

Level Up or Lose Out? - A Study on The Impact of Gamification Tools & Investment Preferences Among New Workforce Entrants

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Abstract:

The financial landscape is evolving rapidly, and young professionals are entering the workforce with a unique perspective on money management. This study, titled "Level Up or Lose Out?", explores the investment preferences and attitudes towards gamification. By focusing on four key investment products – bonds, stocks, mutual funds (MFs), and exchange-traded funds (ETFs) – the research aims to bridge the gap between traditional financial tools and the digital-first approach favored by Gen Z and Millennials. The study talks about financial profiles and investment familiarity of these young adults. It shows their preferred income brackets and employment statuses, providing valuable insights into their financial starting points. Additionally, it explores their awareness of investment options, categorizing them as "familiar" with bonds, stocks, MFs, and ETFs. The survey then explores the realm of investment apps, a crucial touchpoint for this tech-savvy generation. By including popular platforms like Zerodha Varsity, Upstox, Groww, and 5paisa, the research investigates the existing app ecosystem that young adults are utilizing for their financial ventures. This data helps identify potential areas of overlap and paves the way for integrating gamification features within these existing platforms, maximizing user adoption.

The heart of the study lies in exploring the impact of gamification on investment behavior. By introducing concepts like points, badges, leaderboards, progress bars, and virtual trophies, the survey gauges the potential for increased engagement and motivation. The findings reveal a positive sentiment towards these elements, with a significant portion of respondents expressing excitement about earning rewards for smart investment decisions and tracking their progress through gamified interfaces. This suggests a strong attitude towards gamification as a tool for enhancing financial literacy and fostering a more engaging investment experience.

Keyword : Gamification, investment behavior, digital income platform, financial literacy

Introduction

The world of finance and banking is continually changing, and one of the latest trends is the integration of gamification into these sectors. This innovative approach applies game-like elements

and principles to banking and finance to enhance user engagement, educate customers, improve their experience, and drive desired behaviors. By leveraging gamification, financial institutions can create interactive and engaging digital experiences

that help them connect with their customers on a deeper level while streamlining complex processes. Gamification in banking and finance has gained momentum recently, as it offers numerous benefits. For example, implementing gamification often helps increase user engagement, loyalty, and

satisfaction, improving customer retention and acquisition. Additionally, gamification can motivate users to save money, invest in their future, or use digital banking apps and services more frequently. This can drive revenue growth for financial institutions, reduce costs, and improve efficiency.



Fig No 1 – Gamification Tool

Various gamification techniques, including point systems, badges, levels, leaderboards, challenges, and quests, are utilized in the digital finance landscape. These techniques aim to make banking and finance more fun, interactive, and rewarding for users. For example, users can earn points or badges by completing tasks such as setting up automatic savings plans, paying bills on time, or using mobile banking apps. Leaderboards and challenges can encourage users to compete with one another and achieve specific financial goals.

Gamification in banking means incorporating game mechanics and design principles into non-game contexts within the financial sector. The goal is to make financial activities more interesting, enjoyable, and rewarding for customers. Financial institutions achieve this by integrating points, badges, levels, and rewards into their services, creating a more immersive and interactive user experience.

Through gamified finance, mundane transactions and tasks beyond traditional bank account interfaces are transformed into exciting challenges. Digital transformation in banking influences human tendencies towards competition, achievement, and recognition, fostering a positive and dynamic relationship between customers and their financial services providers. Ultimately, gamification in banking aims to create engaging experiences to improve customer satisfaction and engagement while improving brand loyalty and revenue for financial institutions.

Literature Review

Pay, A., Indapurkar, K., & Gupta, K. P. In their paper, Gamification of financial applications and financial behavior of young investors explored people's views on money (financial attitude), their confidence in handling money (financial self-efficacy), and how their financial planning activities affect their overall financial behavior.

The researchers have also explained the concepts of financial management behavior, financial attitude, financial self-efficacy, and financial planning activity.

(Bitrián et al., 2020) In their research paper, “Making finance fun: The gamification of personal financial management apps,” integrates self-determination theory (SDT) and the technology acceptance model (TAM) to explore how gamification increases users' motivation and intention to use personal financial management (PFM) apps, and how it facilitates their adoption.

