

Cultivating Youth Financial Well-Being: A Perspective on Activity Theory in Digital Financial Services

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Abstract

Digital financial services (DFS) are reshaping how individuals manage money by embedding real-time tracking, personalised nudges, and frictionless transactions into everyday life. However, research remains largely focused on adoption and current-oriented practices such as short-term usage and immediate convenience, offering limited insight into how DFS can foster users' future financial lives and financial well-being, especially for young people who are digitally adept but financially precarious. Financial well-being, understood as a sense of security and freedom in meeting present and future financial needs, includes both hedonic, and eudaimonic, toward meaningful goals. It is particularly challenging in youth-focused DFS. Drawing on activity theory, we conceptualise financial well-being as an evolving, practice-based activity rather than a static outcome state and investigate how DFS can be effectively leveraged to cultivate young users' financial well-being. We conducted a qualitative case study of *Enrich*, a youth-focused DFS offered by a Taiwanese commercial bank. It repositioned from transactional convenience towards future-oriented tools that support financial responses and practices. We propose a pendulum-like framework of activity systems that captures young users' oscillation between hedonic and eudaimonic orientations in DFS-mediated practices and helps DFS researchers and designers link usage to longer-term youth financial well-being.

Keywords: Digital financial services, Financial well-being, Activity theory, Qualitative case study.

1 Introduction

People are increasingly managing their everyday finances through digital financial services (DFS) while facing challenges with keeping control of day-to-day spending and preparing for future financial demands (Riitsalu et al., 2024). Recent advances in DFS have significantly changed individuals' financial management (Bhat et al., 2025). Services such as real-time tracking, automated categorisation, and frictionless transactions (e.g., Karjaluo et al., 2019; Loh et al., 2023) can influence individuals' financial behaviours, particularly in relation to saving, borrowing, and investment (Bapat, 2022; Lyons et al., 2022; Naito et al., 2021). In addition to these functional benefits, DFS increasingly mediate everyday financial decision-

making by embedding personalised nudges, credit offers, and spending insights into routine interactions (Barone et al., 2024; D'Acunto & Rossi, 2023). Existing research on DFS has largely focused on issues such as adoption and usage (Chamboko, 2024; Lai & Liew, 2021; Shaikh et al., 2023), as well as their potential to improve access to suitable financial products and services (Kamble et al., 2024; Li et al., 2024).

However, prior work on DFS remains largely oriented towards current-oriented practice to enhance financial skills and behaviours (French et al., 2021; Nguyen et al., 2021), while paying much less attention to their implications for individuals' future financial lives (Chatterjee & Sarker, 2024). Financial well-being, in this regard, remains insufficiently understood in this context (Bhat et al., 2025; Kanungo & Gupta, 2021). It refers to an individual's sense of security and freedom in managing their current and future financial needs (Brüggen et al., 2017; Pazarbasioglu et al., 2020). This is highly relevant and challenging for DFS because these services increasingly aim not only to expand access and usage, but also to strengthen people's future-oriented practices related to financial security and financial health (Brüggen et al., 2017; Mahdzan et al., 2023; Pazarbasioglu et al., 2020). Prior research indicates that higher financial well-being supports mental health, life satisfaction, and relationship quality, whereas low financial well-being is associated with heightened stress and financial insecurity (Arber et al., 2014; Brüggen et al., 2017; García-Mata & Zerón-Félix, 2022).

Young people are a particularly salient group in this regard, as they increasingly rely on DFS to manage everyday finances while often experiencing heightened financial precarity (Banerjee, 2023; Wilska & Nyrhinen, 2025). Research further indicates that rising indebtedness and loss of control over everyday finances undermine young users' sense of security and freedom in managing their present and future financial needs (Mahdzan et al., 2023; Utkarsh et al., 2020). Therefore, this study heeds the growing calls for more future-oriented information systems (IS) research by moving beyond current practice and explicitly striving to be relevant to future practice (Chiasson et al., 2018; Markus & Mentzer, 2014; Pee et al., 2021). Specifically, our research objective is to reframe DFS-mediated youth finance towards longer-term financial well-being within increasingly digital financial contexts. Guided by this objective, we pose the following research question (RQ):

RQ: *How can DFS be effectively leveraged to cultivate young users' financial well-being?*

This study draws on activity theory (AT) (Engeström, 1999a; Vygotsky, 1978) as the theoretical lens to address the above RQ. AT, a practice-oriented theory (Foot, 2014; Miettinen et al., 2009), rests on the core premise that human activity is purposive and mediated by tools, social norms, community, and the division of labour (Karanasios, 2018). This theoretical lens moves beyond traditional views of financial well-being as a fixed individual trait or a purely outcome-based state and instead supports a better understanding of financial well-being as an integral, evolving aspect of young people's everyday current- and future-oriented financial practices.

We conducted a qualitative case study (Walsham, 1995) of "Enrich" (a pseudonym), a youth-focused DFS offered by a Taiwanese commercial bank and embedded in users' everyday financial practices. The case is particularly revelatory (Eisenhardt, 1989) because Enrich was deliberately repositioned from a transactional convenience tool to a set of future-oriented services that encourage financial planning, reflection, and learning related to financial well-being. This rare strategic shift, together with the service's integration into young people's routine saving, spending, and investing activities, provides a rich setting for

examining DFS-mediated current- and future-oriented financial practices. It also enables us to explore how such services shape young users' responses, everyday financial behaviours, and key transitions in their financial lives.

Drawing on our findings, we propose a pendulum-like research framework of DFS-mediated activity that conceptualises financial well-being as an ongoing movement between addressing short-term pressures and cultivating longer-term goals. We argue that DFS can support current- and future-oriented financial practices in ways that connect immediate problem-solving with the development of sustainable financial practices over time. This paper has two main contributions. *First*, we conceptualise young people's financial well-being in DFS as an evolving activity system that connects digital tools, financial literacy, and everyday money management, rather than treating these elements in isolation. *Second*, we extend AT work on contradictions (Karanasios, 2018) by articulating a pendulum-like framework of DFS-mediated activity that treats youth financial lives as oscillating between more hedonic, current-focused and more eudaimonic, future-oriented configurations. This framework shows that the tension between "old" and "new" activity configurations is worked through via recurrent swings rather than a one-off replacement of the former by the latter.

The paper is structured as follows. Section 2 reviews related literature on DFS and on current- and future-oriented views of financial well-being. Section 3 outlines AT view of practice as activities. Section 4 explains the methodology applied in our case study. Section 5 presents the case findings. Section 6 discusses the implications of these findings and proposes our research framework. Section 7 details the theoretical and practical contributions, and Section 8 concludes the paper and suggests directions for future work.

2 Literature Review

In this section, we develop the conceptual background for our study by linking work on DFS with research on financial well-being. We first define DFS and review how prior studies have largely emphasised current-oriented financial skills and behaviours. We then introduce financial well-being, including hedonic and eudaimonic aspects, and relate these to current- and future-oriented financial practices, with a particular focus on young people.

