

## Research Article

# Analysing the Consumer Choice and Preferences for Gamified E-Commerce in Ludhiana

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## I N F O

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## A B S T R A C T

This study investigates consumer choice and preferences for gamified e-commerce in Ludhiana, India. Gamified e-commerce incorporates game-like elements, such as points, badges, referral contests, and leaderboards into the online shopping experience. The purpose of this study is to understand how these elements influence consumer engagement, purchase decisions, and brand loyalty. The findings of the study revealed that consumers in Ludhiana are generally positive towards gamified e-commerce. The study also identified some challenges associated with gamified e-commerce. Some consumers expressed concerns about the potential for addiction and manipulation. Overall, the findings of this study suggest that gamified e-commerce has the potential to be a successful strategy for online retailers in Ludhiana.

**Keywords:** Gamified E-Commerce, Consumer Choice, Consumer Preferences, Ludhiana, India

## Introduction

Gamification is the application of game principles like challenges and rewards in non-game contexts like education and shopping. Using Gamification it becomes easy to target, engage, and convert your prospective buyers because of the human nature to compete, win, and get fame. The effectiveness of Gamification can be attributed to human psychology. As humans, we all are inclined to chase quick rewards and recognition. Many industries like finance, education, and e-commerce are actively using Gamification to increase buyer retention and revenue by building engagement. Gamification is the process of gaming elements and game principles in e-commerce applications. It shows different game design elements to expand user engagement on different applications, organisational work rate, the drift of the organisation, getting new ideas, bringing crowd on the application, employee recruitment and evaluation, ease of use, usefulness of systems, physical, and mental exercises, and more. Some techniques used in this approach include adding different choices, providing

a tutorial, creating a competitive challenge, and adding narratives according to the customer's needs.

Gamification is the process of taking something that already exists – a website, an enterprise application, or an online community and integrating game mechanics into it to motivate participation, engagement, and loyalty. Gamification locates the game or the data-driven techniques with which the game designers engage players for longer periods of time, and try to impose them on non-game experiences to motivate actions that add value to businesses. The greed of winning more rewards sometimes makes the user play the game for a longer period of time and hence engage with the Flipkart application for a longer period of time. Gamification principles.

Prior to utilising Gamification to jumpstart your business, it's necessary to understand the core principles. A well-designed Gamification system motivates the users to do something (a reward), the ability or space to engage in the action, and finally the trigger to throw them headfirst into the "game." Gamification in e-commerce appeared to be an extremely

effective sales tool. There are numerous methods to set up more engagement. What better way to engage than to challenge their intellect (trivia and quizzes) and let them have some fun (Gamification)? Gamification strategies are an affable and productive way to ease the buyer's journey with little effort and reward. It elicits strong emotions as it taps into the drive to strive, compete, and improve.

### Integrating Gamification into a Website

Different Gamification strategies can be implemented, but here from this report, we want to highlight some of the most popular and effective techniques for e-commerce. Some of them are:

#### Achievements & Badges

Different online platforms offer different gifts and offers to their customers like Flipkart provides different offers to their customers while Amazon offers different offers to their customers. So it is up to the company what to offer to the customers so that the customers retain them for the long run or for a longer period of time. Companies should look after what each competitor is offering and accordingly, they have to give offers to retain their customers.

#### Countdowns

In many games, you must complete a task within a given time limit in order to win. This is just like that. A countdown is the best possible way to force customers through the conversion funnel. If a user makes a purchase or completes a form in that time, they win (and receive the benefits associated with winning).

#### Point System

The customer gets extra points when they buy the product from them, they write reviews of the product, ask their friends to join them, etc. The customer is provided with the different types of levels and inviting more numbers of customers could make him reach the upper level. This technique is extremely viable for building dedication, and loyalty, and taking clients back to the site.

#### Referral Contests

Referral challenges are a phenomenal method to pick up an introduction to new leads. Dropbox offers a referral framework wherein clients are given stockpiling updates for alluding to new information exchanges. This kind of referral challenge keeps clients intrigued and interfacing with your image and site. Regardless of whether referral challenges aren't for you, recollect that social purchasing can be a useful asset.

