accomplish the primary objective, are:

- To discuss the various categories and potential uses of e-payment mechanism and to have a clear knowledge about the emergence of new trends.
- To evaluate the security features with regard to e-payment system.
- To analyse the attitude of youngsters towards e-payment system.

## 4. Significance of the Study

The traditional methods of payment have now been replaced by e payment mechanism because of its wide use. It is used in many areas like shopping, movie ticket booking, fee payment, mobile recharging, bill payment etc., All these uses attract students as their day to day activities gets more

improved and a lot easier. A lot of technological advancements have been taking place in field of payment. So it is very useful to know about the new trends and advancements in payment mechanism. It is also important that the young generation are aware about these new trends. It is also necessary to study about different methods of E-payment. So that we can have an idea about E-payment system and its security threats.

## 5. Research Methodology

The study was descriptive in nature based on both primary and secondary data. The primary data were collected by providing questionnaire to the respondents. The secondary data were collected from Journal articles, magazines, books etc.

### 5.1 Types of E Payment

#### a) Credit Card

A Credit card is a piece of plastic, 3-1/8 inches by 2-1/8 inches in size that carries information that allow you to make purchase now pay for them later. Credit cards from visa, master card or any other network allow you to pay for purchase or services by borrowing from the credit card company. To purchase goods from merchant who accept credit card such as merchant has credit card reader to purchase the payment transaction to withdraw cash from ATM. You then repay by making monthly payment toward the amount borrowed, that is you don't have to repay the whole borrowed amount in full at one go.

#### b) Debit Card

Debit card is a prepaid card and also known as ATM card. An individual has to open an account with the issuing bank which gives debit card with a personal id number, when he makes a purchase he enters his pin number on shop pin pad. When the card is slurped through the electronic terminal it dials the acquire a banking system either master card or visa card that validate the pin and finds out from the issuing bank whether to accept or decline the transaction the customer can never overspend because the system reject any transaction which exceeds the balance in his account. The bank never faces a default because the amount spent is debited immediately from the customer account with almost every bank account you are issued a debit card.

#### c) Smart Card

Smart card was first introduced in Europe mostly known as stored value card. A smart card is about the size of a credit card, made of a plastic with an embedded microprocessor chip that holds important financial and personal information. The microprocessor chip is loaded with the relevant information and periodically recharged. In addition to these pieces of information, systems have been developed to store cash onto the chip. The money on the card is saved in an encrypted form and is protected by a password to ensure the security of the smart card solution. In order to pay via smart credit is necessary to introduce the card into a hardware terminal. The device requires a special key from the issuing bank to start a money transfer in either direction. Smart cards can be disposable or rechargeable.

#### d) Digital Wallet

Digital Wallet otherwise known as Electronic wallets are being very useful for frequent online shoppers are commercially available for pocket, palm-sized, handheld, and desktop PCs. They offer a secure, convenient, and portable tool for online shopping. They store personal and financial information such as credit cards, passwords, PINs, and much more. To facilitate the credit-card order process, many companies are introducing electronic wallet services. E-wallets allow you to keep track of your billing and shipping information so that it can be entered with one click at participating merchants' sites. E-wallets can also store e checks, e-cash and your credit-card information for multiple cards.

#### e) Electronic Cheque

Electronic cheque is messages that contain all the information that is found on an ordinary Cheque but it uses digital signature for signing and endorsing and has digital certificate to authenticate bank account. There are many websites that accept Electronic Cheque. Electronic checks are typically used in orders processed online and are governed by the same laws that apply to paper checks. Electronic checks offer protective measures such as authentication and digital signatures to safeguard digital transactions.

#### f) Electronic Cash

Similar to regular cash, e-cash enables transactions between customers without the need for banks or other third parties. When used, e-cash is transferred directly and immediately to the participating merchants and vending machines. Electronic cash is a secure and convenient alternative to bills and coins. E-cash usually operates on a smartcard, which includes an embedded microprocessor chip. The microprocessor chip stores cash value and the security features that make electronic transactions secure. When e-cash created by one bank is accepted by other reconciliation must occur without any problem cash must be storable and receivable. Most E-cash is transferred directly from the customer's desktop to the merchant's site. Therefore, e-cash transactions usually require no remote authorization or personal identification number (PIN) codes at the point of sale.