Digitalisation of the finance industry is transforming the delivery, access, and experience of financial services for individuals. DFS refer to "financial services that rely on digital technologies for their delivery and use by consumers" (Pazarbasioglu et al., 2020, p.1). DFS encompass a variety of services, including mobile banking, payment applications, digital lending, and mobile investment, enabling users to manage their finances efficiently and conveniently without relying on traditional banking infrastructure (Karjaluo et al., 2019; Loh et al., 2023). These digital services reduce transaction costs and improve efficiency while expanding access to financial services for underserved populations (Kamble et al., 2024; Li et al., 2024; Singh, 2020). Moreover, DFS can promote economic growth and reduce poverty by increasing the uptake of financial services (Chinoda & Kapingura, 2024; Liu et al., 2021).

In particular, DFS adoption can also strengthen financial skills and capability by exposing individuals to practical tools that foster learning and engagement (Abdallah et al., 2025). For instance, features such as automated savings, expense tracking, and real-time notifications help users monitor their financial activities and plan more efficiently (Agarwal & Ann, 2024). Many DFS also incorporate educational elements, including tutorials, budgeting tools, and investment guides, which help users grasp complex financial concepts in an interactive way

(Morgan, 2021). Similarly, investment services enable users to explore investment opportunities and build confidence in their asset-building decisions (Koskelainen et al., 2023). Therefore, users of DFS are more likely to display enhanced attitudes and motivations, as well as more competent financial behaviours, including tracking income and expenditure (French et al., 2021).

However, such improvements in financial skills and behaviours, while beneficial in current practice, do not necessarily lead to future-oriented financial well-being (Bhat et al., 2025; Chatterjee & Sarker, 2024; Pee et al., 2021). The Consumer Financial Protection Bureau (CFPB) defines financial well-being as *"a state of being wherein a person can fully meet current and ongoing financial obligations, can feel secure in their financial future, and is able to make choices that allow enjoyment of life"* (CFPB, 2015, p.18). Similarly, a qualitative study in Australia described it as *"a person is able to meet expenses and has some money left over, is in control of their finances and feels financially secure, now and in the future"* (Salignac et al., 2020, p.16). These definitions point to financial well-being as inherently concerning both current- and future-oriented practice, which includes managing finances in the present and preparing for desired outcomes over time (Netemeyer et al., 2018). This involves not only feeling financially comfortable and less stressed in one's current situation (Nanda & Banerjee, 2021) but also seeing one's finances as enabling the pursuit of meaningful financial goals (Shin et al., 2023), thereby reflecting both hedonic and eudaimonic aspects of well-being (Delle Fave et al., 2011; Ryan & Deci, 2001).

From a hedonic perspective, well-being is often understood in terms of pleasure attainment and the avoidance of pain or distress (Joshnloo et al., 2021; Ryan & Deci, 2001). It highlights feeling financially comfortable in the present, experiencing less money-related stress and negative affect, and being able to enjoy day-to-day life without undue financial strain (Nanda & Banerjee, 2021). This aspect is closely related to how current financial practices relieve immediate pressures and worries. In contrast, a eudaimonic perspective emphasises meaning, self-realisation, and the extent to which people can pursue personally important goals and live in line with their values (Delle Fave et al., 2011; Ryan & Deci, 2001). Eudaimonic financial well-being therefore concerns feeling in control of one's financial situation and being able to work towards personally meaningful financial goals over time (Shin et al., 2023). This view is more clearly future-oriented, as it focuses on whether financial practices support skill-building, long-term planning, and progress towards desired financial lives. Further, both dimensions underscore financial well-being not merely as objective financial outcomes, such as income, assets, and debt (Gerald et al., 2025), but as a subjective experience grounded in individuals' perceptions of their financial security and freedom (Brüggen et al., 2017; Mahdzan et al., 2023).

In particular, everyday financial practices shape not only present emotions (Iannello et al., 2021), such as anxiety or peace of mind, but also influence how people anticipate and experience their financial futures (Muir et al., 2017; Rosciano & Starita, 2024). In sum, drawing on the above literature, we characterise financial well-being in this study in terms of present and desired states, hedonic and eudaimonic experiences, and objective and subjective evaluations. These dimensions clarify that it is necessary not only to examine present financial practices but also to move beyond them to consider whether they support, or fail to support, desired future financial well-being. The conceptual dimensions of financial well-being across current- and future-oriented practice are shown in Table 1.

Dimension	Current-oriented practice	Future-oriented practice
Present and desired state	Present states reflect whether individuals can manage day-to-day finances without undue strain. (Netemeyer et al., 2018).	Desired states reflect confidence in maintaining or improving living standards and achieving long-term financial goals. (Brüggen et al., 2017).
Hedonic and eudaimonic	Hedonic highlights reduced financial stress, worry, and money-related negative affect (Nanda & Banerjee, 2021).	Eudaimonic highlights feeling in control of one's finances and able to pursue personally meaningful financial goals (Shin et al., 2023).
Objective and subjective	Objective aspects highlight whether financial outcomes (e.g., income, assets, and debt) are sufficient to cover needs and absorb shocks (Gerald et al., 2025).	Subjective aspects highlight perceived financial security, freedom, and comfort in managing one's finances (Mahdzan et al., 2023).

Table 1. The Current- and Future-oriented Practice in Financial Well-being

In addition, research indicated that easy access to digital credit through DFS in the moment may undermine users' future financial stability and lead to over-indebtedness, especially among low-income users who have difficulty interpreting loan conditions and repayment requirements (Yue et al., 2022). Zhang and Zhao (2025) reported that individuals who use mobile payments are more likely to fall behind on credit card, mortgage, and student loan repayments, with overspending mediating the link between mobile payment use and debt delinquency. Moreover, some users experience heightened anxiety related to cybersecurity risks, as well as overspending and over-indebtedness linked to their use of mobile payment services (An et al., 2025; Javaheri et al., 2024). Studies also emphasise a growing trend of digital financial exclusion among individuals with limited digital financial skills (Ren et al., 2018; Vik et al., 2024). These issues are particularly relevant for young people, who are among the earliest and most intensive adopters of DFS and mobile payment services (Banerjee, 2023; Wilska & Nyrhinen, 2025).

Growing up in increasingly cashless and digitally mediated environments, young people frequently rely on DFS for everyday spending, borrowing, and money management (Utkarsh et al., 2020). This intensive reliance, nevertheless, exposes young people to risks such as impulsive spending, accumulation of unsecured debt, and heightened financial stress, which may undermine their financial well-being over time (Mahdzan et al., 2023; Utkarsh et al., 2020). These risks are further compounded by low levels of financial literacy, which make autonomous financial decision-making even more challenging for young people (Philippas & Avdoulas, 2021). Although financial education is vital in this context (Panos & Wilson, 2020; Van Klyton et al., 2021), many young users find existing tools, such as digital tutorials or static in-app modules, unengaging or difficult to understand (Sharma & Sharma, 2019). As a result, low engagement with educational tools, combined with the complexity of financial products, often leads to suboptimal financial choices that can adversely affect financial well-being (Bone et al., 2014; Mahdzan et al., 2023; Panos & Wilson, 2020). Notably, younger consumers are also facing increasing concerns about digital financial fraud, such as phishing and online scams, and some are accumulating excessive debt due to the ready availability of digital credit (Gomber et al., 2018; Philippas & Avdoulas, 2021; Utkarsh et al., 2020).