### Review of Literature

#### Meister (2020)

This approach allows for increasing customer loyalty and engagement. To use Gamification successfully, it's

absolutely essential to understand the motivation and expectations of the customers. Therefore, Gamified approaches should not only build on extrinsic but also on intrinsic motivation. The change in customers' needs over time has also to be taken into account. Thus, Gamification describes a continuous process that leverages customers' emotions.

#### J Hamari et al. (2019)

The results indicate that achievement and social-related features are positively associated with emotional, cognitive, and social brand engagement. Immersion-related features are positively associated with social brand engagement. The results imply that there is a positive chain relationship between Gamification, brand engagement, and brand equity, and that, Gamification appears to be an effective tool for brand management.

#### Meder et al. (2018)

The emerging user participation or change in behaviour is a key aim when applying Gamification. The studies in certain fields, such as education health e-commerce and enterprise, show that it has a positive effect. The study also revealed that tangible rewards increase consumer activity substantially quite more than intangible rewards.

#### Folmar's (2015)

They captured an important idea in the application of Gamification in learning and other fields: game thinking. Game thinking mandates rethinking teaching practises, not just adding game elements without considering how Gamification works: "Gamification is not just making a game, which imparts a lesson; it is applying game thinking to how we impart that lesson and continuing to develop it based on the feedback from the players".

#### Tracy et al. (2015)

The research on Gamification as a customer engagement experience environment where he empirically generated insights into a Gamification approach to online customer engagement and behaviour (CE and CEB). There is a significant discrepancy between hyped coverage and empirically based research as to the appropriateness of virtual brand Gamification in engaging customers. Using Samsung Nation as a parameter of analysis, a mixed-method research design using ethnography and also participant observation is used to address the research objective. The findings signify key processes and outcomes of CE and CEB within virtual Gamified platforms. Additionally, insights are provided into implementation flaws deriving from Gamification that may potentially impact the CE experience.

#### Hildebrand et al. (2014)

They observed that in the level of different kinds of consumer behaviours according to their category how dealing with

a challenge in online shopping in a gamified zone has effectively increased the perceived value of an unblocked reward. He elaborated that it is important to remember that the process of Gamification might not always be successful Gamified services create gamely experiences that are needed to reach the targeted outcomes behaviours.

Wiebe et al., (2014)

The results showed that engagement of consumers in Gamified through online shopping tasks is needed for them to be effective. Within digital games research, engagement has been described as being part of how games are experienced.

Otterbring et al. (2014)

They examined both choice and visual attention in order to understand the process that could lead to the effect of different materials on purchasing behaviours. The outcomes pointed it is important to include a process perspective since solely using the choice might not fully reflect its influence on understanding the effects of Gamification on the purchasing capacity or behaviours of the customers.

Nunan (2014)

Their aim is to encourage the customer to continue purchasing, for example, reward points are given easily to a buyer who has interacted with the sellers or just been on the seller's website for a certain period or just by clicking like or sharing on their wall about the seller. Then these reward points can be used in future purchases.

## Research Methodology

Research is a structured enquiry that utilises acceptable scientific methodology to solve problems and create new knowledge that is generally applicable, in short, the methodology adopted for conducting the study.

## Objectives

- To understand consumer choices regarding games on e-commerce platforms
- To study customer experience with respect to Gamification on e-commerce platforms

## Research Design

The nature of research is descriptive research, as it describes the characteristics of the population or phenomenon that is being studied. In this study, the self-administered questionnaire is chosen to collect data about "analysing the consumer behaviour and their preferences towards Gamification on e-commerce in Ludhiana".

## Sampling Plan

### Target Population

The population for the study was the people of Ludhiana city aged 18 years and above.

## Sampling Technique

The sampling technique used in this research is non-probability convenience sampling. In such a technique researcher seeks his or her own convenience to reach the ultimate target group.

## Sample Size

The sample for this research is 200.

## Research Instrument

The online questionnaire is the main instrument used in this study. A questionnaire is a technique of data collection where different people are asked to respond to the same set of questions in a predetermined order. The questions are answered without an interviewer present. Subjects usually record a written response to each questionnaire item. Subjects can fill out the questionnaire at their convenience and answer the items in any order.

## Data Collection Method

Primary data: In this study unbiased structured questionnaires and personal interviews as the methods for receiving primary data.

Secondary information has been acquired from various newspapers, magazines, books, and various websites.

## Data Analysis Tools and Techniques

For interpretation, various tools have been used like tables, graphs, and pie charts.