## 6. Data Analysis and Interpretation

The data collected in the research were not simply because it contained unnecessary information and over or under emphasized facts. Therefore only relevant data were included in the analysis chapter. For better understanding, the collected data are simply represented in the form of diagram and charts. Interpretation of the data is also given to share the meaningful information.

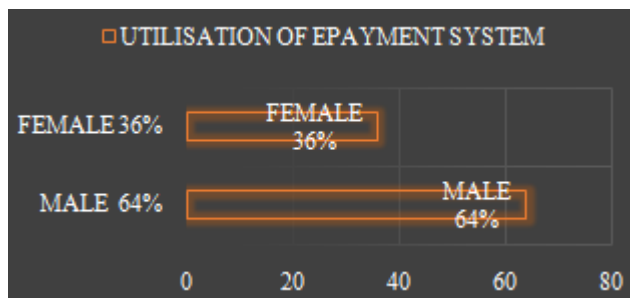


Figure 1: Utilisation by Gender  
Source: Primary Data

**Interpretation**

The above figure shows the classification of respondents on the basis of gender. Out of 100 percent, 64% of respondents are males and the remaining 36% are females.

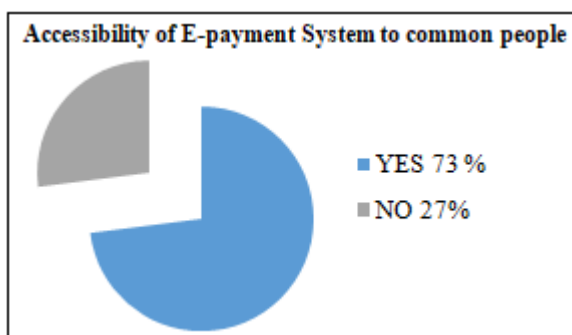


Figure 2: Accessibility of E-Payment System to Common People  
Source: Primary Data

**Interpretation**

By analysing the above chart, it is found that 73% of the students are accessible to e payment system and rest 27% are not accessed with e payment system.

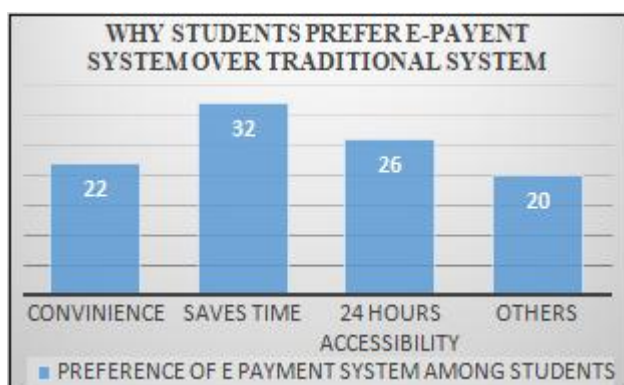


Figure 3: Why students prefer e-payment system over traditional system  
Source: Primary Data

**Interpretation**

From the chart it is clear that 22% student's uses e payment in terms of convenience, 32% uses as it saves time, 26% uses it because of 24hrs accessibility and the rest 20% have other reasons.

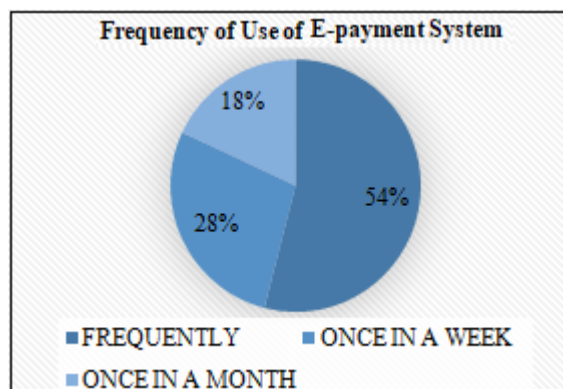


Figure 4: Frequency of Using E-Payment Mechanism  
Source: Primary Data

**Interpretation**

By analysing the above chart, it is found that 54% of students frequently use e payment, 28% uses once in a week, remaining 18% uses once in a month.