In such settings, the focus of this study moves from mere access to DFS towards the nature of their use in young people's everyday financial practices and their longer-term financial lives.

This shift in focus positions youth-focused DFS as a critical context for examining current- and future-oriented dimensions of financial well-being.

3 Theoretical Lens

The literature section above suggests that existing work on DFS has not adequately addressed young people's financial well-being, particularly in relation to the ways such services shape the current- and future-oriented practices of that well-being. What is therefore required is a theoretical understanding of how financial well-being is cultivated through young people's engagements with DFS. Much prior research on DFS and digital technologies in the IS field has relied on adoption-oriented models such as the Technology Acceptance Model (TAM) and the Unified Theory of Acceptance and Use of Technology (UTAUT), focusing on constructs like perceived usefulness, ease of use, and behavioural intention (Williams et al., 2015). These approaches are well suited to explaining initial adoption and short-term usage, but they are less suited to capturing how digital services become embedded in ongoing practices or how they relate to longer-term, future-oriented financial lives and well-being. They also do not explicitly foreground financial well-being as an outcome of interest in the IS field. In response, this study adopts AT as a theoretical lens to address the RQ stated in the introduction.

AT is grounded in Vygotsky (1978)'s cultural-historical work, which conceptualises human activity as object-oriented and mediated by tools (Engeström, 1999a). The object refers to the problem situation or focus that the subject (actor or agent) attempts to change (Engeström, 1999b), using "tools" to achieve specific "outcomes". The object is continually in transition "as the object is co-configured time and time again" (Engeström, 2000, p.973), under cultural-historical "rules and norms," a "community," and the "division of labour" (Karanasios, 2018). In an activity system, rules and norms refer to both explicit and implicit conventions that guide behaviour within the activity. The community represents the setting in which the activity takes place (Engeström, 1999a), comprising individuals, groups, or organisations that are distinct yet share the same object and interact with the subject (Engeström, 2001). The division of labour captures the distribution of tasks and responsibilities among participants, which reflects underlying role structures and hierarchies. Therefore, an activity system depicts a subject's use of tools to act on this changing object within such a socially structured context.

As illustrated in Figure 1, AT conceptualises the activity system as tool-mediated, with tools and technologies integrated with their social context and treated as a single analytical unit (Karanasios et al., 2018). In this context, achieving an object often involves the interaction of multiple activity systems that work toward a (potentially "common" or "shared") object from which new activities and objects of work can emerge (Allen et al., 2013; Foot, 2014; Karanasios & Allen, 2013). This perspective emphasises that activity systems are interconnected and interdependent because their elements depend on the deliberate integration of other activity systems (Engeström, 2009; Karanasios, 2018).

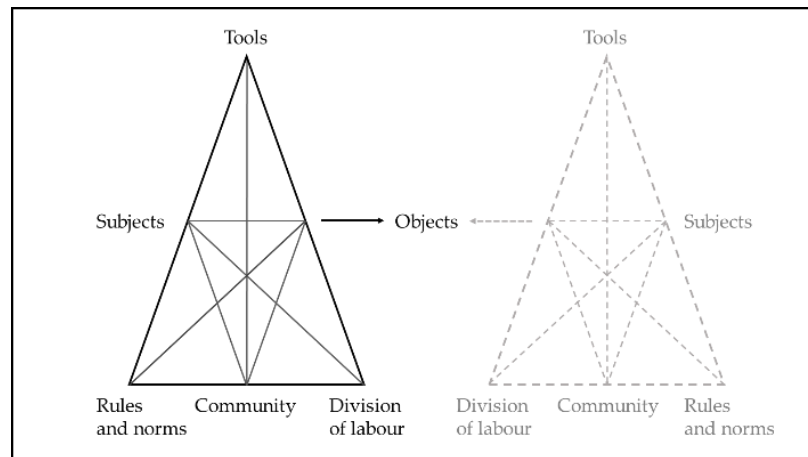


Figure 1: Activity systems and their fundamental elements

Current- and future-oriented practices of financial well-being may affect the mediating tools and the relationships between the subject, object, and other elements of the activity system. Indeed, financial well-being-related practices can flow through technologies, rules, and objects in ways that influence the elements within multiple interacting activity systems (Brüggen et al., 2017; Engeström, 2008; Miettinen et al., 2009). For instance, current-oriented practices can affect whether young users gain access to particular financial tools or resources, while future-oriented practices can be reflected in the rules and norms that structure interactions within the activity system. In addition, DFS, as mediating tools, can either enable or constrain current- and future-oriented practices of financial well-being. A DFS, for example, could reinforce current-oriented practices through features that track spending and facilitate immediate payments, or it could foster future-oriented practices by supporting saving, budgeting, and longer-term planning for financial well-being.

Financial well-being-related practices can be understood as an aspect of the rules that govern activity systems and norms of financial behaviour (Philippas & Avdoulas, 2021). Similarly, expectations around financial well-being are ascribed within communities that participate in financial activities. For example, family members, peers, and financial educators can, through ongoing interaction and guidance, gradually shape young users' current- and future-oriented financial practices. Moreover, financial well-being practices can also be examined through the division of labour. Examining the division of labour highlights who takes charge of particular financial tasks in relation to the activity's object. It draws attention to which community members make different kinds of financial choices, for what reasons, and with which tools. Such role distributions are shaped by established interaction patterns within the community and by wider cultural and societal norms around money management and financial responsibility (Foot, 2014).

On the other hand, contradictions are a core concept in AT, considered as the "dynamic dimension" of activity (Groleau et al., 2012, p. 654), and are highly relevant for understanding financial well-being in digitally mediated practices. They may emerge within a single element of an activity (such as a particular digital financial tool), between different elements (for example, between rules and young users' financial goals), or across interconnected activities (such as study, work, and leisure) that shape how young people manage money (Engeström, 2001). Importantly, contradictions may also manifest as tensions between current financial pressures and aspirations for future security (i.e., between current and future activities)

(Karanasios, 2018; Kuutti, 1999). For instance, when the desire to participate in social activities conflicts with intentions to save or invest for longer-term goals. Such contradictions can provide opportunities for innovation and learning (Engeström, 2001) by prompting reflection on current financial practices and their alignment with desired future-oriented financial well-being. It follows that contradictions, which highlight connections between different activities or elements, present and future concerns, and the perspectives of different actors, serve as key analytical mechanisms in this study of financial well-being.

