Redefining Financial Engagement: A Gamified Approach with ElektraFi

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Introduction

Financial wellness platforms face persistent engagement challenges:

- 76% of users abandon financial apps within 30 days
- 68% of employees feel overwhelmed by financial decisions
- 82% of adults express privacy concerns with financial platforms

These challenges often stem from **psychological disconnects** that undermine users' motivation and financial behavior.

To address this, we introduce **ElektraFi**, a gamified financial wellness platform that applies the **Self-Determination Theory (SDT)**. By embedding SDT-aligned gamification features that support autonomy, competence, and relatedness, we aim to improve engagement, financial literacy, and behavioral consistency.

Research Questions & Objectives

Research Questions

1. How do SDT-based gamification features impact user engagement on ElektraFi?
2. Which SDT combinations most effectively improve retention and financial literacy?

Research Objectives

- Develop an SDT-based gamification framework for financial platforms
- Evaluate the effectiveness of SDT-aligned elements
- Enable a scalable model for employee wellness
- Provide empirical validation of motivational theories

Key Findings

We conducted an internal pilot study (N = 12) to evaluate how SDT-aligned gamification features impact user preferences and engagement.

H1: *66.7%* of users preferred progress bars and visualization elements, indicating these features effectively address multiple SDT needs.

H2: *91.7%* rated immediate feedback as "very important" or "extremely important," supporting the impact of **competence-enhancing** features.

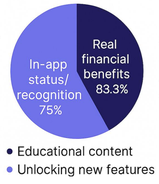
H3: *50%* preferred tiered points systems supporting **autonomy**; *75%* were willing to spend 2–5 minutes daily on financial tasks ($p < 0.01$).

Motivator Insight

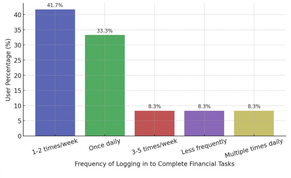
83.3% of users rated **real financial benefits** (e.g., interest rate bonuses, fee waivers in the app prototype) as their highest motivator—significantly above recognition or educational rewards.

Key Metrics from Survey

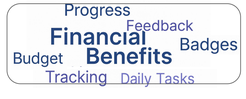
Preferred Reward Types



Gamification Boosted User Task Frequency

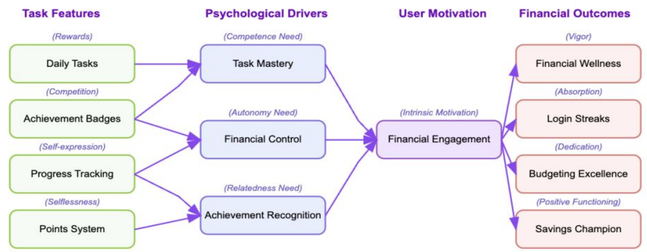


User Preference Word Cloud



Methodology

- **Survey Design and Implementation**
  - Post-implement internal survey of SDT components
- **Live User Testing**
  - Long term analysis of user's financial behaviors
- **Feature Feedback**
  - Qualitative assessment of user feedback on psychological driving tasks
- **Platform Activity Logging**
  - Quantitative analysis of engagement metrics(login frequency, task completion rate)



Research Model (SDT theory)

Evaluation

We conducted an **internal pilot study with 12 participants** to evaluate usability, engagement, and learning effectiveness. Over a **three-week period**, participants engaged in a live walkthrough, completed SDT-aligned surveys, and had their platform activity logged.

Our evaluation combined **three core methods**:

- **Survey**
  - SDT-aligned questionnaires measuring autonomy, competence, and relatedness
  - Feature-specific feedback on progress tracking and badge systems
- **Live Testing**
  - Structured walkthrough sessions
  - Observational feedback and open-ended reflections
- **Platform Logging**
  - Login frequency, streak data, badge collection
  - Interaction with task cards and social features

Each gamified feature was mapped to Self-Determination Theory (SDT) needs:

Autonomy → Task cards, challenge selection

Competence → Dashboards, progress metrics, visual rewards

Relatedness → Shared streaks, badge recognition

Tools & Metrics

Touls used	SDT need
Typeform surveys	Google Sheets
Variety of chosen tasks	Survey + log analysis
Visual reward interaction	Screenshot-based recall
Login frequency & streak length	Sheet-based tracking
Social feature interaction	Survey (QB–Q10)

Quantitative Analysis

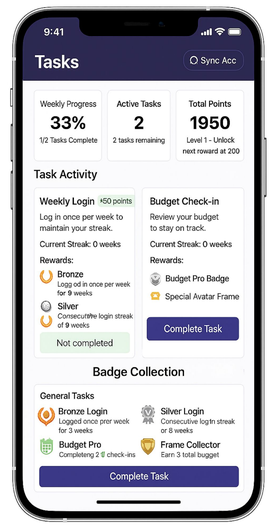
- Surveyed SDT metrics: autonomy, competence relatedness
- Feature-specific feedback prompts
- Live session walkthroughs and reflection

Qualitative Assessment

- Open-ended survey reflections
- Observational feedback (verbal reactions)
- Relatedness: shared streaks, badge recognition

Implementation

Self-Determination Theory(SDT) Implementation		
Need	**Definition**	**Implementation**
Autonomy	The need for **choice** and **self-direction**	• **Self-facilitated progression paths** • **Personalized financial challenges**
Competence	The need to feel **capable** and **effective**	• **Instant Points Rewards** • **Achievement Badges** • **Progress Tracking** • **Daily Tasks**
Relatedness	The need for **meaningful connection**	• **Achievement Celebrations** • **Shared financial goals** • **Community Leaderboards**



Conclusion

Our SDT-aligned gamification design showed strong potential to enhance short-term **user motivation, engagement frequency**, and **financial behavior consistency**. Internal pilot testing highlighted clear patterns that support our framework:

Key insights:

- Motivation was highest when **feedback was immediate** and rewards were **tangible**
- Users engaged more when they could **visualize progress and personalize tasks**
- **SDT satisfaction mapping** guided effective gamified interface design

Key Impacts:

- Validated through both qualitative and quantitative data, our SDT-mapped features led to observable improvements in engagement, motivation, and task adherence.

Applied Insights from SDT-Based Design

SDT Need → Impact

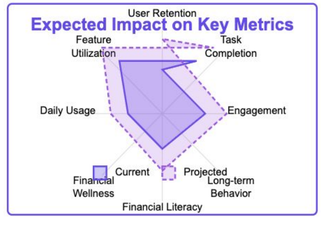
- Autonomy → higher engagement
- Competence → stronger motivation
- Relatedness → sustained behavior

Key Takeaways

- Core SDT components successfully integrated
- Significant positive impact
- Considerations for other platforms

Future Work

- Conduct A/B testing with a larger, more diverse user base
- Introduce social and competitive gamification layers to deepen relatedness
- Leverage adaptive feedback based on real-time user behavior
- Apply SDT-gamification framework to broader domains (e.g., health platforms)
- Explore habit-forming patterns linked to autonomy-supportive tracking flows



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Project Demo & Link

Survey Result | Github repo | Research Paper