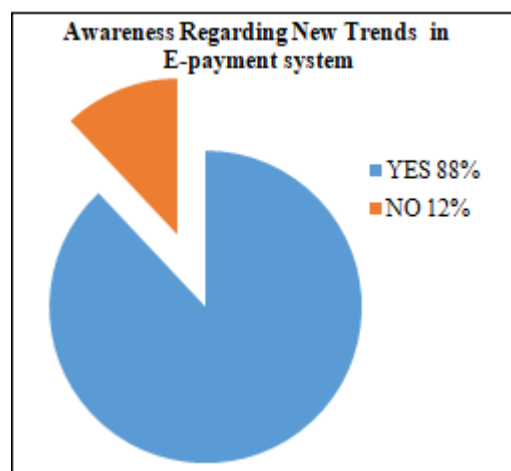


Figure 5: Awareness regarding new trends in e-payment system  
Source: Primary Data

**Interpretation**

By analysing the above chart, it is found that 88% of the respondents are aware about new trends in e payment and only 12% are not aware about it.

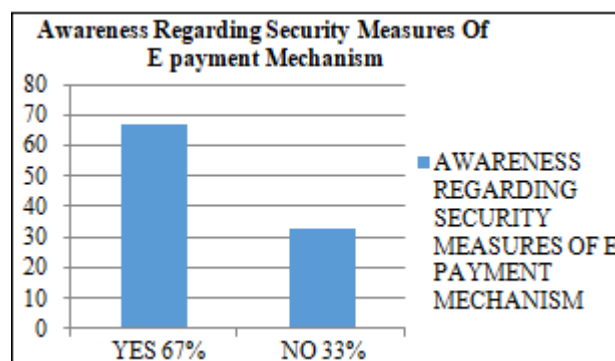
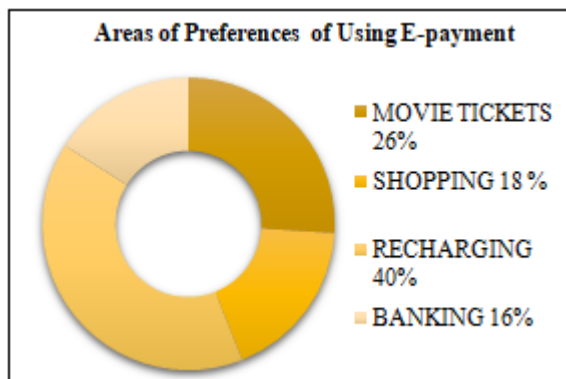


Figure 6: Awareness regarding security measures of e-payment mechanism  
Source: Primary Data

**Interpretation**

By analysing the above chart, it is found that 67% of the students are aware about the security measures of e payment and the rest 33% are not aware about the security measures.

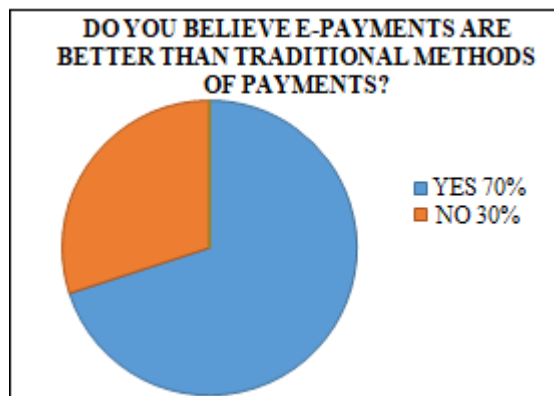


**Figure 7:** Areas of preferences for using e-payment  
Source: Primary Data

**Interpretation**

By analysing the above chart, it is found that 26% of student's uses e payment for booking movie tickets, 18% uses e payment for shopping, 40% of students uses e payment services for Recharging and 16% uses it for performing banking related transactions.

