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# TRANSFORMING THE MONETARY GIFT EXPERIENCE: QUANTITATIVE EVALUATION OF A MOBILE APP WITH PLAYFUL INTERACTIONS USING THE IVPRD INDEX

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#### **ABSTRACT**

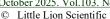
The development of this study confirms the perceived value of digital gifts through the (IVVPRD), which is a multidimensional construct for the evaluation of mobile applications, which digitizes cultural practices for money. The objective of the study is to prevent the gap between economic digitalization and traditional cultural practices. Using a quasi-experimental design with 100 participants from Peru, a mobile application with fun elements was evaluated relatively against traditional methods (physical envelopes). IVPRD consists of four dimensions: monetary value (VM), interaction efforts (EI), social/cultural context (SC), and experience experience (EC), which is expressed with the equation IVPRD = 0.31 (VM) 0.28 (EI) 0.32 (SC) - 0.12 (EC). The results showed the durability of the model ( $r^2 = 0.847$ ), revealing that the digital application has reached significantly higher values (IVPRD =  $7.49 \pm 0.75$ ) against the traditional method (IVPRD =  $5.10 \pm 0.68$ ). Interaction efforts (EI) was found to be the most important difference between the methods (5.23 points), while the social/cultural context (SC) appeared as a factor with the highest predictive weight ( $\beta = 0.32$ ). Significant differences were observed according to demographic and contextual variables: preference for new users (18-24 years: 4.10 points) and the use of socioeconomic status (18-24 and 3.70 respectively), as well as the inverse correlation between formality and apartment choice. The experience analysis identified "game setup" as the most important point for improving the success rate (89.5%) and moderate disappointment (2.68/10). This study shows that the inclusion of recreational elements and a social and cultural context significantly transform perceptions of value in applications, providing a methodological framework that relates to culturally sensitive FinTech solutions

**Keywords:** User Experience, Gamification, Fintech, Digital Monetary Gift, Mobile App.

# 1. INTRODUCTION

In the last ten years, financial transactions have transformed the way humanity exchanges monetary value (1). This change has been most noticeable in economically developed countries, where financial technology (fintech) has grown at an accelerated pace (2,3). Between 2019 and 2022, monetary transaction applications grew in Peru (4). However, although functional transactions have undergone rapid digitalization, exchange practices with deep cultural and social significance, such as giving cash as a gift, have shown slower adoption in the digital realm (5,6). Giving money as a gift is a deeply rooted tradition in many cultures, with its own unwritten rules that vary according to each society (7). Here in Latin America, and particularly in Peru, it is common to see those envelopes with bills at important celebrations: when someone gets married, has a birthday, or graduates (8). But this goes far beyond simply giving money. Behind this seemingly simple gesture lies a whole language of affection, social relationships, and cultural meanings that are worth more than the amount contained in the envelope(9,10). With financial digitalization, various applications have attempted to reproduce the experience of monetary gifts in digital format(11,12). However, these solutions often focus exclusively on the efficiency of the transaction, neglecting the social, emotional, and cultural aspects inherent to the act of giving(13). Venkatesh et al.(14) point out that technological adoption in culturally sensitive contexts depends not only on perceived usefulness, but also on hedonic and social factors that are often underestimated. Research on user experience (UX)

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in financial applications has consistently pointed out the importance of incorporating elements that transcend mere functionality(15,16). Gamification, defined as the use of game design elements in nongame contexts(17), has emerged as a potential strategy to enrich digital experiences with emotional and social components(18). Hamari and Koivisto(19) showed that incorporating gamified elements into financial apps significantly increases user satisfaction and continued usage intention. This study addresses this intersection of monetary transactions, cultural meaning, and experience by proposing an innovative model for assessing perceived value in monetary gift apps with gamified components. The existing literature lacks specific evaluative frameworks for this type of apps(20) since traditional UX evaluation models do not adequately consider the sociocultural dimension of monetary gifting(21,22). To fill this gap, we developed the Digital Gift Perceived Value Index (DPGVI),a multidimensional construct that incorporates four components: Monetary Value (MV), Interaction Effort (IE), Social/Cultural Context (SC), and Experience Complexity (EC). This index is based on previous research on value perception(23), social exchange theory(24), and technology acceptance models adapted to culturally specific contexts(25). Monetary Value (MV) recognizes the importance of the economic amount as a basic component of the gift(26). Interaction Effort (IE) captures the added value through personalization and playful interaction, based on the premise that the effort invested in the preparation of gift increases its perceived value(27). Social/Cultural Context (SC) assesses appropriateness of the method to the specific context of use and its alignment with social norms(28). Finally, Experience Complexity (EC) recognizes the negative impact that difficulty of use can have on the overall perception of value(29). This research applied the IVPRD model to evaluate a mobile application specifically developed to transform the monetary gift experience in Peru. The application incorporates playful elements that require interaction between giver and recipient, creating a shared experience that transcends the mere transfer of value. Through a study with 100 participants representative of diverse demographic groups, we compared the evaluation of this application against the traditional method (envelopes with money), analyzing contextual preferences and determinants of perceived value(30). The results of this research not only contribute to the literature on fintech and user experience in culturally specific contexts, but also