In this study, we therefore conceptualise current- and future-oriented practices of financial well-being as dynamic, continually evolving activities. In particular, rather than treating financial behaviours as isolated choices or static characteristics, activity theory foregrounds their configuration through the interplay of subjects, tools (i.e., DFS), rules, communities, and divisions of labour, and attends to changes in these relations over time as young people negotiate immediate demands alongside longer-term aspirations. This perspective allows us to trace the intertwining of present-oriented actions (for example, everyday spending or bill payments) with future-oriented practices (such as saving, investing, or planning and managing for financial security), as well as the ways in which tensions between them gradually reshape financial well-being.

4 Methodology

With the aim of understanding how DFS can support young people's current- and future-oriented financial practices and contribute to their financial well-being, this study adopts a qualitative approach with a single case study design (Walsham, 1995) to investigate the role of DFS as a mediating tool in young people's everyday financial lives. This research design allows us to examine in depth how DFS-mediated youth finance is embedded in young people's financial practices and thereby address our research objective. Drawing on empirical data from this case, the methodology section outlines the case selection rationale and the data sources and analytical focus that guide the interpretation of young people's DFS-enabled financial practices.

4.1 Research Setting

The case setting was a DFS offered by a privately owned commercial bank in Taiwan for young adults who relied on mobile banking in their everyday financial lives. The service was launched in 2016 and remained in operation throughout the period of this study. Access to the case was organised through initial conversations with the service team, which were facilitated by a senior manager who was an alumnus of the authors' university and had previously shared the service in a public talk. We refer to this service as Enrich (a pseudonym), and the case examined young people's current- and future-oriented practices related to financial well-being as mediated by Enrich. Specifically, we considered how these practices were configured in young people's everyday interactions with Enrich and how they intersected with other saving, investing, and spending activities in their lives. We focused on these practices related to financial well-being, on young people's responses and behaviours, and on the interactions and transitions in their financial lives.

Enrich was selected as a single revelatory case (Eisenhardt, 1989) because it represents a rare instance of a bank explicitly repositioning a youth-focused DFS around financial well-being rather than merely convenience or product cross-selling. The case is particularly relevant as it illuminates young people's current- and future-oriented practices related to financial well-

being, shows both zoomed-in dynamics within a single activity system and zoomed-out connections across a network of financial activities, and focuses on DFS built on widespread, everyday financial technologies rather than cutting-edge systems.

Interestingly, Enrich was developed by an intrapreneurial team of fewer than five members, which later grew to around twenty people. It was initially positioned as a digital extension of existing banking channels for younger users seeking convenient access to financial services (see Appendix A-a; b), offering routine transactions such as balance checks, transfers, and bill payments. This initial positioning attracted relatively low download and active usage rates. The team thus began to re-envision Enrich as a tool to cultivate active financial engagement, reflection, and learning for young people's longer-term financial lives, rather than merely offering a digital channel. This shift responded to their observation that many young users were financially passive, an observable phenomenon they linked to broader sociocultural norms (often described as a "lie-flat"¹ mindset) and a tendency to prioritise the present over the future.

Several services were introduced by the Enrich team to operationalise this shift, including *Coin-investment*, a micro-investment service that lowers the entry barrier to investing; *Enrich-pot*, a mobile savings service that supports goal-oriented saving for young people's future needs; and *Enrich-mart*, a mobile commerce service that uses a proprietary virtual currency, *Enrich-go*, to link current spending with saving and investment activities. Further, the Enrich team integrated social media-based communities that provide peer discussion spaces and curated financial management content. These services constitute the empirical basis for analysing how DFS can help young people manage their money day to day and build future-oriented financial practices that support their financial well-being.

4.2 Data Collection

Our data were collected through interviews, online observations, and archival materials, which began in 2019 and concluded in late 2022, providing multiple perspectives on financial well-being in both day-to-day money management and future-oriented financial practices. Semi-structured interviews with core members of the Enrich team focused on how the service was conceived, how it was implemented in practice, and the constraints that influenced its evolution over time. For example, we asked how they understood young people's everyday financial practices and how they expected Enrich to mediate and support these practices. The three interviewees were long-standing, senior members of the original team, having joined at the outset and remained closely involved in every major stage of service development, which gave them rich historical and strategic perspectives on Enrich. One of them was an alumna of the same university as one of the authors, which facilitated initial contact. We then approached the team via email, briefly introducing the study and inviting them to participate in interviews about the development of Enrich and its role in supporting young people's financial well-being.

In addition, we conducted interviews with twenty-one regular young users to gain detailed insight into how they engaged in everyday financial practices, the types of financial activities they undertook, and the benefits and challenges they encountered. The interviewees were

¹ The "lie-flat" mindset, a term selected as the Oxford Word of the Year 2022 in recognition of its status as a prevailing social trend, refers to young people's disillusionment characterised by low ambition, passive disengagement, and resistance to constant pressure to compete amid uncertain financial and social futures.

aged between 18 and their early thirties and were living and banking in major urban areas, reflecting the core demographic targeted by Enrich. The interviews explored how they organised day-to-day money management, how they used Enrich to plan for future expenses or goals, and how these practices had changed over time in response to their evolving financial situations and aspirations. For instance, we asked how they handled monthly budgeting, how they planned for future expenses such as travelling, and how they adjusted their financial activities when moving between study, work, or other life transitions.

Access to young people was arranged through Enrich's official social media communities, where we identified users who had commented on relevant posts and contacted them individually to introduce the study and invite them to take part (Darko et al., 2022; Wright et al., 2024). We provided further details to those who responded positively and arranged interviews with those who met our basic criteria, including having used Enrich regularly for at least three years. Some participants were also recruited by personal networks and subsequent snowball referrals (Naderifar et al., 2017), which helped us reach young people with diverse financial situations and usage experiences. To guide participant selection, we followed a theoretical sampling and saturation approach (Birks et al., 2013), selecting participants based on their familiarity with the Enrich's features and their willingness to provide in-depth reflections and feedback. Each interview lasted approximately 90 minutes and was digitally recorded, transcribed, and analysed.

In addition to interview data, we drew on online observations and archival materials to develop a richer understanding of young people's financial practices and Enrich's role in supporting their financial well-being. Online observations were conducted by the first author, who followed activity in Enrich-owned communities on Facebook, Instagram, and YouTube, as well as user-generated online communities (OC) on platforms such as YouTube, Dcard², and finance-related Instagram accounts, spending over 1,050 hours observing interactions and collecting digital content such as textual exchanges and visual materials. To manage this volume of material, we adopted a filtering approach (McKenna et al., 2017) to systematically identify and retain content relevant to our RQ. Specifically, we first excluded posts that were clearly unrelated to Enrich or personal financial activities, and then further filtered the remaining material based on language, topic, and the presence of user interaction (e.g., comments, replies). As these online spaces were openly accessible and users' contributions were already available in the public domain, informed consent for this component followed established ethical guidance for research using publicly accessible online data (LSE Research Board, 2026; Heise et al., 2019).

