|| Volume 9 || Issue 11 || November 2025 || ISSN (Online) 2456-0774
INTERNATIONAL JOURNAL OF ADVANCE SCIENTIFIC RESEARCH
AND ENGINEERING TRENDS

AN INVESTIGATION INTO INVESTORS' PERCEPTION OF INVESTING IN DIGITAL GOLD (WITH SPECIAL REFERENCE TO CHENNAI CITY)

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Abstract: As the role of digital finance grows, digital gold offers an accessible, convenient alternative to physical gold. This paper examines the perceptions and behavioural patterns of the investors in the digital gold investment of Chennai, India. The research explores demographic characteristics, awareness, factors influencing digital gold investment, information sources, and challenges using a sample of 100 respondents and statistical tools like frequency analysis, Friedman test, chi-square test, factor analysis, and t-tests. The outcome indicates that the investor's preference is based on convenience, security, liquidity, and minimum investment, and that issues regarding regulation and platform risks remain of concern. The results are highly informative and can be used to encourage more people and fintech platforms to embrace digital gold investment.

Keywords: *Digital Transformation, Innovation and Technology, Investors' Perception, Digital Gold, Gold Investment, etc.*

I.INTRODUCTION:

The rise of the digital era has transformed the departmental landscape, from manufacturing to sales, across all countries. Similarly, the gold market is not immune to the shift. The concept of digital gold originated in the early 2000s, coinciding with the growing influence of technology on financial markets. It refers to the practice of buying and holding gold in electronic form, where investors use digital platforms to purchase even small amounts. The gold acquired through these platforms is securely stored in vaults and can either be sold at the prevailing market price or converted into physical gold if preferred. Over the years, digital gold has gained popularity because of its simplicity and convenience. Investors are able to start with as little as ₹1, making it accessible to a broad segment of the population. Supported by mobile apps, fintech platforms, and online wallets, the process of investing has become quick and user-friendly. Moreover, by removing concerns related to storage and theft, digital gold offers a safe, flexible, and modern alternative to traditional forms of gold investment. Paytm Gold, PhonePe Gold, Google pay Gold, Jar, Tanishq DigiGold, MMTC-PAMP, Airtel Payments Bank, Augmont are some of the popular platforms in India where investors can buy and sell digital gold in 2025

According to the **World Gold Council (WGC)** "Digital gold investment in India is a growing, accessible option, especially for young and small-ticket investors. It highlights the benefits of convenience, fractional ownership, and alignment with India's digital finance growth. However, WGC warns of risks like a lack of regulation, hidden costs, and trust issues. It urges clear guidelines, transparency, and consumer protection to make digital gold a safe and sustainable investment."

The development of digital gold can be seen as a windfall for investors, notably those who prefer to invest in physical gold. As the price of gold rises, investors who wish to invest in physical gold, are unsure what to do. They may fail to consider other gold investment strategies at times. Those who invest in physical gold are unlikely to modify their habits. Otherwise, it may be argued that they are unaware of alternative gold. Whatever the situation, it is their responsibility to choose an ideal investment option. One of the finest choices is to invest in digital gold.

II.REVIEW OF LITERATURE

Sunitha & Nayak (2024) evaluated the way innovation and technology have transformed traditional gold investments into digital ones, as well as the challenges and hazards involved in the digital transformation of gold. The study concluded that while investing in digital gold has advantages like accessibility, convenience, and security, it also has drawbacks including a lack of safety, transparency, and regulatory control.

Shankari (2023) intended to raise awareness of the investment and entice everyone to buy digital gold. The study's conclusions suggest that those who want to invest in physical gold might consider doing so in digital form, but before investing, they should weigh the advantages and disadvantages of digital gold. Furthermore, it is advised that investors who prefer short-term investments look at gold exchange-traded funds (ETFs), while those who wish to make long-term investments look for sovereign gold bonds.

Sarkar & Rajput (2024) aimed to assess the factors influencing a certain investor's behavior and motivation to invest in digital gold. Four independent factors performance expectancy, effort expectancy, social influence, and facilitating condition were included in the UTAUT model, while behavioral intention served as the dependent variable. According to the survey, investors' performance expectations and enabling circumstances have a significant impact on their intent to invest in digital gold.

Rathi (2024) examined recent RBI rules and regulations for gold and gold-related securities, focusing on the shifting patterns of gold investment. According to the author, pricing transparency, ease and security, and investment flexibility are the main factors driving the rise in popularity of digital gold. According to this report, as they live through a technology revolution, the younger generation of investors is particularly interested in digital gold.