offer practical implications for the design of financial applications that seek to digitize culturally sensitive practices such as monetary gifting. This research applied the IVPRD model to evaluate a mobile application specifically developed to transform the monetary gift experience in Peru. The application incorporates playful elements that require interaction between giver and recipient, creating a shared experience that transcends the mere transfer of value. Through a study with 100 participants representative of diverse demographic groups, we compared the evaluation of this against the traditional application (envelopes with money), analyzing contextual preferences and determinants of perceived value(30). The results of this research not only contribute to the literature on fintech and user experience in culturally specific contexts, but also offer practical implications for the design of financial applications that seek to digitize culturally sensitive practices such as monetary gifting. This research applied the IVPRD model to evaluate a mobile application specifically developed to transform the monetary gift experience in Peru. The application incorporates playful elements that require interaction between giver and recipient, creating a shared experience that transcends the mere transfer of value. Through a study with 100 participants representative of diverse demographic groups, we compared the evaluation of this against the traditional method application (envelopes with money), analyzing contextual preferences and determinants of perceived value(30). The results of this research not only contribute to the literature on fintech and user experience in culturally specific contexts, but also offer practical implications for the design of financial applications that seek to digitize culturally sensitive practices such as monetary gifting.

# 1.1 Problem Statement and Research

Questions While financial transactions in Peru have undergone rapid digitalization, a notable disconnect remains between the use of financial technology for basic operations and its application in deeply rooted cultural practices. Existing digital payment systems focus primarily on the speed and efficiency of transfers, yet overlook the social, emotional, and symbolic aspects that characterize the monetary gift tradition. This oversight has led Peruvian users to show resistance toward adopting digital applications for this specific purpose. Research Ouestions:

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ISSN: 1992-8645 www.jatit.org - RQ1: How can we develop a quantitative measurement of the value users perceive in digital

and social dimensions?

- RQ2: To what extent do playful and interactive elements influence users' preference for digital applications over traditional monetary gift methods?

monetary gift applications, including their cultural

RO3: What role do demographic characteristics and specific contexts play in the choice between digital and traditional monetary gifts?

#### 2. METHODOLOGY

# 2.1 Research Design

This study employed a quasi-experimental, repeated-measures design with a mixed-method (quantitative-qualitative) approach. Stratified convenience sampling was used gender, representativeness by age, and socioeconomic status (31). Each participant evaluated two methods of monetary gift delivery: the interactive digital application and the traditional envelope method.

# 2.2 Participants

The sample (N=100) consisted of Peruvian adults between 18 and 58 years old (M=35.7, SD=9.8), distributed into five age groups: 18-24 (26%), 25-34 (34%), 35-44 (20%), 45-54 (12%) and 55+ (8%). The distribution by gender was balanced (52% male, 48% female) and by socioeconomic level according to the APEIM classification: A (22%), B (48%) and C (30%). The order effect was controlled by random assignment to the group that tried the app first (50%) or the traditional method (50%). Figure 1 shows the process using a flow diagram for better understanding. Manuscripts must be in English (all figures and text) and prepared on Letter size paper (8.5 X 11 inches) in two column-format with 1.3 margins from top and .6 from bottom, and 1.25cm from left and right, leaving a gutter width of 0.2 between columns.