Palmquist, A. (2023). studied that there is increasing interest in incorporating game design elements in workplace learning, known as instructional gamification. Despite initial positive indications, there is still a need for a deeper understanding of how organizational stakeholders play a role in implementing instructional gamification. This study employed an explanatory sequential mixed-methods approach to identify and understand stakeholders' instructional gamification design preferences and how these preferences might impact their endorsement of instructional gamification.

(Şenol & Onay, 2023) investigated whether gamification can help mitigate the behavioral biases of investors by conducting a unique stock market experiment that is free from observer-expectancy and subject-expectancy effects. Utilizing the trading data of investors who simultaneously have active portfolios in an investment firm and a stock market simulation game, they showed that investors have different biases in real versus simulated settings. This study finds that participating in a stock market game affects all biases differently.

Research Methodology

This section describes research methodology and provides an overview of the approach taken to fulfil

the objectives of the study. It provides a basis for the chosen research design, data collection instruments, sampling design, and analysis techniques.

Research Objectives

1. To explore the investment preferences of new workforce entrants (Gen Z and younger millennials) and the underlying factors influencing their consumer behavior regarding financial products.
2. To examine the impact of gamification on young adults' adoption of mobile investment apps

Research Design:

The research design adopted for this study is descriptive in nature, aiming to describe and analyze the factors influencing consumer behavior in the Indian fashion retail industry. This research employs a quantitative approach, relying on numerical data to examine the relationships between variables. The chosen method for data collection is a survey questionnaire. Once finalized, the questionnaire underwent a pilot test with a small group of individuals representative of the target population. This pilot test helped identify any ambiguities or confusing questions, ensuring the final version was clear, concise, and easy to understand for participants.

Sampling and Data Collection

This research focuses on a specific population segment: new workforce entrants. While a random sampling approach, where every member of the population has an equal chance of being selected, is considered ideal, practical limitations may hinder its implementation. Therefore, a purposive sampling method is proposed as a more feasible alternative. Purposive sampling involves selecting participants who possess specific characteristics relevant to the research question. In this study, participants will be chosen based on their recent

entry into the workforce. This approach ensures that the data collected reflects the experiences and financial behaviors of this specific demographic. However, purposive sampling carries the risk of bias if not implemented carefully. To mitigate this risk, the researchers strived to achieve a diverse sample in terms of age, gender, and educational background within the target population.

Tools of Analysis

The analysis of data collection is completed and presented systematically with the use of Microsoft Excel. The various tools that were used for the presentation are:

- Pivot Tables
- Lookup Functions
- Pie-charts

Data Interpretation

In this section, Data interpretation has been discussed using statistical tools.

1. Age group?

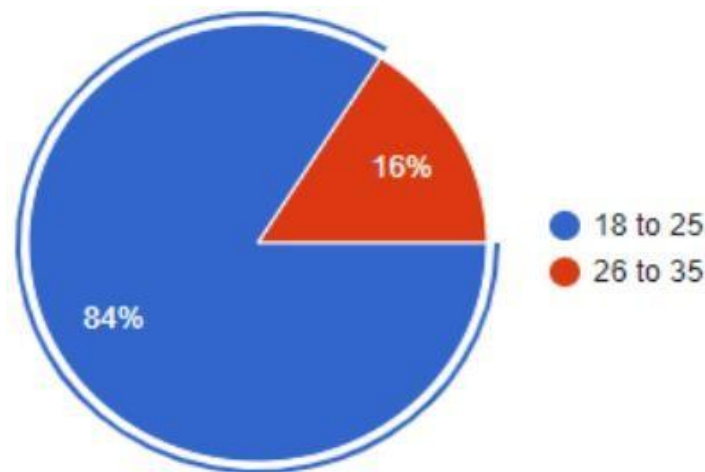


Figure No. 2 - Age of the respondents

Purpose – Understanding Respondent Age: Since investment preferences and receptiveness to gamification tools can vary by age, Figure 3 provides a breakdown of the respondents' age groups. This information is crucial for segmenting the target audience based on age for a more effective study.