## Scope of Study

There are various problems related to Gamification in e-commerce which are as follows:-

- Gamification is able to attract users to buy the products from applications as well as from e-commerce platforms. It is up to the e-commerce platforms how they are going to retain their customers for longer periods of time.
- The games are able to leave a positive impact on the user's mind or not i.e. how the customer feels when he wins the game or how he feels when he loses the game. Does the customer try again and again to win rewards or do they just quit the game when they lose?
- How many users enjoy playing games on e-commerce applications? The interface of the games plays an important role in the enjoyment of the game if the game interface is not that attractive then the customer will leave or switch to the other websites.
- The probability of winning the games can also be the reason for problems in the application if the user is not winning anything after playing for a longer period of time then it might happen that the customer gets irritated and switches over to the other applications or other e-commerce platforms.

### Analysis and Data Interpretation

As shown by the figure 1, out of the total respondents, 51.8% are males and 48.2% are females.

As shown by the figure 2, out of the total respondents 14.6% are of 15-20 years of age, 62.8% are of 20-25 years of age, 17.7% are of 25-35 years of age and 4.9% are above 35 years of age.

As shown by the figure 3, out of the total respondents 61.8% of respondents are students, 18.9% of respondents are self-employed, 18.3% of respondents are professional, 1.2% of respondents are a housewife, 0.6% of respondents are doing private jobs.

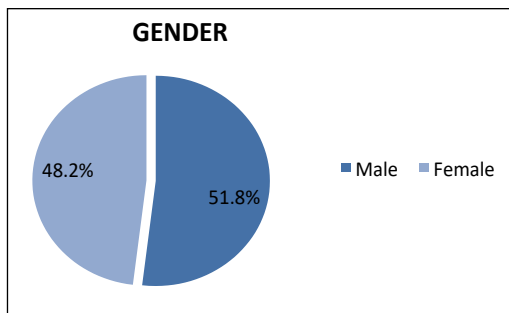


Figure 1. Percentage of Respondents on Gender Basis

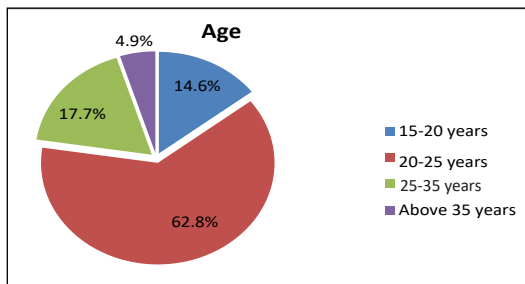


Figure 2. Percentage of Respondents on the Basis of Age

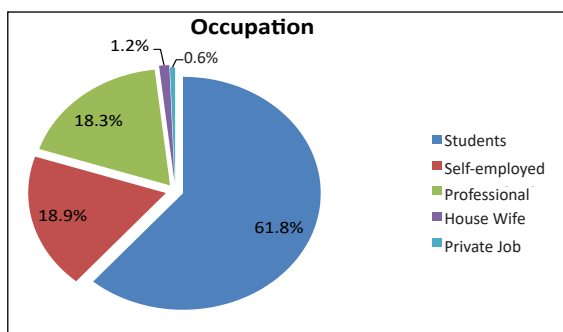


Figure 3. Percentage of Respondents on the Basis of Occupation

As shown by the figure 4, out of the total respondents 59.1% respondents are earning Nil Income (students), 14.6% respondents are earning less than 20K, 7.3% respondents are earning between 20K-30K, 8.5% respondents are earning between 30K-40K and 10.4% respondents are earning above 40K.

As shown by the figure 5, out of the total respondents 16.5% respondents are playing for experience, 14.6% respondents are playing to win rewards, 52.4% respondents are playing for fun, 15.2% respondents are playing to earn money, 0.6% respondents are playing for cricket and 0.6% respondents are playing for time pass.

As shown by the figure 6, out of the total respondents 15.2% respondents like to play spin-offs for winning rewards, 17.1% respondents like to play quizzes for winning rewards, 14.6% respondents like to play skill-based games, 20.1% respondents like to play mental skill-based games, and 32.9% respondents like to play fun games for winning rewards.