III.STATEMENT OF PROBLEMS

Digital transformation and technological innovation have simplified tasks for individuals. Consequently, activities such as online shopping and financial transactions are facilitated digitally. One more new technology emerging for investment has evolved, which is digital gold investment. Many investors allocate their hard-earned money to physical gold, but they may not be aware of the drawbacks of investing in a traditional way, such as purchasing physical jewelry, coins, and bars. When investing in traditional gold, they incur making charges, wastage, and a GST of 3%. In addition to this, the primary issue at hand is the ongoing rise in the price of gold. In the upcoming years, purchasing physical gold is becoming increasingly challenging for people.

IV.RESEARCH GAP

Most of the existing studies are qualitative in nature which discussed the pros and cons, features, etc, of digital gold investment. Digital gold has emerged as a popular investment avenue, but its acceptance among investors is still underexplored. The purpose of this study is to address this issue by investigating investors' awareness levels and problems associated with digital gold investment.

V.OBJECTIVES

- To study the demographic profile of the respondents.
- To examine the level of awareness of investors in digital gold investment.
- To identify the factors influencing digital gold investment over investing in physical gold
- To study the challenges of investing in digital gold.
- To make recommendations to improve digital gold investment.

VI.RESEARCH METHODOLOGY

The present study adopts a convenience sampling technique under the framework of non-probability sampling, with a sample size comprising 100 respondents from Chennai city. The research incorporates both primary and secondary data sources to ensure a comprehensive understanding of the subject matter. The collected data is subjected to rigorous statistical analysis using appropriate analytical tools, including Frequency Analysis, Friedman Test, Multiple response analysis, Chi-square Test, Descriptive Analysis, Reliability Test, An exploratory factor analysis, and t-test thereby facilitating a robust interpretation and validation of the research findings.

VII.LIMITATION OF THE STUDY

- The small sample size in certain subgroups, particularly the 30–48 years age category with only 3 respondents, limits the generalizability of the findings. This limitation underscores the need for further research with larger samples to validate these results.
- This study is limited to Chennai city only and collected 100 respondents only.

DATA ANALYSIS AND INTERPRETATION

Table 1: Frequency analysis table showing demographic profile of respondents

Variables	Characteristics	Frequency	Percentage %
Age	18-28 Years	60	60.0
	29-38 Years	21	21.0
	39-48 Years	3	3.0
	Above 49 Years	16	16.0
	Total	**100**	**100.0**
Gender	Male	33	33.0
	Female	67	67.0
	Total	**100**	**100.0**
Marital status	Married	59	59.0
	Single	41	41.0
	Total	**100**	**100.0**
Education qualification	Up to Schooling	2	2.0
	Diploma	3	3.0
	Under Graduate	20	20.0
	Post Graduate	62	62.0
	Professional degree	13	13.0
	Total	**100**	**100.0**
Occupation	Government employee	35	35.0
	Private employee	12	12.0
	Self-business	3	3.0
	Professional work	9	9.0
	Others	41	41.0

	Total	**100**	**100.0**
Monthly income	Up to Rs 20,000	53	53.0
	Rs 20,001 to Rs 30,000	21	21.0
	Rs 30,001 to Rs 40,000	12	12.0
	Rs 40,001 to Rs 50,000	5	5.0
	Above Rs 50000	9	9.0
	Total	**100**	**100.0**
Family type	Nuclear family	80	80.0
	Joint family	20	20.0
	Total	**100**	**100.0**

Source: Primary data

Inference: Table 1 shows that 60% of the respondents belong to between 18-28 years, 21% of respondents belong to between 29-38 years,3% of respondents belong to between 39-48 years and 16% of the respondents are in the above 49 years age group. 33% of respondents are male, whereas 67 % of respondents are female. 59% of respondents are married and 41% of respondents are single. From the above table, out of 100 respondents, clearly shows that only 2% of respondents' education qualifications are up to schooling, 3 % have studied a diploma, 20% of the respondents are undergraduates, 62% of respondents are post-graduates and 13% are professionals. The occupation column in this table shows that the respondents are majorly from others which may consider house wives, students, freelancers etc. with 41%, and government sectors with 35%, private employee's respondents with 12%, professional workers with 9%, and self-business peoples with 3%. Further to the mentioned data, 53% of respondents have monthly income levels up to Rs. 20,000, 21% have income levels between Rs 20,001 to Rs 30,000, 12% have income levels between Rs 30,001 to Rs 40,000, 5% have income levels over Rs 40,001 to Rs 50,000, and 9 % have above Rs 50,000 monthly income. Family types respondents are 80% from nuclear families, and 20% belong to joint families

Table 2: Friedman test for significant difference among mean ranks towards the Purpose of Investment