Results – Our study included 75 respondents, with a surprising 84% falling into the 18-25 age range. This indicates that most participants belong to Generation Z and possibly some younger Millennials. Only a small portion belongs to generations older than Gen Z.

2. Employment Status?

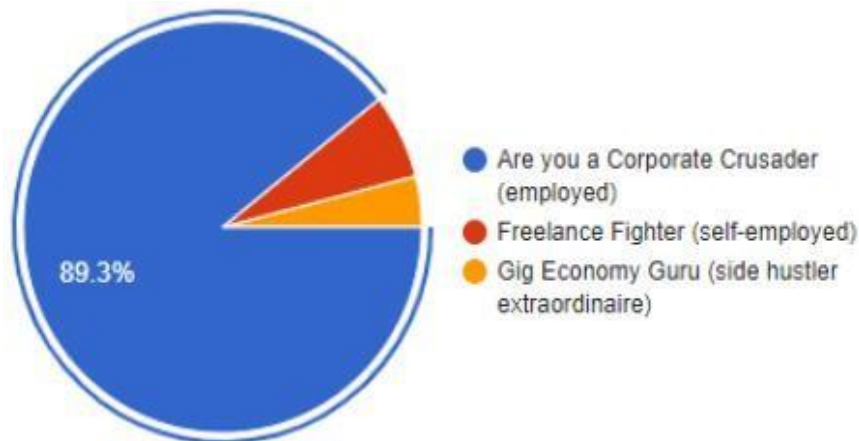


Fig No 3 – Employment of the respondents

Purpose – To segment the respondents as per their employment status. Fig no 3 shows the bifurcation of the respondents as per their employment status.

Results – The survey results reveal that a majority of respondents hold traditional employment positions within an industry. Freelancers, self-

employed individuals, and those with side hustles represent a smaller portion. Considering employment status significantly impacts investment patterns, it's crucial to delve deeper into this aspect for a more comprehensive understanding of the participants' investment behavior.

3. Respondents' Income? (one can select only 1 option out of 3)

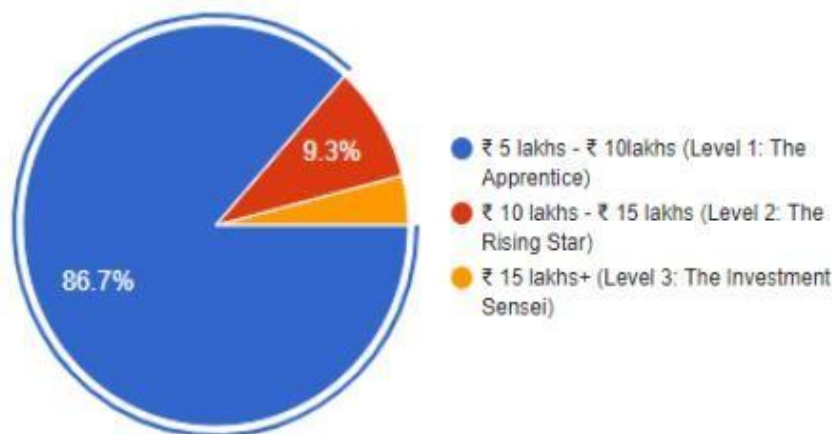


Fig No 4 – Income of the respondents

Purpose – Figure 5 categorizes the respondents based on their income brackets. This data is important because income, often linked to employment status, heavily influences investment decisions. Individuals with varying levels of disposable income tend to gravitate towards

different investment products. Understanding this relationship will help segment the respondents for a more insightful analysis of their investment behavior.

Results – The survey data highlights a significant trend in income levels. A staggering 87% of

respondents fall within the 5 to 10 lakh annual income bracket. This suggests a dominant presence of those with moderate incomes. A smaller portion, roughly 10%, earns above 10 lakhs annually, with a very limited number exceeding 15 lakhs. This

income distribution should be considered when analyzing investment preferences, as it likely impacts the types of investment products chosen by the respondents.