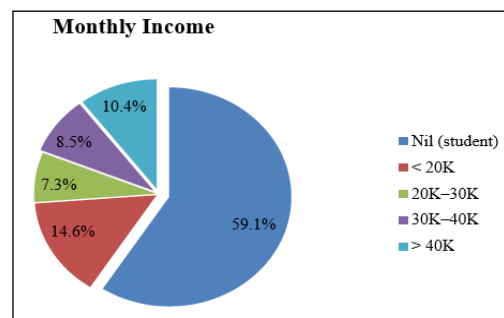


Figure 4. Percentage of Respondents on the Basis of Monthly Income

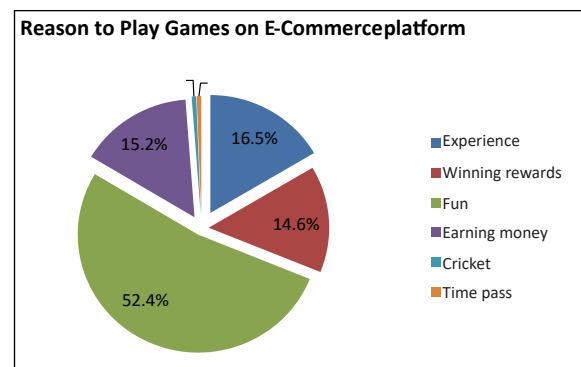


Figure 5. Percentage of Respondents on the Basis of Reason to Play on E-Commerce Platform

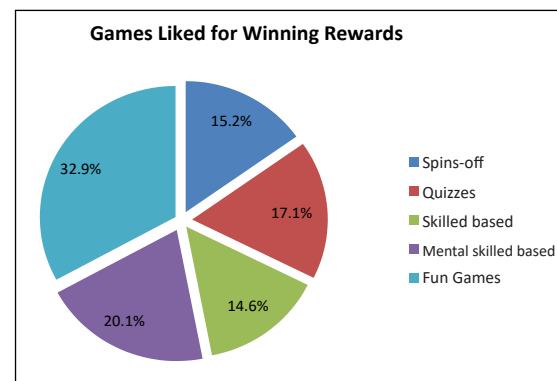


Figure 6. Percentage of Respondents on the Basis of Games Liked Most for Winning Rewards

As shown by the figure 7, out of the total respondents 10.4% of respondents play daily, 27.4% of respondents like to play once a day, 36% of respondents like to play once a week, and 26.2% of respondents like to play once a month on e-commerce.

As shown by the figure 8, out of the total respondents 16 respondents strongly disagree, 13 respondents disagree, 55 respondents are neutral, 54 respondents agree and 26 respondents strongly agree that they like to rotate the wheel while playing games on e-commerce.

As shown by the figure 9, out of the total respondents 16 respondents strongly disagree, 45 respondents disagree, 41 respondents are neutral, 47 respondents agree and 15 respondents strongly agree that they have greed for earnings like others while playing games on e-commerce.

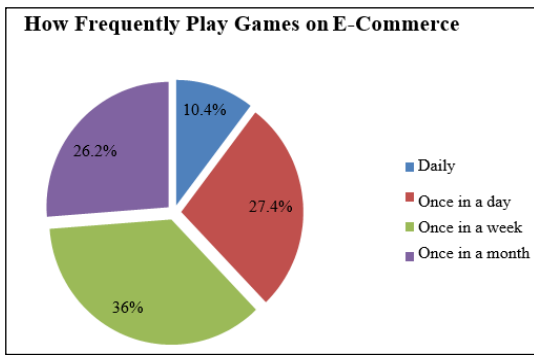


Figure 7. Percentage of Respondents on the Basis of How Frequently They Played Games on E-Commerce

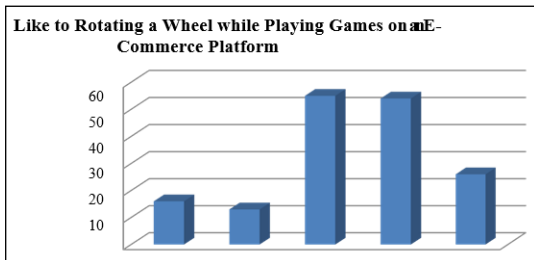


Figure 8. Responses of Respondents regarding Whether They Liked to Rotate the Wheel While Playing Games on an E-Commerce Platform