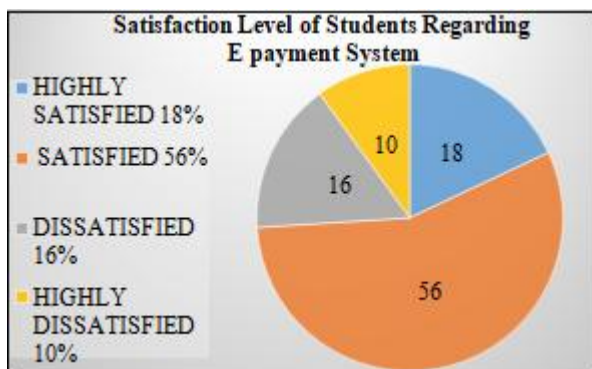
system are satisfied,70% are moderately satisfied and only 4% are dissatisfied.



**Figure 10:** Do you believe e-payments are better than traditional methods of payments?  
Source: Primary Data

**Interpretation**

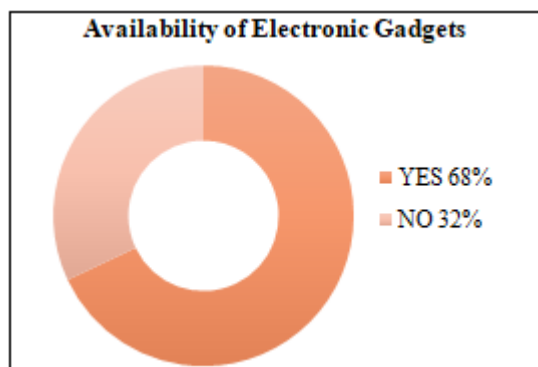
By analysing the above chart, it is found that70% of students had an opinion that e payment mechanism is better than traditional method and the rest 30% had an opinion that traditional method is better.



**Figure 8:** Satisfaction Level of Students Regarding E-Payment System  
Source: Primary Data

**Interpretation**

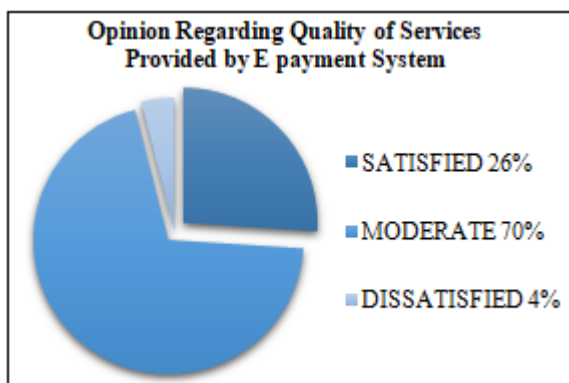
By analysing the above chart, it is found that18% students are highly satisfied with the use of e payment system 56% students are satisfied with e payment system,16% students are dissatisfied with e payment system and 10% students are highly dissatisfied.



**Figure 11:** Availability of Electronic Gadgets  
Source: Primary Data

**Interpretation**

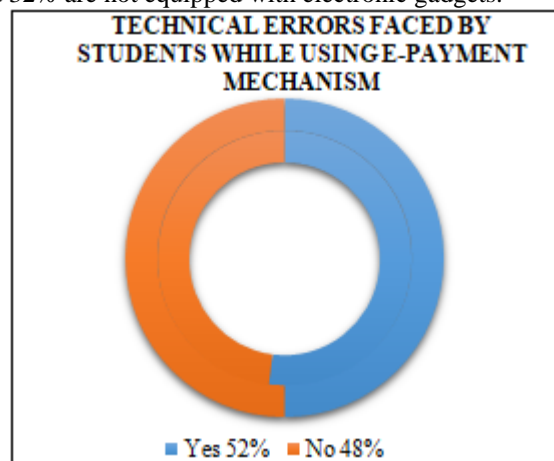
By analysing the above chart, it is found that68% of the students are equipped with electronic gadgets for e payment and 32% are not equipped with electronic gadgets.