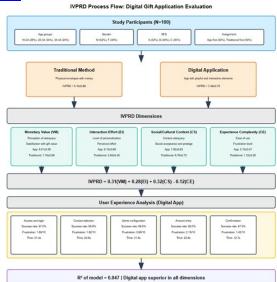


Figure 1: IVPRD process flow: digital gift application evaluation

#### 2.3 Instruments

### **IVPRD Evaluation Questionnaire**

A 26-item questionnaire was developed based on the Technology Acceptance Model (TAM) (32,33). The instrument assessed four main components:

- Monetary Value (MV): Perception of adequacy and satisfaction with monetary value of the gift (items 6-7).
- Interaction Effort (IE): Level of personalization, perceived effort and added value of the interaction (items 8-
- Social/Cultural Context (SC): Adaptation to context, social acceptance and perceived prestige (items 11-13).
- Experience Complexity (CE): Difficulty of use, level of frustration and lack of intuitiveness (items 14-16).

Additionally, the overall perceived value (PV) was measured using items 17-19. All items used 11point Likert scales (0-10). A pilot study (n=30) was conducted to validate the instrument, obtaining a Cronbach's alpha of 0.89, indicating high internal consistency.



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# 2.3.2 User experience evaluation

A usability evaluation was developed through controlled testing, recording success rates, completion time, and frustration levels for each step of the process. The Single Ease Question (SEQ) method (34) was used to assess the perceived difficulty of each task. The application interaction flowchart is shown in Figure 2.

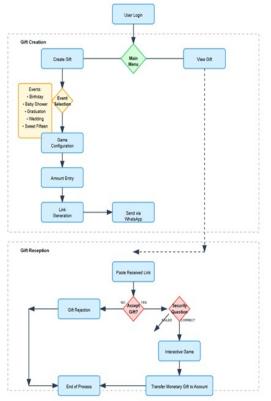


Figure 2: Flowchart: Interactive Digital Gift Application

### 2.4 Mobile Application Design:

The evaluated mobile application was designed with a user-centered approach, incorporating elements of gamification and personalization for various social occasions in South America. Figure 3 shows the main interfaces for different types of events for the population and Spanish language events:

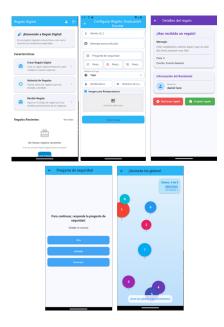


Figure 3: Interactive digital gift mobile application

#### 2.5 Procedure:

The evaluated mobile application was designed with a user-centered approach, incorporating elements of gamification and personalization for various social occasions in South America. Figure 3 shows the main interfaces for different types of events for the population and Spanish language events: The assessment sessions were conducted individually in a controlled setting. Each participant received standardized instructions and completed the following steps:

- Demographics and previous experience with financial applications.
- Evaluation of the first method (app or traditional depending on the assigned group).
- Completeness of the IVPRD questionnaire for the first method.
- Evaluation of the second method.
- Completeness of the IVPRD questionnaire for the second method.
- Direct comparison and additional qualitative questions.

For app evaluation, a high-fidelity prototype was used on standardized mobile devices (Samsung Galaxy S21). For the traditional method, the

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experience was simulated using physical envelopes and representative currency.

#### 2.6 Mathematical Formulation of the IVPRD:

# 2.6.1 Conceptual model and operationalization

The Digital Gift Perceived Value Index (DPGVI) was conceptualized as a multidimensional function based on previous research on value perception (35) and technology acceptance models (36). The proposed model is expressed as:

IVPRD = 
$$\alpha(VM) + \beta(EI) + \gamma(CS) - \delta(CE)$$
 (1)

Where:

- VM = Monetary Value (items 6-7)
- EI = Interaction Effort (items 8-10)
- CS = Social/Cultural Context (items 11-
- CE = Complexity of Experience (items 14-
- $\alpha$ ,  $\beta$ ,  $\gamma$ ,  $\delta$  = empirically determined weighting coefficients

# 2.6.2 Determination of coefficients by multiple regression

The coefficients were determined using multiple regression analysis, using the overall perceived value (PV) as the dependent variable and the four components as predictors. The regression model used was:

$$VP = \beta_0 + \beta_1(VM) + \beta_2(EI) + \beta_3(CS) - \beta_4(CE) + \epsilon \tag{2} \label{eq:2}$$

Where  $\beta_0$  is the constant and  $\epsilon$  is the error term. The standardized coefficients obtained were used as weights in the IVPRD equation.