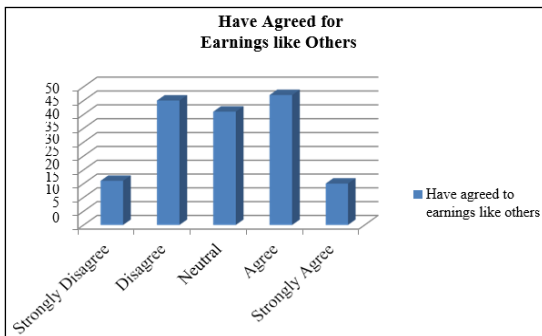


Figure 9. Responses of Respondents regarding Their Greed for Earning Like Others

As shown by the figure 10, out of the total respondents 11 respondents strongly disagree, 28 respondents disagree, 40 respondents are neutral, 54 respondents agree and 31 respondents strongly agree that they enjoy achievements through Gamification.

As shown by the figure 11, out of the total respondents 14 respondents strongly disagree, 34 respondents disagree, 46 respondents are neutral, 41 respondents agree and 29 respondents strongly agree that they use Gamification for earning rewards.

As shown by the figure 12, out of the total respondents, 29.3% play till the middle of the game, 44.5% like to play until they don't lose, and 26.2% play until they don't get any reward on e-commerce.



Figure 10. Responses of Respondents regarding Whether They Enjoyed Achievements Through Gamification



Figure 11. Responses of Respondents regarding Using Gamification for Earning Rewards

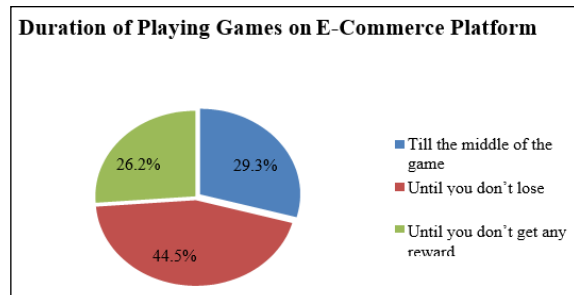


Figure 12. Percentage of Respondents on the Basis of Duration of Playing on E-Commerce Platform

As shown by the figure 13, out of the total respondents 20 respondents strongly disagree, 19 respondents disagree, 51 respondents are neutral, 58 respondents agree and 16 respondents strongly agree that they are more likely to make purchase if the shopping process is enjoyable.

As shown by the figure 14, out of the total respondents 10 respondents strongly disagree, 32 respondents disagree, 42 respondents are neutral, 62 respondents agree and 18 respondents strongly agree that they enjoy when sites/apps add games or interactive features.

As shown by the figure 15, out of the total respondents 18 respondents strongly disagree, 19 respondents disagree, 44 respondents are neutral, 50 respondents agree and 33 respondents strongly agree that winning points can encourage one to make a purchase.

As shown by the figure 16, out of the total respondents 14 respondents strongly disagree, 15 respondents disagree, 38 respondents are neutral, 62 respondents agree and 35 respondents strongly agree that they like to play games that are more challenging and require skills.

As shown by the figure 17, out of the total respondents, 11 respondents strongly disagree, 21 respondents disagree, 35 respondents are neutral, 55 respondents agree and 42 respondents strongly agree that they like to play games in which unlocking levels make it more challenging.

As shown by the figure 18, out of the total respondents 14 respondents strongly disagree, 18 respondents disagree, 49 respondents are neutral, 54 respondents agree and 29 respondents strongly agree that they like to play games that provide opportunity to win expensive gifts or vouchers.

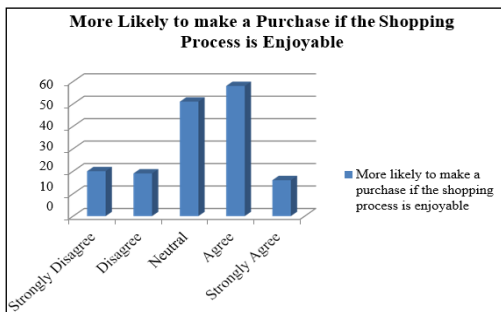


Figure 13. Responses of Respondents regarding Whether They are More Likely to Make Purchases if the Shopping Process is Enjoyable



Figure 16. Responses of Respondents regarding Whether They Like to Play Games that are More Challenging and Require Skills