Archival data were also gathered to trace Enrich's historical development. These sources included official and publicly accessible online materials documenting different app versions (e.g., Enrich's website, banking and finance news, and users' comments in online forums), historical records from Enrich-related and user-generated OC, online videos showcasing company-produced features and tools (such as service introductions, tool demonstrations, news reports, user stories, and online interviews), and relevant government reports. These archival materials were used to contextualise the case and to corroborate insights from interviews and online observations, rather than to analyse individual users' personal data, and

² Dcard is a large online forum with over one million members whose users are mainly university students and young working adults in Taiwan.

were drawn only from freely accessible public-facing channels. Overall, the interviews, online observations, and archival materials offered a rich, multi-layered view of how Enrich employs financial activities to support young users in developing effective financial management practices and enhancing their financial well-being. Table 2 summarises the three sources of our data collection.

Data type	Data source	Quantity collected	Value of dataset
Interviews	– Enrich team - S1: Vice president - S2: Senior manager - S3: Business director – Regular users - U1–U11: 11 college students - U12–U14: 3 fresh graduates - U15–21: 7 office workers	– Total interview time: 6 hours and 15 minutes – Transcripts: 81 pages (61,097 words) – Total interview time: 24 hours and 35 minutes – Transcripts: 573 pages (262,727 words)	The team had in-depth knowledge of Enrich’s strategic decisions during its development. Regular users provided firsthand insights into their engagement with Enrich in their everyday financial activities.
Online observations	– Screen captures from OC content – OC discussion threads – OC chat logs – Background information about Enrich membership	– 60 screen images – 20 pages of discussion thread logs (10,198 words) – One-year chat logs – 30 pages (30,297 words)	The online observation dataset captured real-time user interactions with Enrich and the evolving activity dynamics of the service.
Archival data	– Online open data – OC historical data – Online video clips – Government financial supervisory commission reports	– 65 web pages (46,854 words) – 55 pages of communication logs from OC (20,758 words) – 231 video clips – 25 pages of a financial industry trend report (13,746 words)	The diverse archival dataset offered essential contextual insights into Enrich’s growth trajectory and relevant external influences.

Table 2. Data Collection

4.3 Data Analysis

We employed narrative analysis (Gee, 1991; Riessman, 1993) as an open, multi-voiced conversation (Wertsch, 1991) between the researchers and the various actors we interviewed and engaged with, as described above. This analysis is “*the study of experience as story*” (Connelly & Clandinin, 2006, p.477), in which people’s narratives are used to describe human action in their daily lives (Riessman, 1993). In this study, we tried to capture individual stories of interviewees’ experiences with using Enrich, including their financial activities and their interpretations of financial well-being within a youth-focused social, cultural, and institutional context in which those experiences “were constituted, shaped, expressed, and enacted” (Clandinin & Rosiek, 2019, p. 42).

The analysis unfolded in three interconnected stages. *First*, during the first-order coding stage, we conducted a thorough review of the dataset to develop a nuanced understanding of the respondents’ narratives. This stage involved familiarising ourselves with Enrich’s core services, promotional strategies, and embedded guidance, with the aim of identifying key concepts in young users’ current and future financial practices that they perceived as helping them cultivate effective financial management and support their financial well-being. *Second*, we conducted second-order coding in line with interpretive research principles, which emphasise the iterative interplay between theoretical concepts and empirical data (Klein &

Myers, 1999). In this stage, guided by AT, we focused on capturing how young users engaged in Enrich-mediated financial activities that supported their future-oriented practices, as discussed in the study findings section. *Third*, we carried out theoretical coding by systematically classifying and organising excerpts derived from the second-order analysis. This stage enabled us to refine an understanding of how DFS, in the context of Enrich, supports young users in developing and crafting financial practices and cultivating their financial well-being. Specifically, we revealed a “pendulum” dynamic in young users’ current financial practices, oscillating between hedonic activities that make day-to-day money management enjoyable and eudaimonic activities that build longer-term financial goals and responsibility, thereby orienting them toward future financial practices and enhanced financial well-being. These insights were synthesised into a theoretical framework, which is presented in the discussion section (see Figure 2). Examples of the data coding process are provided in Appendix B.

5 Findings

This section presents the results of the narrative analysis that focused on three types of digitally mediated financial practices supported by Enrich: incremental commitment building, responsible choice reshaping, and accessible literacy enhancing of the learning process. These three findings address the research question by showing how DFS mediates young people’s current- and future-oriented financial practices and, in doing so, contributes to the cultivation of financial well-being.

5.1 Incremental Commitment Building

Coin-investment and *Enrich-pot* jointly reconfigured young users’ financial activity systems, shifting them from sporadic, consumption-centred money use towards routinised, future-oriented practices that demanded patience and delayed gratification. Our analysis conceptualises these services not as neutral transaction channels but as mediating artefacts that reshape young users’ interpretations and enactments of financial decisions in everyday life. In doing so, Enrich does not simply make investing and saving more convenient. Instead, Enrich re-organises the objects, tools, rules, and social relations of young users’ financial practices in ways that progressively support financial well-being rather than merely increasing the frequency of their financial activities, as illustrated in the narratives below.

Coin-investment first functioned within the tools and rules element of the activity system by lowering both the concrete financial and symbolic thresholds for participation. Specifically, it allows investments from the equivalent of spare change (with a minimum of approximately 0.53 AUD), repositioning investing from an exceptional, high-stakes activity to a minor, repeatable action embedded in everyday routines. As Enrich’s senior manager explained:

“The feature gives young users a reason to appreciate the potential benefits of financial management. [...] A coin-investment won’t make them wealthy overnight or cause huge losses, but it’s a starting point for wealth accumulation” – Interviewee S2.

This indicates a deliberate configuration of the rules within young users’ financial activity system, in which they are invited to try out investment decisions under bounded risk, learning to act without fear or anxiety of catastrophic loss. At the same time, early *coin-investment* decisions can still function more as tentative experiments than as fully confident commitments

for some young users. User narratives further illustrated how this configuration invited novices to engage with investing under bounded risk:

“When I first downloaded Enrich, investing wasn’t on my radar. However, being able to start with just a coin made it seem feasible, so I decided to give it a go. [...] That’s when my financial management journey began” – Interviewee U3.

In this regard, the object of activity begins to shift from merely preserving cash to cautiously exploring asset-building, as young users move, in small steps, from avoidance towards active, albeit micro-scale, financial commitment. This incremental, low-stakes engagement is less about mastering complex financial products and more about establishing a stable pattern of future-oriented action that provides a gradual pathway towards financial well-being rather than merely becoming savvy.