**Figure 9:** Opinion regarding quality of services provided by e-payment system  
Source: Primary Data

**Interpretation**

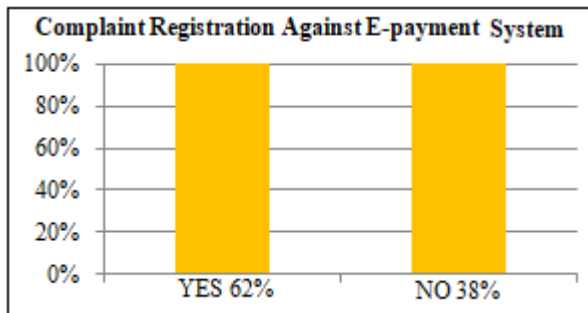
By analysing the above chart, it is found that 26% had an opinion that quality of services provided by e payment



**Figure 12:** Technical errors faced by students while using e-payment mechanism  
Source: Primary Data

**Interpretation**

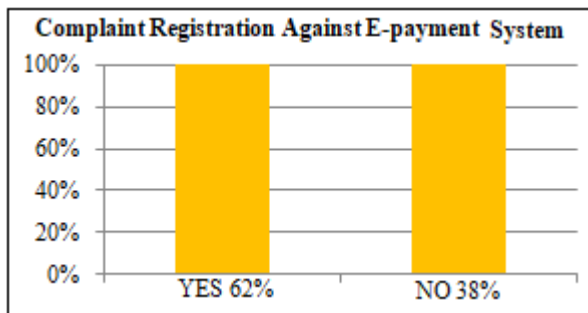
By analysing the above chart, it is found that 52% students have faced threat related to e payment and 48% haven't faced any threat.



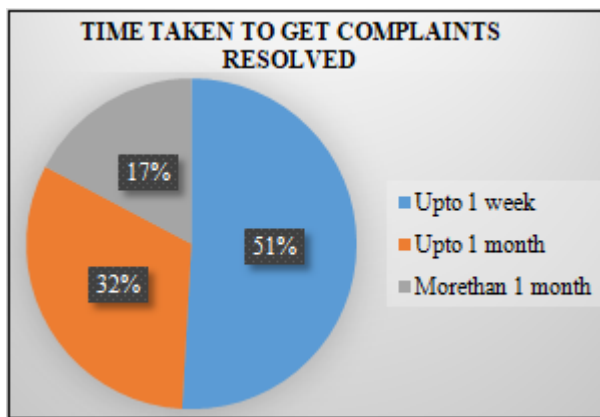
**Figure 13:** Complaint Registration against E-Payment System  
Source: Primary Data

**Interpretation**

By analysing the above chart, it is found that 62% students have registered complaint against e payment system and the 38% have not registered any complaint with regard to e payment mechanism.



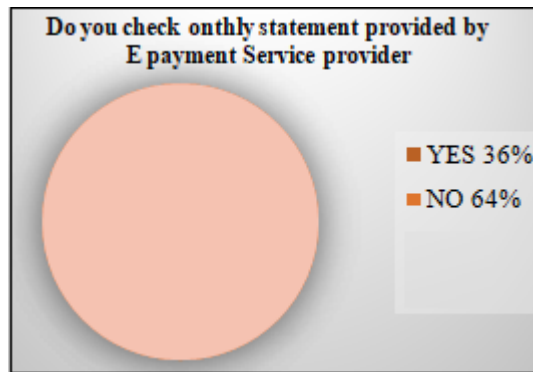
**Figure 14:** Time taken to get complaints resolved



Source: Primary Data

**Interpretation**

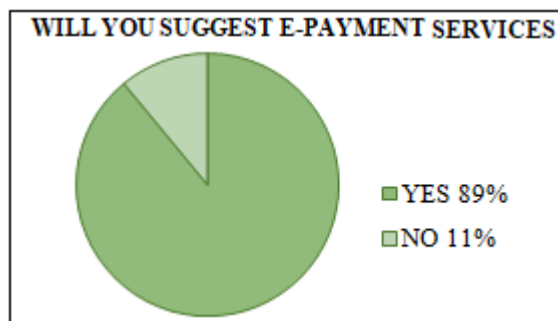
From the above chart it is clear that 51% of students got their complaints resolved within one week, 32% students got complaints resolved within one months and the rest 17% students took more than one month to get their complaints resolved.