Null Hypothesis: There is no significant difference among mean ranks towards the Purpose of Investment

Purpose of Investment	Mean Rank	Chi-Square value	P-Value
Capital appreciation	2.28	62.302	< 0.001 **
Income generation	2.52		
Diversification	2.94		
Beating Inflation	3.56		
Meeting Specific Financial Goals	3.70		

Source: Primary data

Note: ** Denotes significant at 1% level

Inference: Since the P-value is less than 0.001, the null hypothesis is rejected at 1% level of significance. Hence, concluded that there is a significant difference in mean ranks for the Purpose of Investment. Based on the mean rank, capital appreciation (2.28) is the most important purpose of investment, followed by income generation (2.52) is the 2nd important purpose, followed by diversification (2.94) is the 3rd important purpose, beating inflation (3.56) is the 4th important purpose and meeting specific financial goals (3.70) is the least important purpose of investment.

Table 3: Multiple response analysis for the source of information about Digital gold investments

Sources	Frequency	Percentage (%)	Percentage of cases (%)
Friends/Family	78	38.2%	78.0%
Social Media	50	24.5%	50.0%
Financial Advisor	2	1.0%	2.0%
Digital Platforms	37	18.1%	37.0%
News/Media	37	18.1%	37.0%
Total	204	100.0%	204.0%

Source: Primary data

Note: The total percentage of cases exceeds 100% (204%), which is expected in multi-response data as respondents could choose multiple sources.

Inference: The above table indicates that the way people get informed about digital gold investment, they predominantly receive information from friends/family (38.2%) and social media (24.5%). Digital platforms and News/media are equally cited, each with 18.1% of responses, showing their moderate influence. financial advisor (1.0%) is the least influential source among the respondents.

Table 4: Chi-square test for association between age and awareness level of respondents

Null Hypothesis: There is no association between age and awareness level of respondents

Age	Awareness level		Total	Chi-square value	P value
	Low	High			
18 – 28 years	14 **(23.3)** [37.8]	46 **(76.7)** [73.0]	60 (100.0) [60.0]	16.621	<0.001**
29 – 38 years	13 **(61.9)** [31.5]	8 **(38.1)** [12.7]	21 (100.0) [21.0]		
30 – 48 years	0 **(0.0)** [0.0]	3 **(100.0)** [4.8]	3 (100.0) [3.0]		
Above 49 years	10 **(62.5)** [27.0]	6 **(37.5)** [9.5]	16 (100.0) [16.0]		
Total	37 **(37.0)** [100.0]	63 **(63.0)** [100.0]	100 (100.0) [100.0]		

Source: Primary data

Note: 1. The value within ( ) refers to Row Percentage

2. The value within [ ] refers to Column Percentage

3. ** Denotes significant at 1% level

Inference: Since the p-value is less than 0.01, the null hypothesis is rejected at 1% level of significance. Hence, concluded that there is an association between age and respondents' awareness level. Based on the row percentages among respondents aged 18–28 years, 23.3% have a low level of awareness and 76.7% have a high level of awareness. In the 29–38 years group, 61.9% have a low level and 38.1% have a high level of awareness. For ages 30–48 years, 0% have a low level and 100% have a high level of awareness *(It should be noted that the 30–48 years age group consists of only 3 respondents, which may limit the reliability of the reported 100% high awareness level for this group).* In the above 49 years group, 62.5% have a low level and 37.5% have a high level of awareness. Hence majority of respondents in the 18–28 and 30–48 age groups exhibit high awareness, while those in the 29–38 and above 49 groups predominantly exhibit low awareness.

Table 5: Summary of Reliability Test Results

Statistic	Value
Number of Items	9
Sample Size (N)	100
Cronbach's Alpha	0.802

Source: Primary data

Inference: The reliability analysis for the nine-item scale measuring factors on digital gold investments yielded a Cronbach's alpha of 0.802, which indicates good internal consistency. This suggests that the items reliably measure the same underlying construct, providing confidence in the consistency and reliability of the survey instrument used in this study. According to established guidelines, an alpha value above 0.7 is considered acceptable, and above 0.8 is good, confirming the suitability of the scale for further analysis and interpretation.

Table 6: An exploratory factor analysis on factors influencing digital gold investment over physical gold.