Moreover, the *coin-investment* interface, with its symbolic elements, further altered young users’ framing of small financial decisions. This reframing was reinforced by a snack-vending-machine metaphor in the interface (see Appendix A-c), which translated the abstract idea of portfolio investment into a familiar consumption scenario. This visual metaphor reinforced the idea that small, everyday expenses could be redirected towards investment, as young users came to see each coin not only as potential instant gratification but also as a building block of future gains. As one user reflected:

“Investing an amount equivalent to what I’d spend on a snack reminded me that even small sums could add up” – Interviewee U3.

Our analysis suggests that this metaphor is not a mere aesthetic choice but a mediating artefact that redefines everyday discretionary spending as an arena for practising patience and delayed gratification. It shifts the meaning of “small snacks” from inconsequential consumption to potential contributions towards longer-term goals. As the senior manager remarked:

“Saving a bit from snack purchases to invest is actually more about training young users in investment decision-making than the immediate monetary value” – Interviewee S2.

In doing so, the metaphor subtly redirects young users’ attention from the lure of immediate gratification towards the cumulative value of repeated micro-investments that contribute to longer-term goals. This reconfiguration of meaning helps embed future-oriented considerations into routine spending situations, making the cultivation of patience part of ordinary financial activity systems rather than a separate, explicitly moral discipline. Further, Enrich’s choice to offer a limited set of relatively simple funds operated as a rule that constrained the action space, thereby reducing decision overload and perceived risk within a more psychological mindset toward investing. These constraints helped early investing activity become more structured and predictable, making it more likely that tentative engagement would be repeated and consolidated into an ongoing practice. As one user noted:

“As a beginner, too many choices would have overwhelmed me and might have put me off investing altogether” – Interviewee U14.

On the other hand, *Enrich-pot* extended these dynamics by shifting the locus of financial activity from occasional, one-off investment decisions under simplified choice constraints to structured saving trajectories organised around explicitly future-oriented objects. The service invited young users to attach concrete future outcomes to each present contribution by

enabling them to create labelled pots (for example, a travel fund) with automated small deposits. In this regard, users could assign meaningful labels to their pots and imagine their gradual progress toward tangible goals. As one user reflected:

"I set a savings goal for wireless earphones. I had always wanted them but struggled to save enough money. Now I can visualise reaching this goal" – Interviewee U16.

Our analysis suggests that the object of saving, as reflected in users' experiences, became less abstract and more personally meaningful. In particular, *Enrich-pot* supported users in working toward clearly defined, longer-term goals, such that each micro-deposit was experienced as a small but concrete step toward a desired outcome, rather than treating saving as an open-ended accumulation of money. This change in how saving was framed and felt is crucial for financial well-being, because users were not only acquiring saving techniques but also beginning to see themselves as moving toward goals they personally valued over time.

Importantly, visual and interactive feedback in *Enrich-pot* functioned as a mediating artefact that helped sustain young users' sense of progress and commitment toward their saving goals. Specifically, celebratory animations of a hammer smashing a pot and coins bursting across the screen, badges unlocked at different milestones, and the ultimate "gold badge" for goal completion (see Appendix A-d; e) provided emotionally resonant signals that users' incremental efforts were valued. As one user shared:

"Reaching my savings goal was incredibly satisfying. Watching the hammer break the pot and seeing gold coins burst across the screen as my balance increased was thrilling. I've now set up several savings plans in Enrich-pot, and I'm excited about breaking more pots in the future" – Interviewee U21.

Interestingly, young users compared the process to nurturing that gradually grows with each small input. Our analysis indicates that this configuration cultivated affective attachment to long-term saving rather than to immediate spending. This affective reconfiguration lay in the temporal orientation and emotional experience of financial practice, shifting from short-term gratification and frustration to enjoyment of sticking with a plan and confidence in eventual goal attainment. As one participant shared her experience:

"Saving with Enrich-pot feels like nurturing a Tamagotch³, each contribution helps it grow. This gives me joy and confidence that I can achieve my savings goals" – Interviewee U14.

Further, *Enrich-pot* introduced subtle forms of friction that re-shaped the rules of withdrawal without removing young users' autonomy. When users attempted to break a pot prematurely, sequential pop-up warnings and animations of reluctant money "flying away" prompted them to reconsider their decision in light of how close they were to the goal (see Appendix A-f; g). These artefacts effectively interrupted impulsive tendencies and re-aligned action with previously set intentions. As one young user recounted:

"I almost broke my money pot, but the pop-up messages reminded me of how close I was to my goal. I decided not to withdraw and continued saving, looking forward to purchasing what I wanted" – Archival data.

³ A Tamagotchi is a handheld digital pet from Japan that mimics the experience of looking after a real animal.

These features on Enrich can be seen as mediating contradictions between present desires and future commitments. In other words, this reflects a contradiction between present, consumption-oriented motives and future-oriented saving goals within the activity system. The visual and interactive elements of *Enrich-pot* operate as tools that surface and structure this tension rather than being contradictions in themselves. Rather than resolving the tension by banning early withdrawals, *Enrich-pot* keeps the contradiction visible and offers users opportunities to practise reflective choice. This study posits that such repeated negotiations between impulse and intention contribute to cultivating patience and self-regulation within young users' everyday financial practices on Enrich.

Finally, collaborative-saving pots extended incremental commitment beyond the individual level by enabling friends or family members to contribute jointly towards shared goals, such as a group travel fund. Shared pots for collective objects reconfigured the community and division of labour elements of the activity system, creating structures of mutual visibility and accountability. Automated monthly transfers to a joint pot made it easier for groups to sustain saving, while the shared visualisation of progress framed financial commitment as a collective endeavour. This social embedding of saving reinforces both the objective dimension of financial stability (accumulated resources) and the subjective dimension of feeling supported, capable, and on track. We found that young users experienced themselves as part of social configurations that support disciplined and future-oriented financial practices. As one college student described the experience:

"My friends and I set up automated monthly transfers to our shared Enrich-pot travel fund. The joint virtual account made it convenient for everyone to contribute. Saving together connected our goals and made them more achievable and enjoyable" — Archival data.

Overall, the narratives around symbolic metaphors, constraints on action, and social arrangements in both *coin-investment* and *Enrich-pot* show that these elements worked together to support small, repeatable financial practices that connected present routines with imagined future outcomes. In doing so, these DFS-mediated practices supported young users in shifting from short-term, loosely organised money management toward more patient, future-oriented, and self-endorsed financial practices through a gradual, incremental building of commitment rather than sudden, one-off decisions. This shift concerns not only what young users did with money in the present but also how they began to organise their financial lives over time as an ongoing process of incremental commitment building. It supports eudaimonic aspects of financial well-being such as perseverance, self-regulation, and a sense of progressing toward valued goals, while still offering modest hedonic satisfaction from small milestones and celebrations.