4. Financial Tools Used by Respondents.

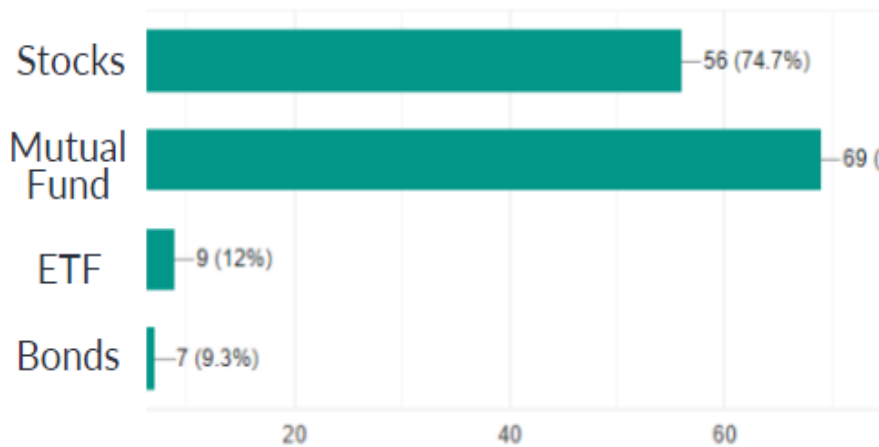


Fig. No. 5 – Financial Tools

Purpose – To understand consumer preference for investment products.

Results – The survey results shows that mutual funds are the preferred investment choice. Stocks are also of interest, while ETFs and bonds see

lower adoption. This might be due to a lack of familiarity with ETFs and bonds among investors. However, companies like Zerodha are working to improve financial literacy and raise awareness of these investment options.

5. Financial apps used by Respondents

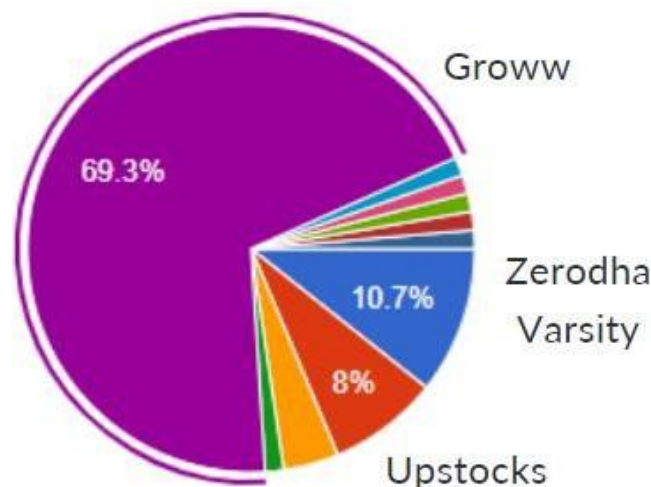


Fig No 6 – Financial Apps

Purpose – To understand the respondent’s preference over all investment applications.

Results – Most people in the survey said they use Groww, an investment app that uses games to keep

users interested. Some people also use Zerodha Varsity, an educational platform. A smaller number of people use other investment apps like Upstocks and 5paisa.

6. Are gamification tools helpful?

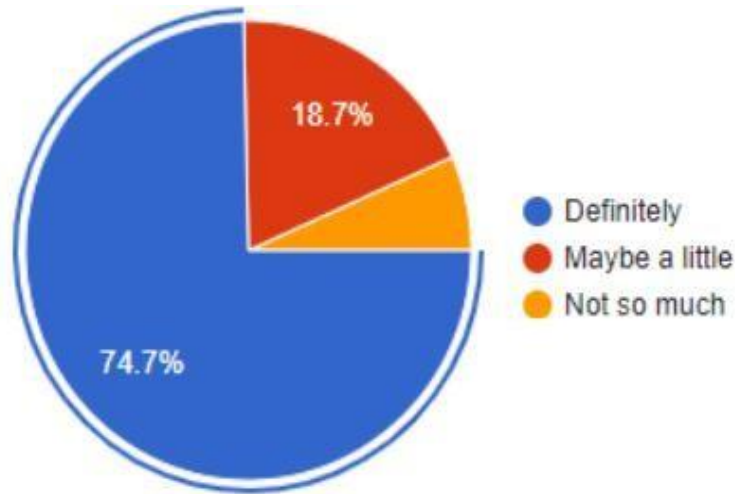


Fig No 7 – Are Gamification tools useful or not?