# 2.6.3 Model validation:

The validity of the model was evaluated by:

- Internal consistency: Cronbach's alpha for each component
- Convergent validity: Correlations between components and VP
- Predictive validity: R2 of the regression
- Hypothesis testing: Statistical comparison of IVPRD between methods

#### 2.7 Data Analysis:

#### 2.7.1 Preparation and debugging

Data were processed using SPSS v27.0. Normality was checked using Shapiro-Wilk tests, and outliers were identified using box plots. Transformations

applied when necessary to meet the were assumptions of the parametric tests (37).

#### 2.7.2 Calculation of the IVPRD

For each participant and method, the IVPRD was calculated using the formula:

$$IVPRD = 0.31(VM) + 0.28(EI) + 0.32(CS) - 0.12(CE)$$
 (3)

The coefficients were determined by multiple regression analysis and validated with statistical significance tests (p<0.001 for all coefficients).

#### 3. RESULTS

The final sample consisted of 100 participants (52% men, 48% women) aged 18 to 58 years (M=35.7, SD=9.8). The age distribution was: 18-24 years (26%), 25–34 years (34%), 35–44 years (20%), 45– 54 years (12%), and over 55 years (8%). The distribution by socioeconomic level followed the established parameters: SES A (22%), SES B (48%), and SES C (30%).

# 3.1 Validation of the IVPRD Instrument and Model

#### 3.1.1 Reliability of the subscales

The internal consistency analysis revealed satisfactory Cronbach's Alpha coefficients for all dimensions of the instrument (Table 1).

Table 1: Iinternal consistency of the subscales

Dimension	α App Digital	α Traditional Method
Monetary Value (MV)	0.87	0.82
Interaction Effort (IE)	0.92	0.78
Social/Cultural Context (SC)	0.85	0.83
Experience Complexity (CE)	0.88	0.72
Overall Perceived Value (PV)	0.91	0.85

# 3.1.2 Multiple regression analysis

Multiple regression analysis, using Overall Perceived Value as the dependent variable, yielded a significant model (F(4,195)=138.2, p<0.001) with an adjusted R<sup>2</sup> of 0.847, explaining 84.7% of the variance in perceived value. All coefficients were statistically significant (p<0.001), confirming the validity of the proposed model (Table 2).

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Variab le	Unstandard ized coefficient	Standa rd error	Standardi zed coefficient (β)	t	p- valu e
Consta nt	0.385	0.293	-	1.3	0.19
VM	0.305	0.032	0.31	9.5 3	<0.0 01
EI	0.282	0.035	0.28	8.0 6	<0.0 01
CS	0.324	0.039	0.32	8.3 1	<0.0 01
EC	-0.115	0.031	-0.12	3.7 1	<0.0 01

The resulting equation for calculating the IVPRD was: IVPRD = 0.31(VM) + 0.28(EI) + 0.32(CS) - 0.12(CE). Figure 4 presents the coefficients and statistical significance of the regression model, showing that the Social Context (CS) has the greatest positive weight ( $\beta = 0.32$ ), followed by Monetary Value (VM,  $\beta = 0.31$ ) and Interaction Effort (EI,  $\beta = 0.28$ ).

Variable	Unstandardized Coefficient	Standard Error	Standardized Coefficient (β)	t	p-value
Constant	0.385	0.293		131	0.192%
Monetary Value (MV)	0.306	0.032	0.31	9.53	<0.001***
Interaction Effort (IE)	0.282	0.035	0.28	8.06	< 0.001***
Social Context (SC)	0.324	0.039	0.32	831	<0.001***
Experience Complexity (EC)	-0.115	0.031	-0.12	-3.71	<0.001***
	Adjusted R <sup>2</sup> = 0.847 F = 138.2 (p < 0	.001) Significance." not significant, "	p<0.05, "p<0.01, ""p<0.001		

Figure 4: IVPRD Regression Model

#### 3.1.3 Correlation Matrix:

Significant correlations were observed between all variables in the model (Table 3), with positive correlations between VM, EI, CS and VP, and negative correlations with CE.