Variable	Communalities	Component 1	Component 2	Component 3
Ease of Investment	0.707	0.724	-0.395	-0.166
Storage and Security	0.636	0.607	0.352	-0.379
Better Returns on Investment	0.674	0.576	0.169	-0.561
Flexibility and Liquidity	0.765	0.436	0.493	0.576
Tolerable Risk Level	0.511	0.588	0.353	-0.203
Convenience of Transactions	0.625	0.639	0.336	0.322
No Storage Fees	0.606	0.745	-0.191	0.120
Full Transparency	0.602	0.654	-0.303	0.286
No Minimum Investment	0.661	0.618	-0.521	0.094

Component	Eigenvalue	% Variance Explained	Cumulative % Variance
1	3.532	39.25%	39.25%
2	1.188	13.20%	52.45%
3	1.067	11.86%	64.31%

Source: Primary data

Inference: An exploratory factor analysis using principal

component extraction was conducted on nine items measuring perceptions of digital gold investments. The analysis yielded three components with eigenvalues greater than 1, explaining a cumulative 64.31% of the variance. The first factor (39.25% variance) comprised variables related to **convenience and trust**, including ease of investment, storage and security, no storage fees, and full transparency. The second factor (13.20%) reflected **flexibility and risk** considerations such as liquidity, risk tolerance, and transaction convenience. The third factor (11.86%) was associated with **financial performance expectations**, highlighted by better returns on investment and no minimum investment required. Communalities above 0.5 for all items indicate that the extracted factors explain a substantial portion of variance in each variable.

Table 7: t-test for analyzing gender and challenges in digital gold investment

Null Hypothesis: Mean challenges faced by males = Mean challenges faced by females (μ1=μ2).

Challenges	Male Mean	Female Mean	p-value	Significant
Lack of Physical Ownership	3.79	3.60	0.419	No
No Regulatory Authority	4.12	3.69	0.005	Yes
Risk of the Platform	4.12	3.66	0.034	Yes
Cyber-Attacks or Potential Issues	3.94	3.67	0.184	No
Investing Limited to Rs. 2 Lakhs	3.91	3.22	0.001	Yes
Limited Storage Period	3.82	3.61	0.300	No

Source: Primary data

Inference: The results showed no significant difference among gender in perceptions of lack of physical ownership (male mean = 3.79, female mean = 3.60, p = 0.419), cyber-attacks (male mean = 3.94, female mean = 3.67, p = 0.184), or limited storage period (male mean = 3.82, female mean = 3.61, p = 0.300).

However, significant differences were found for several challenges. Males perceived a greater lack of regulatory authority compared to females (male mean = 4.12, female mean = 3.69, p = 0.005). Similarly, perception of platform risk was higher among males (mean = 4.12) than among females (mean = 3.66, p = 0.034). Additionally, males reported more concern about the investment limit of Rs. 2 lakhs (mean = 3.91) compared to females (mean = 3.22, p = 0.001).

FINDINGS OF THE STUDY

- Most of the respondents (60%) are between 18-28 years old, and the female respondents are 67 percent.
- Digital gold investment awareness is also highly dependent on the age of the population, with the younger populations being more aware.
- The Friedman significant difference shows a difference between the investment purposes with capital appreciation ranked first.
- The most common source of information on digital gold, as imposed by friends and family, is social media and digital platforms.
- Internal consistency of the survey instrument is verified by the reliability analysis (Cronbach: 0.802).
- Exploratory factor analysis provides three key components that affect digital gold investment, which include convenience/trust, flexibility/risk and financial performance.
- Gender-based t-test analysis shows that males have greater perceptions of regulatory and platform risks than females.

SUGGESTION

- Investors need to download only trusted applications, use two-factor authentication, and avoid following unproven links or deals to avoid cyber fraud and they should exercise the habit of comparing platforms in terms of purity, transaction fees, storage, and redemption opportunities before choosing an investment platform.
- The regulatory bodies (SEBI, RBI and BIS) must develop a single clear framework to regulate the digital gold transaction, storage, purity and eligibility of the service provider.
- The government in this regard may establish standard measures of purity, vaulting, and data reporting to establish transparency and simplify the market operations.
- To prevent advertisements or promotions by influencers, policymakers have to establish a centralized system of redressing grievances by digital gold investors and implement stringent oversight of false advertisements.
- Tax benefits of cutting the capital gains holding period from three years to one year can encourage first-time and young investors to consider investing in digital gold.

VIII.CONCLUSION

Younger and digitally savvy investors are turning to digital gold investment as it is easy to invest in, secure and flexible. This investment complies with trends of digital transformation and

satisfies liquidity and low entry requirements. Investor confidence is, however dampened by regulatory uncertainty and platform risk. Clear rules and regulations, transparency, and investor education are needed to maximize the potential of digital gold. Such actions may build confidence and create wider acceptance, especially in older and less informed groups of investors. Altogether, the digital gold is a promising future of gold investment of the modern age, and it is an innovative addition to the traditional physical investments.

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