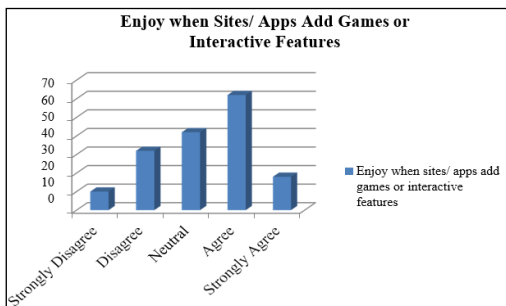


Figure 14. Responses of Respondents about Enjoyment when Sites/ Apps Add Games or Interactive Features

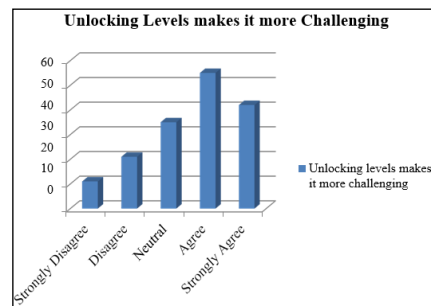


Figure 17. Responses of Respondents regarding Whether They Like to Play Games in which Unlocking Levels Makes it More Challenging

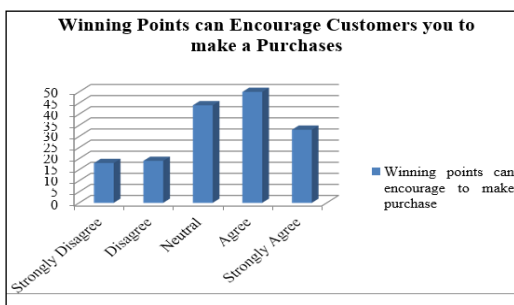


Figure 15. Responses of Respondents regarding Whether Winning Points Can Encourage Making Purchases



Figure 18. Responses of Respondents regarding Whether It Provides an Opportunity to Win Expensive Gifts or Vouchers

As shown by the figure 19, out of the total respondents 14 respondents strongly disagree, 32 respondents disagree, 51 respondents are neutral, 40 respondents agree and 27 respondents strongly agree that they try to complete all the steps to get that reward including reference and posting on social media.

As shown by the figure 20, out of the total respondents 16 respondents strongly disagree, 31 respondents disagree, 44 respondents are neutral, 44 respondents agree and 29 respondents strongly agree that they try to maintain streaks to win super rewards.

As shown by the figure 21, out of the total respondents 19 respondents strongly disagree, 21 respondents disagree, 36 respondents are neutral, 56 respondents agree and 32 respondents strongly agree that the Winning points encourage to use or visit that app frequently.

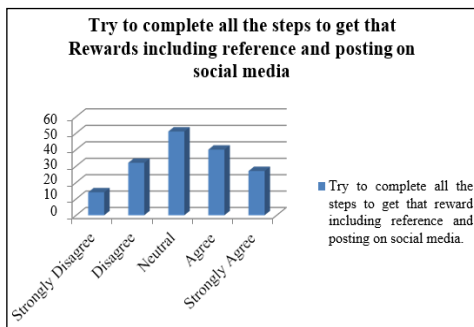


Figure 19. Responses of Respondents regarding Whether They Tried to Complete All the Steps to Get that Reward Including Reference and Posting on Social Media



Figure 20. Responses of Respondents regarding Trying to Maintain Streaks to Win Super Rewards

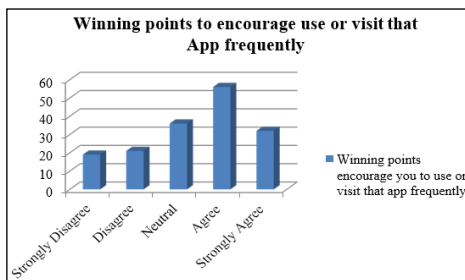


Figure 21. Responses of Respondents regarding Whether Winning Points Encouraged Them to Use or Visit that App Frequently