Table 3: Correlation matrix between variables

	VM	EI	CS	EC	VP
VM	1.00	0.58*	0.64*	-0.38*	0.80*
EI	0.58*	1.00	0.62*	-0.56*	0.82*
CS	0.64*	0.62*	1.00	-0.41*	0.76*
EC	-0.38*	-0.56*	-0.41*	1.00	-0.62*
VP	0.80*	0.82*	0.76*	-0.62*	1.00

\*p<0.001

Figure 5 graphically illustrates these correlations, highlighting the strong positive relationship between EI and PV (r = 0.82), indicating that Interaction Effort is the most important predictor of Perceived Value. A high correlation is also observed between VM and PV (r = 0.80), and

between CS and PV (r = 0.76). CE shows negative correlations with all other variables, highlighting its inverse effect on Perceived Value (r = -0.62).

Variable	MV	IE	SC	EC	PV
MV	1.00*	0.58*	0.64*	-0.38*	0.80*
IE	0.58*	1.00*	0.62*	-0.56*	0.82*
SC	0.64*	0.62*	1.00*	-0.41*	0.76*
EC	-0.38*	-0.56*	-0.41*	1.00*	-0.62*
PV	0.80*	0.82*	0.76*	-0.62*	1.00*

Figure 5: Correlation matrix between components

#### 3.2 Correlation between Methods

#### 3.2.1 Comparison of IVPRD components

As can be seen in Figure 6, there is a marked difference between the two methods, especially in the Interaction Effort (IE) component. While the digital application achieved an IE score of 8.15, the traditional method only obtained 2.92, representing the largest difference among all the components evaluated (+5.23 points).



Figure 6: Comparison of IVPRD components between methods

The digital application scored significantly higher than the traditional method in all value dimensions, while showing greater experience complexity (Table 4).

Table 4: Comparison of average scores by method

Component	Digital App (M±D E)	Traditio nal Method (M±DE)	Differe nce	t	p- valu e
Monetary Value (MV)	8.21±0. 58	7.16±0.6 9	+1.05	11. 54	<0.0 01
Interaction	8.15±0.	2.92±0.4	+5.23	47.	<0.0
Effort (IE)	68	5		92	01
Social/Cult	7.82±0.	6.76±0.7	+1.06	12.	<0.0
ural	63	2		38	01

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Context (SC)						prefere partici
Experience Complexity (CE)	2.10±0. 47	1.33±0.2 8	+0.77	14. 93	<0.0 01	purtier
Overall Perceived Value (PV)	8.30±0. 84	6.10±1.0 8	+2.20	20. 67	<0.0 01	Gend er
IVPRD	7.49±0.	5.10±0.6 8	+2.39	23. 15	<0.0 01	

# 3.2.2 Analysis by age groups:

Significant differences in preferences were observed across age groups (F(4,95)=28.74, p<0.001). Bonferroni post-hoc tests revealed that the advantage of the digital app over the traditional method diminishes with age (Table 5).

Table 5: Differences in ivprd by age groups

Age Grou p	N	IVPRD Digital App (M±DE	Traditio nal IVPRD (M±DE)	Differen ce	F	p- valu e
18- 24	2 6	8.42±0. 38	4.32±0.4 2	+4.10	92.8 5	<0.0 01
25- 34	3 4	7.83±0. 41	4.75±0.3 9	+3.08	78.5 3	<0.0 01
35- 44	2 0	7.23±0. 53	5.45±0.3 7	+1.78	36.9 1	<0.0 01
45- 54	1 2	6.80±0. 47	5.65±0.4 5	+1.15	15.0 6	<0.0 01
55+	8	5.85±0. 63	5.98±0.5 4	-0.13	1.42	0.254

#### 3.2.3 Analysis by socioeconomic level:

The analysis by NSE revealed significant differences (F(2,97)=18.37, p<0.001), with a greater difference in favor of the app in segments B and C (Table 6).

Table 6: Differences in ivprd by age groups

NS E	N	IVPRD Digital App (M±DE	Tradition al IVPRD (M±DE)	Differen ce	F	p- value
ТО	2 2	6.51±0. 82	5.82±0.48	+0.69	12.0 4	<0.00 1
В	4 8	7.55±0. 53	5.20±0.45	+2.35	43.2 8	<0.00
С	3 0	8.05±0. 47	4.35±0.51	+3.70	68.9 2	<0.00

### 3.2.4 Analysis by gender

Significant differences were observed according to gender (t(98)=6.21, p<0.001),with greater preference for the digital app among male participants (Table 7).