Purpose – To understand whether gamification is helpful to the customer.

Results – The survey shows that everyone uses at least one investment app, and many use two. Among these users, a large majority (around 75%) find the gamification features in these apps to be

both engaging and helpful. However, a significant minority (around 20%) believes that gamification only plays a small role, as knowledge is the most important factor in successful investing. Finally, a small group (less than 10%) feels that gamification hinders investment by creating confusion.

7. Would you be more likely to invest if it felt like a Game with points, badges, and leaderboards?

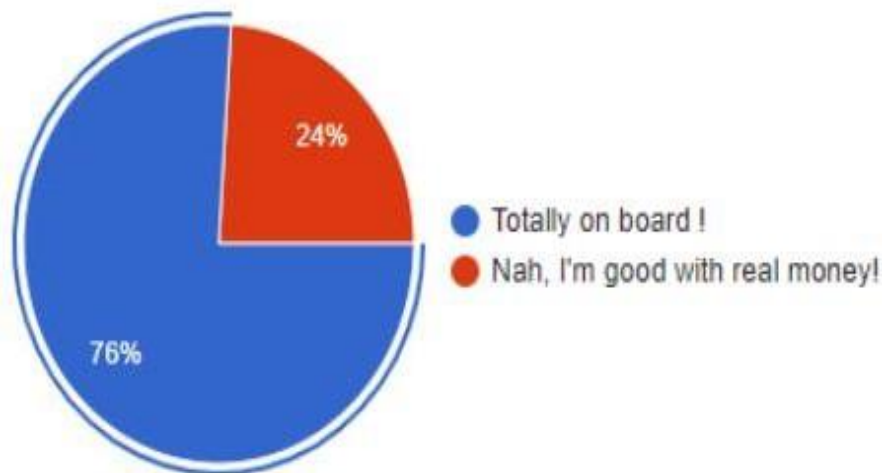


Fig No 8. – Respondents' likelihood over Gamification tool

Purpose – To understand whether the gamification tools such as points and badges are compelling the respondents to invest.

Results – The survey shows gamification is a double-edged sword for investment platforms. A

majority of respondents are attracted to platforms offering points, badges, and redeemable rewards, highlighting the power of gamification in keeping users engaged. However, there's also a segment of respondents who aren't interested in gamified investment platforms.

8. Would a chance to win bonus points make you consider a slightly riskier investment option?

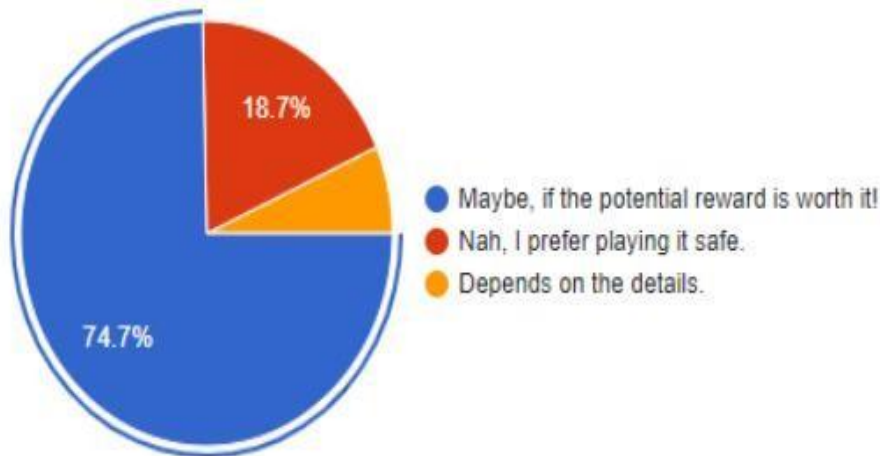


Fig No 9. – Respondents' motivation for becoming a riskier investor

Purpose – To understand the risk appetite of the respondents.