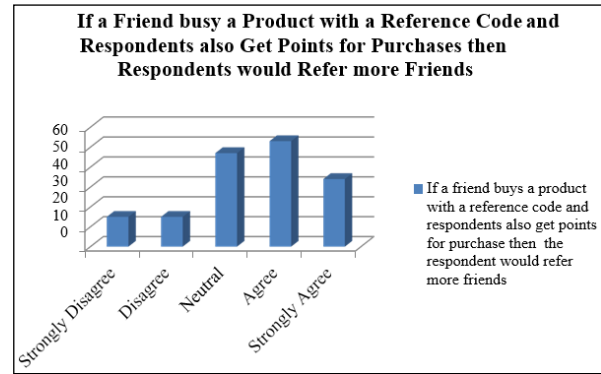


Figure 22. Responses of Respondents regarding Referring More Friends

As shown by the figure 22, out of the total respondents, 15 respondents strongly disagree, 15 respondents disagree, 47 respondents are neutral, 53 respondents agree and 34 respondents strongly agree that if the respondent's friend buys a product with a reference code and the respondent also gets points for purchase then the respondent would refer more friends.

### Findings

1. The data collected from the questionnaire was collected from 164 respondents where 51.8% were male respondents and 48.2% were female respondents.
2. Most people prefer to play fun games, and spin-offs for winning rewards, whereas skill-based games are least preferred. However, winning points make the platform attractive for users and encourage them to make purchases.
3. The best part is gamification is not addictive in e-commerce. Most respondents like to play once a month or once a week rather than being occupied on the platform 24/7.
4. Most of the respondents enjoy achievements through Gamification over greed for rewards. Adding to this, they like to Review the products on the app if it provides points for discounts.
5. While most of the respondents are neutral, many of them strongly agree that they are more likely to make a purchase if the shopping process is enjoyable. They strongly agree that they like to play games in which unlocking levels make it more challenging, they try to maintain streaks to win super rewards.
6. They enjoy when sites/ apps add games or interactive features, respondents strongly agree that they like to play games that provide an opportunity to win expensive gifts or vouchers.
7. 40 respondents agree and 27 respondents strongly agree that they try to complete all the steps to get that reward including reference and posting on social media and respondents are neutral where 14 respondents strongly disagree and 32 respondents disagree.

8. 53 respondents agree and 34 respondents strongly agree that if the respondent's friend buys a product with a reference code and the respondent also gets points for purchase then the respondent would refer more friends 47 respondents are neutral whereas 15 respondents strongly disagree and 15 respondents disagree

### Recommendations

1. E-commerce platforms should try to inculcate online games to attract more customers.
2. E-commerce websites should launch new targets on a daily basis to sustain the customers so that they don't switch to other platforms which will help them retain the customers for a long playing time.
3. The e-commerce platform should limit the number of attempts per user so that the customer has a mindset setup that in this attempt only he/ she has to win the reward and every user has equal attempts and chances to win the rewards.
4. E-commerce platforms should provide all kinds of games that involve quizzes, fun games, and mental skill-based so as to attract every type of game lover to engage in that platform to play.
5. They should provide more points or discounts on referring to others that will not only increase customer base but also customer loyalties. And they will stick to that platform and keep referring to others.
6. A lot of customers try to maintain a streak to win more rewards, thus websites/ apps should provide interesting steps to encourage them to maintain the streak, and that too the reminder should also be there in case customers forget to maintain it. That will lead to more frequent use of the platform and increase customer value.

### Limitations

1. This study was based on the opinion of people, trust/honest opinions for this propaganda were difficult to collect.
2. A study was limited to Ludhiana and results cannot be general.
3. Time factor puts hindrance in research.
4. The reliability of the data always remains a prime concern when human behaviour is surveyed.

### Conclusion

Based on the analysis of secondary as well as primary data sources we found factors that have a significant impact on the preference of the customer playing games on e-commerce platforms. Nowadays e-commerce sectors are booming so they need to adopt Gamification platforms to retain more customers and also engage them for more time in the app. Some customers hesitate to buy products if

the products are expensive but through Gamification, they can earn a good amount of rewards that will eventually provide discounts then the customer will definitely buy the products from these platforms. This will attract more new customers, retain the old customers, and create customer loyalty. Sometimes e-commerce platforms should also provide easy games to customers so that they can win and the customers who left playing in the beginning can stick to the game and play till they win the reward or end. It will engage them and give them hope to win rewards and bonuses. Customers love it when they get rewards/ discounts, and Gamification, referring friends will encourage them to stick to that platform and they will buy more products from the same.

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