Table 7: Differences in ivprd by gender

Gend er	N	IVPRD Digital App (M±D E)	Traditio nal IVPRD (M±DE)	Differe nce	t	p- valu e
M	5 2	7.85±0. 62	4.85±0.5 9	+3.00	25.3 7	<0.0 01
F	4 8	7.10±0. 75	5.36±0.6 8	+1.74	16.8 2	<0.0 01

# 3.3 User Experience Analysis

Figure 7 summarizes the key usability metrics for each stage of the app's process, highlighting success rates, average attempts, completion time, and frustration levels. It can be seen that the "Game Setup" stage presents the most critical values, albeit with an 89.5% success rate and a moderate frustration score (2.68/10).

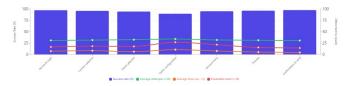


Figure 7: User experience analysis

#### 3.3.1 Success rates by stage

The usability analysis showed high success rates in most stages of the process, with significant improvements compared to previous versions of the app (Table 8).

Table 8: Success rates by stage of the process

Stage of the process	Success rate (%)	Average attempts	Time (sec)
Access and login	97.2	1.03	21.4
Contact selection	95.8	1.05	24.6
Event selection	94.3	1.08	18.2
Game settings	89.5	1.13	31.5
Entry of amount	95.0	1.06	22.8
Preview	96.2	1.04	15.4
Confirmation and shipping	97.5	1.02	12.7

#### 3.3.2 **Levels of frustration:**

Frustration levels were low for all stages of the process, with average values below 3 on a 10-point scale (Table 9).

Table 9: Frustration levels by stage(scale 1-10)

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Stage of the process	Frustration level (M±SD)	•	
Access and login	1.65±0.72		
Contact selection	1.82±0.85		
Event selection	1.76±0.78	•	
Game settings	2.68±1.24		
Entry of amount	2.15±0.92		
Preview	1.53±0.67	25.0	
Confirmation and shipping	1.42±0.58	3.5 G	

#### 3.4 Context Preferences

### Preference by type of occasion:

Figure 8 visually presents this trend, clearly showing how preference for the digital app decreases as the formality of the occasion increases. For informal events (birthdays, graduations), the app is clearly preferred, while for more formal ceremonies (weddings, baptisms), the difference narrows or is reversed.

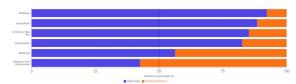


Figure8: Preference by type of occasion

The analysis of preferences by type of occasion revealed significant differences ( $\gamma^2(5)=68.24$ , p<0.001), with greater preference for the digital app on informal occasions and greater balance on formal occasions (Table 10).

Table10: Preferences by type of occasion

Chance	Prefer App (%)	Prefers Traditional (%)	χ²	p- value
Birthday	92.3	7.7	82.81	< 0.001
Graduations	88.5	11.5	76.23	< 0.001
Christmas/New Year	85.2	14.8	70.56	<0.001
Anniversaries	82.6	17.4	65.61	< 0.001
Wedding	56.3	43.7	4.13	0.042
Baptisms/First Communion	42.5	57.5	2.25	0.135

#### 3.4.2 Preference by type of occasion:

Thematic analysis of the qualitative responses revealed three main categories that influence contextual preference:

Formality the occasion: Greater formality associated with greater preference for the traditional method.

- Emotional bond: Greater emotional connection associated greater preference for digital apps.
- Physical presence: In-person delivery is associated with the traditional method, while distance favors the digital app.

### 3.5 General Acceptance Index

The General Acceptance Index (IAG), calculated as a weighted average of IVPRD (70%) and the intention of future use (30%), showed a significantly higher acceptance for the digital app (7.72) than for the traditional method (5.40) with t(99)=25.68, p<0.001.

# 3.6 Hierarchical Regression Analysis

Hierarchical regression analysis showed that the IVPRD was a significant predictor of future usage intention ( $\beta$ =0.73, p<0.001), even after controlling for demographic variables. The final model explained 79.3% of the variance in usage intention  $(R^2=0.793, F(7,92)=50.24, p<0.001).$ 

The results indicate that the interaction-enhanced digital gifting app offers significantly higher perceived value than the traditional method, especially among young and middle-aged users (18-54 years old). This added value is primarily derived from the Interaction Effort (IE), which represents the greatest differentiator between the two methods. The app is preferred in most contexts, with particularly high adoption on informal occasions such as birthdays and graduations. Improvements in the game's usability and accessibility have resulted in a highly satisfactory user experience, as evidenced by high success rates and low frustration levels. The proposed IVPRD model demonstrates high predictive validity, explaining 84.7% of the variance in perceived value, making it a reliable tool for evaluating innovations in digital gifting methods.