5.2 Responsible Choice Reshaping

Enrich-mart and *Enrich-go* reconfigured young users' spending activity systems not by asking them to take on additional budgeting tasks, but by redirecting how they framed and judged everyday consumption within their existing routines. Rather than acting as a digital payment channel, *Enrich-mart* served as a mediating artefact that turned routine spending into a site where tensions between immediate enjoyment and future-oriented financial well-being were continually worked through. *Enrich-go* turned selected purchases into points that nudged young users to rethink the way they approached their daily spending. Our analysis conceptualises these services as not merely facilitating payments for daily necessities, but as

reorganising the objects, tools, rules, and community relations underpinning young users' spending practices. In doing so, they made responsible, future-oriented choices more thinkable and practicable within existing consumption routines, as evidenced in the narratives presented below.

Enrich-mart narrowed and redirected what counted as reasonable consumption by foregrounding essential, pre-selected items such as transport, groceries, utilities, and everyday meals (see Appendix A-h). Young users were not invited into an open marketplace of discretionary treats but into a curated digital space where "good" spending was implicitly tied to necessities and ongoing routines rather than to spur-of-the-moment indulgences. This reconfiguration of the activity's object encouraged users to differentiate more sharply between needs and wants, sometimes prompting them to reassess their desires at the moment of deciding what to buy. As one user shared:

"I ordered a cup of coffee via Enrich-mart and earned 50 points for my Enrich-go account. I used them to get a free pancake at McDonald's. It was a gratifying experience" — Archival data.

This gratification arose not primarily from the enjoyment of consumption itself, but from a routine purchase being reconfigured into a more resourceful, low-cost outcome. At the same time, playful point-based rewards can also blur the line between genuinely stretching resources and simply finding new occasions for small, treat-like purchases. Our analysis illustrated that the object of consumption shifted from one-off gratification to stretching resources and supporting everyday life more prudently. In particular, *Enrich-go* further reshaped the mediating tools through which young users related present spending to future possibilities. Specifically, users engaged with a hybrid currency that made trade-offs more tangible by earning points through investing (i.e., *coin-investment*), saving (i.e., *Enrich-pot*), and selected purchases (i.e., *Enrich-mart*), and then redeeming them for items they might otherwise have paid for out-of-pocket. As one young user explained that when making a purchase:

"When I made a purchase, I first assessed my accumulated points, using my own funds only if necessary. Sometimes, I waited until I had enough points for a free purchase. Often, I ended up forgetting about my original purchase plan, which helped curb my impulse buying" — Archival data.

Such narratives show that point balances became a tool for re-timing or cancelling consumption. Our analysis revealed a contradiction between young users' desire for immediate acquisition and the emerging value they place on conserving cash and leveraging rewards within the spending activity system. The *Enrich-mart* and *Enrich-go* mechanisms function as mediating tools that make this tension visible and actionable, rather than constituting the contradiction themselves. Interestingly, *Enrich* did not remove this tension but created conditions in which young people increasingly chose to wait until points accrued, to pay with points instead of cash, or to drop a purchase altogether when it no longer seemed worth the outlay. In this way, delaying or foregoing purchases came to appear as a sensible, even satisfying, way for them to resolve the tension.

Moreover, these shifts also played out through evolving rules and community relations within the activity system. Informal norms emerged around checking points first, avoiding cash when points were available, and treating certain purchases as justified only when linked to *Enrich-go* rewards. Young users shared tactics in OC, compared how they converted points into "a

free McDonald's set breakfast" or "a full meal at MOS Burger", and joked about *Enrich-go* "competitions". As our online observations captured this dynamic:

"It looked like an Enrich-go competition! People shared how they used their points for dining. Some enjoyed a free McDonald's set breakfast, while others mentioned using their points for a full meal at MOS burger" – Online observations.

Our analysis found that such exchanges revealed tensions between pre-existing social norms of spontaneous, enjoyment-driven consumption and new, peer-endorsed norms that celebrated frugality, delay, and optimisation. In this context, the community element of the activity system helped stabilise new rules of conduct that supported more responsible and future-oriented financial practices by making responsible spending that could be displayed, discussed, and admired.

Overall, *Enrich-mart* and *Enrich-go* contributed to responsible choice reshaping by working through, rather than erasing, young users' ambivalence about spending. The services continually surfaced tensions between "I want it now" and "I want to save my cash/points," between treating small treats as harmless and treating them as opportunities to stretch resources, and between seeing financial discipline as tedious and seeing it as a game-like challenge. *Enrich* incrementally transformed existing consumption habits and preferences by reorganising objects, tools, rules, and community in this way, gradually turning everyday spending into more reflective, strategically timed, and aligned with current and imagined future financial well-being, rather than leaving it solely anchored in short-term enjoyment. In doing so, these practices combined hedonic elements such as the immediate enjoyment of rewards and playful "competitions" with more eudaimonic aspects of financial well-being, including strengthened self-control and prudence. This interplay between short-term enjoyment and longer-term goal alignment illustrates how *Enrich-mart* and *Enrich-go* support both hedonic and eudaimonic dimensions of young people's financial well-being.

5.3 Accessible Literacy Enhancing

In addition to reshaping young users' financial practices on investing, saving, and spending, *Enrich*'s social media-based, learning-focused services reconfigured their engagement with financial knowledge as part of everyday financial activity. This shift moved financial literacy from a peripheral, intimidating issue to a central, ongoing focus of young people's financial practice. Rather than treating social media channels as general information-delivery channels, our analysis conceptualises these OCs as mediating artefacts that organise young people's encounters with, interpretations of, and engagement with financial ideas over time. In this regard, objects, tools, rules, and community arrangements within the activity system around learning about finance were progressively reshaped. Financial concepts were stripped of technical opacity, relocated into familiar online spaces, and opened up for peer discussion and verification. In doing so, *Enrich* did not merely disseminate more content but re-organised the conditions under which young users could appropriate financial knowledge as workable within their current and future financial practices, as illustrated in the narratives below.

Specifically, our analysis found that the first shift concerned the tools and rules through which financial literacy was pursued. Rather than expecting young people to seek out expert-led, text-heavy resources, *Enrich* embedded financial explanations into the same social media environments where they already spent time. It deliberately aimed to meet young users where

they already were through Facebook, YouTube, and Instagram. As one Enrich team member reflected:

“Our objective was to make financial knowledge acquisition trendier. Social media serves as an effective channel for this purpose, particularly when engaging with young users” — Interviewee S1.

This reconfiguration reduced the psychological distance between everyday scrolling and learning about finance, making it easier for users with limited literacy to begin engaging without feeling judged or out of place. Also, Enrich relaxed the implicit rules that financial learning must be formal, serious, and effortful by foregrounding familiarity and appeal, and instead positioned it as an activity that could be picked up casually within ongoing digital routines. Importantly, Enrich further reworked financial concepts so they could be integrated into young people’s existing interpretive repertoires. The “financial vernaculars campaign” on Instagram exemplified this move by translating finance-related products into everyday metaphors (see Appendix A-i; j). For instance, an exchange-traded fund (ETF) was explained through a restaurant menu analogy, as a convenient “set meal” of stocks compared with the effort of ordering individual dishes one by one. Understanding an ETF became less about mastering abstract financial language and more about reasoning with a familiar consumption scenario (choosing a set meal instead of ordering dishes one by one) and its implications for effort, variety, and risk. This shift went beyond simply simplifying terminology and made a complex financial concept more relatable and easier to grasp. As we observed on Instagram, users left positive messages:

“One user commented that this explanation of an ETF makes it much easier for me to understand, and another replied to the same Instagram post, saying, after reading this ETF post, I feel more informed about it” — Online observations.