Results – The survey shows investors are divided on reward-based investing. A larger group is

willing to take some investment risk to get rewards that could be valuable for future investment. However, some respondents prioritize understanding the market before investing, even if it means forgoing potential rewards.

9. If you failed at an investment game, does it discourage you?

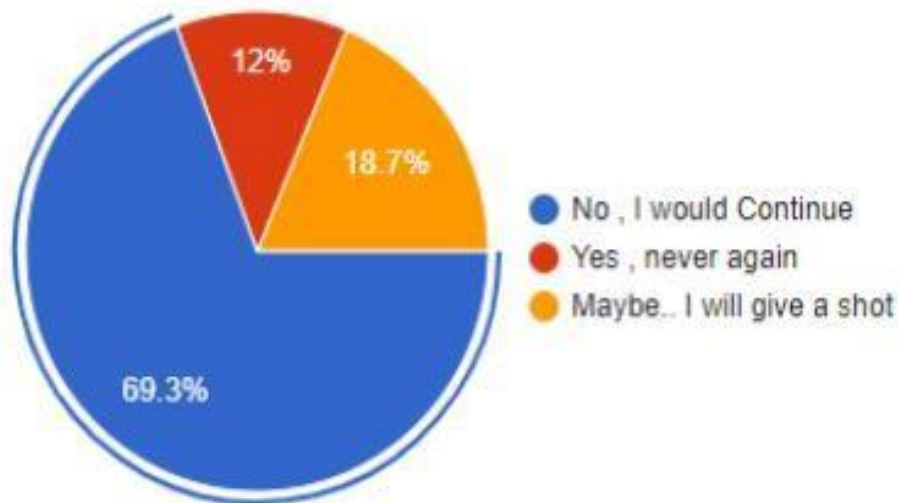


Fig. No. 10. – Audience response if they lose

Purpose – To segment the respondents who will still invest even if they lose their investment.

Results – The survey shows mixed reactions to potential losses caused by gamification. Many respondents, despite finding gamification tools

engaging, would continue investing even if they lost money due to them. This suggests they value the motivational aspects of gamification. However, a different group is more cautious and would only try gamified investing one last time, unwilling to risk significant sums through these tools.

10. What kind of reward would motivate you to invest more?

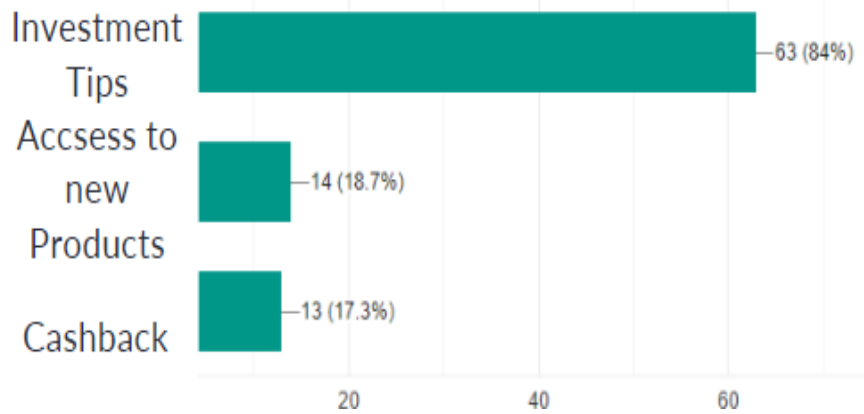


Fig.No.11- Respondents' motivation for investment.

Purpose: To understand what kind of rewards are motivating for the respondents.

Results – The survey shows that most respondents are more interested in investment advice as a

reward for using financial apps, compared to traditional rewards like cashback or access to new products. This suggests a strong desire for knowledge and a willingness to take calculated risks to achieve their financial goals.