**Figure 15:** Do You Check Monthly Statement Provided by e-Payment Service Provider  
Source: Primary Data

**Interpretation**

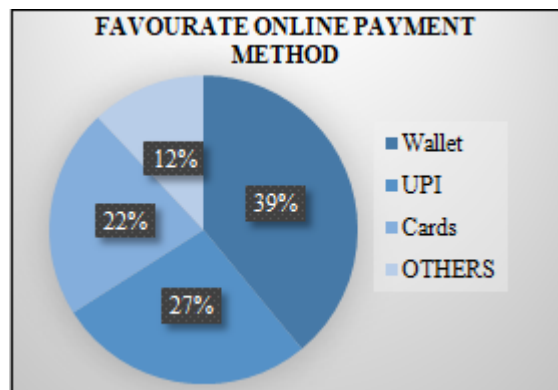
By analysing the above chart, it is found that 36% students periodically check monthly statement and the rest 64% is not interested to check monthly statement.



**Figure 16:** Will you Suggest E-Payment Services  
Source: Primary Data

**Interpretation**

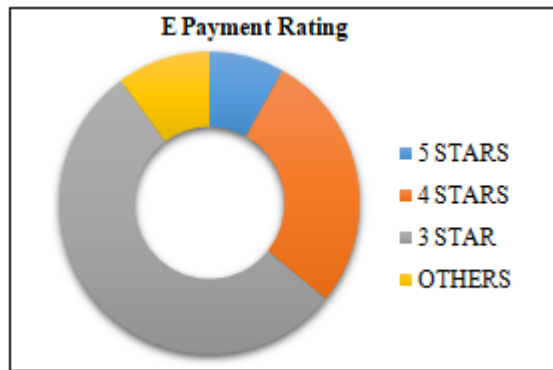
By analysing the above chart, it is found that 89% of students are ready to suggest E-payment services and the rest 11% are not ready to suggest it.



**Figure 17:** Favorite Online Payment Method  
Source: Primary Data

**Interpretation**

By analysing the above chart, it is found that 39% of students are using Different types of E-Wallets as their fevourate Method, 27% of students are using UPI Apps as their fevourate method, and 22% of students are using Credit or debit card as their fevourate method of E-payment.



**Figure 18:** E-Payment Service Rating

Source: Primary Data

### Interpretation

The above chart shows that 8% of students give 5 stars, 28% gives 4 stars, 54% gives 3 stars and the rest 10% gives less than 3 stars rating for the performance of different systems.

## 7. Conclusion

Technology has arguably made our lives easier. One of the technological innovations in banking, finance and is the Electronic Payments. Electronic Payments provides greater freedom to students in online shopping, movie ticketing, group buying etc., and at whichever time of the day. After analysis and comparison of various modes of electronic payment systems, it is revealed that it is quite difficult, if not impossible, to suggest that which payment system is best. Some systems are quite similar, and differ only in some minor details. The study also reveals that e-payment systems acceptance among students is due to the prominent factors like convenience, 24 hours accessibility, ease of use etc. Added to this, success of e-commerce payment systems also depends on consumer preferences, technological advancement and security. The Reliable and Cashless payment system offers immunity against theft of paper and e-money. Based on our review of these findings, it is clear that the Internet is playing a more and more vital role in the field of e-payment. Students are becoming aware of need to measure the collaborative effects of e-payment. Feedback can be obtained easily as that online payment system is virtual in nature. We also came to know about the reasons behind the popularity of E-payment Mechanism as they help a lot to save valuable time and give value to our time.

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