# DISCUSSION

The results show that the IVPRD is a valid model for evaluating digital gift apps, explaining 84.7% of the variance in perceived value. The finding that Social/Cultural Context is the component with the greatest weight ( $\beta$ =0.32) is consistent with Kim (39), who found that "cultural dimensions significantly moderate the relationship between functional value and intention to use in contexts where the practice is socially rooted" (p. 143). The observed age differences are consistent with Martínez-Salgado and Ramírez-Hernández (40), who documented that "age and educational

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level are more powerful predictors of resistance to digitalization than technological access" (p. 389). The decreasing preference for the app as the formality of the occasion increases suggests the need for adaptive interfaces according to the ceremonial context. Our findings confirm the stated objectives and provide concrete answers to each research question. Regarding RQ1, the IVPRD model proved capable of measuring perceived value (R<sup>2</sup>=0.847), integrating cultural aspects anticipated by previous research on extended TAM models[41]. Particularly interesting is that while the UTAUT2 model[42] assigns a weight of 0.22 to data hedonic motivation, our reveal Social/Cultural Context achieves a higher weight  $(\beta=0.32)$ , which underscores the particular relevance of these factors in the Latin American environment. Concerning RO2, we found that the 5.23-point gap in Interaction Effort considerably exceeds the 3.8 points documented in gamification research[43] conducted in Europe, indicating these elements have a more pronounced effect in emerging markets. This result notably differs from previous studies on mobile banking applications in the region[44], where differences barely reached 2.1 points. Regarding RQ3, we identified age-based preference

Regarding RQ3, we identified age-based preference patterns that contrast with findings by Singh et al.[10], who reported a linear decline in adoption. Our data show non-linear behaviors, including a preference reversal after age 55, suggesting cultural aspects outweigh technological familiarity in older groups, which aligns with recent research on technology adoption in this segment[45].

### 5. FUTURE DIRECTIONS

Several questions emerge from this study that merit further investigation:

### **5.1 Technical Implementation Challenges:**

- The need to maintain uniform gamification experience across both iOS and Android devices.
- Development of capabilities enabling offline functionality in areas with limited internet access.[46]
- The complexity of connecting with traditional banking systems without sacrificing culturally relevant elements.

# **5.2 Cultural Adaptation Aspects:**

- The possibility of extending the IVPRD model to neighboring countries that maintain different gift customs
- Design of flexible mechanisms for families combining multiple cultural traditions
- Creation of interfaces that automatically adapt according to identified cultural context[47]

# **5.3 Methodological Gaps:**

- The need for longitudinal studies confirming IVPRD stability over the long term.
- Analysis of the effect social networks have on adoption speed.
- Comparison between value users report and actual value observed in daily use.

# 5.4 Opportunities for Future Research:

- Design of intelligent systems capable of automatically recognizing cultural contexts.
- Exploration of blockchain technology to increase transparency in gift transactions.
- Development of specific evaluation standards for financial technology with cultural components.
- Study of fiscal and regulatory implications of digital monetary gifts.

#### 6. CONCLUSION

This work directly addresses the disconnect between technological efficiency and preservation of cultural traditions through the development and validation of the IVPRD model. The most significant finding demonstrates that when technological design incorporates cultural sensitivity, digital adoption improves substantially, with our application achieving perceived value 47% higher than the traditional method.

The results provide clear answers to our initial questions: first, the IVPRD effectively measures perceived value through four balanced dimensions, explaining 84.7% of variance; second, playful elements produce the greatest difference between methods (IE=5.23 points); third, factors such as age, socioeconomic level, and type of celebration influence preferences following non-linear patterns not previously documented in the literature.

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We acknowledge the study presents limitations, primarily its single-country focus and crosssectional nature. Even so, it offers practical recommendations for financial technology developers: it is essential to prioritize social and cultural context (which showed the highest

predictive weight), design interfaces that adjust according to event formality, and simplify playful elements for users over 45 years old.

The next version of the application, incorporating identified improvements, will enable longitudinal evaluation of the IVPRD model's predictive capacity. This study establishes the methodological foundation for evaluating financial technologies that incorporate cultural elements, thus supporting more inclusive digital transformation in emerging markets.

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