11. What kind of reward would motivate you to invest more?

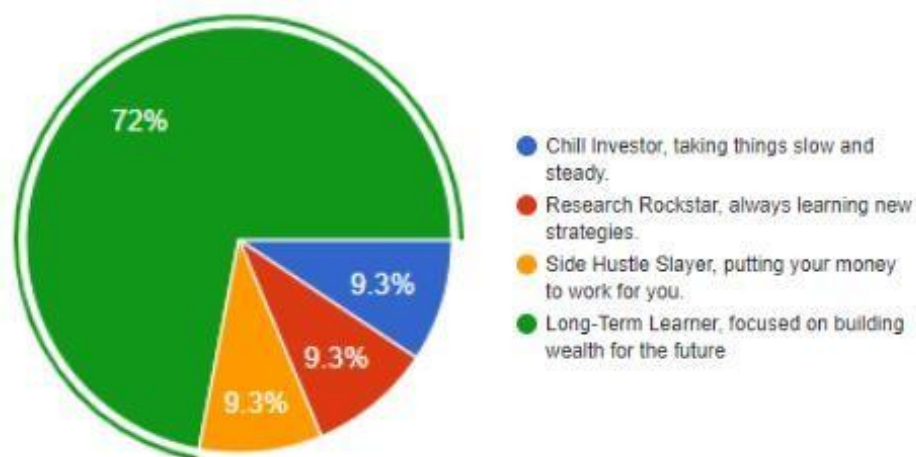


Fig No 12 – Kind of the Investor

Purpose – To understand the investment goal of the respondents.

Results – The survey shows two main investor mindsets: most prioritize long-term investing and

are comfortable waiting for returns. In contrast, others are willing to take calculated risks for potentially higher gains. The latter group is actively

learning about the financial markets to achieve their goals.

Conclusion

- **Term Investment Focus:** Gamification can encourage new entrants to the workforce to develop habits for investing over a long period.
- **Mutual Funds & Stocks Over ETFs & Bonds:** The study suggests a possible preference for investment options with potentially higher returns, like mutual funds and stocks, compared to those with lower risk profiles like bonds and ETFs. This might indicate a higher risk tolerance among this group.
- **Gamification as a Catalyst:** Gamification tools within the investment platform can act as a trigger to get new workforce entrants started with investing.
- **Risk Willingness:** The preference for stocks and mutual funds suggests a potential for a higher risk appetite among new workforce entrants.
- **Social Competition:** Social competition features within the gamified platform could further influence investment choices, potentially pushing users towards options perceived as successful among their peers.
- **Resilience in Investment:** The long-term success of gamification might rely on its ability to build resilience among users. This means helping them understand and cope with the natural fluctuations of the investment market, ensuring they stay invested beyond the initial excitement of rewards.
- **Reward-Driven Engagement:** Gamification can be effective in initially attracting and engaging new workforce entrants through rewards and a game-like atmosphere. However, for sustained engagement, it's crucial to focus on building long-term investment habits.

Recommendations

1. **Incorporate Gamification in Financial Literacy Programs:** Financial Literacy programs should incorporate game-like elements to make learning about finances more engaging and collaborative
2. **Personalization is Key:** Tailor the gamified experience to individual needs and risk tolerance. This could involve offering different challenges, rewards, and investment options based on user profiles.
3. **Encourage Diversified Portfolios Through Gamified Incentives:** Design the gamification system to incentivize building diversified portfolios that combine different asset classes like stocks, bonds, and ETFs. This can help users understand the benefits of diversification for managing risk.
4. **Conduct Longitudinal Studies to Track Gamification's Long-Term Effects:** Research the long-term impact of gamification on financial behavior. This can involve tracking how participants' investment habits, risk tolerance, and financial literacy evolve after exposure to gamified learning.

Limitations

1. **Focuses on New Workforce Entrants:** The study's findings might not be generalizable to the broader population, as it only considers new workforce entrants. Their financial knowledge, risk tolerance, and investment goals could differ from those of more experienced investors.
2. **Limited Product Range:** The study only considers four investment products (bonds, stocks, mutual funds, and ETFs). This limits the applicability of the findings to a wider range of investment options.
3. **Self-Reported Data:** The study relies on self-reported data, which can be susceptible to

biases. Participants might overestimate their financial knowledge or investment experience.

- 4. Potential for Bias:** The gamified environment itself might introduce bias. Gamification elements could influence participants' investment choices towards actions that lead to higher scores or rewards within the game, rather than reflecting their true risk tolerance and financial goals.

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