This campaign transformed opaque instruments into graspable tools that young users could readily relate to their own investing or financial plans. However, not all aspects of investing could be rendered straightforward through such metaphors, and some issues still required more sustained clarification and reflection. In particular, making financial literacy accessible also surfaced contradictions within the activity system, as the underlying concepts remained tied to long-term risk, uncertainty, and responsibility even while Enrich sought to lower learning barriers and present finance as approachable. That is, young users were simultaneously implicitly invited to treat financial content as light, scrollable material and to come to rely on it for consequential decisions about money management. This tension is visible in the way some participants described their learning experiences. As one participant explained:

“I joined the OCs to learn about investing. [...] As I gained experience, friends in the community started asking me for advice. They even think I’m a finance expert [laughs]. A few years ago, I knew nothing about it. I’m not an expert now, but I’ve become much more confident in my financial decisions” — Interviewee U13.

Here, the user negotiates a tension between being treated as an expert by peers and still regarding themselves as a non-professional learner. Our analysis also suggests that accessible tools not only enabled young users to move from confusion to confidence but also shifted the division of labour. Responsibility for explaining and validating financial knowledge increasingly circulated among peers rather than remaining solely with institutional experts. In

particular, this redistribution of the division of labour within the activity system was reinforced by community dynamics that extended beyond Enrich's own channels. Many young users described assembling a patchwork of OCs to support their financial learning. As one user described:

"I gained advanced knowledge from petty-bourgeoisie-OC and the blue-and-white-slippers-OC on Instagram. However, if I have financial questions, I go back to Enrich for clarification. This cross-referencing approach helped me to develop financial acumen" – Interviewee U4.

In this case, the object of activity, becoming financially informed and confident, was pursued across multiple communities with partially misaligned rules and norms. We found that the user's financial practice of cross-referencing reveals how contradictions between these communities were worked through in action. Young people, rather than passively absorbing any single narrative, used Enrich as a mediating reference point to test and recalibrate interpretations acquired elsewhere. Notably, these cross-community practices also reconfigured the rules and division of labour envisaged by Enrich's designers. Instead of positioning Enrich as the sole authority, the team explicitly embraced users' outward engagement. As the vice president reflected:

"We are pleased to see users broaden their learning horizons through varied sources, but even more so to see they rely on our content for confirmation. We couldn't cover everything users needed, and engaging in conversations with others helps reduce risky behaviours" – Interviewee S1.

This stance acknowledges an inherent contradiction between Enrich's desire to guide users and the fact that their learning inevitably spans multiple, uncontrollable information sources. Building on this recognition, Enrich treated external OCs as part of the broader learning environment rather than as direct competition. In doing so, it accepted that users would assemble heterogeneous inputs and sought instead to provide stable, clarifying artefacts and norms that could anchor their reasoning when uncertainty arose.

Overall, these activities show that making financial literacy accessible involves more than simplifying content or making it fun. Instead, it involves an ongoing reorganisation of the activity system through which young people learn about finance. This includes transforming intimidating financial concepts into everyday tools, shifting rules so informal, peer-based discussion becomes a recognized part of learning, and renegotiating community roles, with expertise treated as distributed, provisional, and open to verification. Our analysis revealed that financial literacy becomes a shared object of activity, embedded in users' current digital lives and oriented towards imagined futures. Also, young users do not simply become more financially savvy in a narrow sense. They develop the capacity to navigate conflicting advice, weigh trade-offs between short-term gains and long-term security, and seek clarification when needed. In this way, accessible literacy becomes a central means through which DFS can support financial well-being. It enables young people to treat financial knowledge as they can enter into, question, and progressively align with their evolving financial practices and aspirations. It engages both hedonic well-being (finding financial learning enjoyable and approachable) and eudaimonic well-being (developing confidence and competence in future financial decisions). At the same time, making financial learning feel less intimidating and more enjoyable also encourages young people to engage with Enrich more regularly in their everyday lives.

6 Discussion

In this section, we address our RQ about how digital financial services can support young people's financial well-being. We propose a theoretical framework that captures how DFS-mediated financial practices oscillate between hedonic and eudaimonic orientations, and we develop three narratives that trace how incremental commitment building, responsible choice reshaping and accessible literacy enhancing work together over time. We then use this framework to re-interpret existing work on digital financial services, youth financial well-being and digital financial literacy.

Drawing upon our findings, we conceptualise young people's financial practices with DFS as a pendulum-like activity system that oscillates between hedonic and eudaimonic orientations in their everyday money management, as illustrated in Figure 2. In this framework, the shared object of activity, the rules that govern acceptable financial action and young users' orientations to saving, spending and learning shift over time in response to different DFS and socio-technical conditions. Current-oriented financial practices move back and forth between activities that make day-to-day money management feel enjoyable and low-stakes, and activities that help young people build longer-term goals, discipline, and responsibility. Rather than treating these financial practices as separate states, our framework emphasises that this oscillation gradually orients young users towards future-oriented financial practices and enhanced financial well-being. The framework emphasises that this mediated oscillation gradually reconfigures the object of financial well-being and orients young users towards more future-oriented financial practices over time.

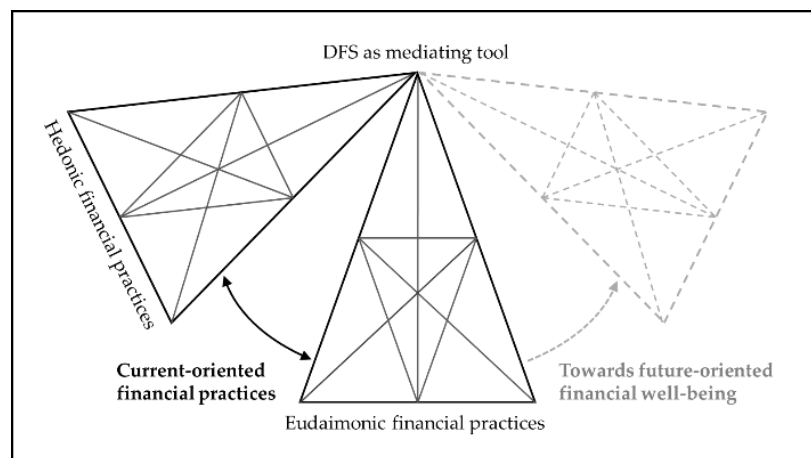


Figure 2: The pendulum-like activity systems towards future-oriented financial well-being

Shown on the left of the framework, *incremental commitment building* captures a key phase in the pendulum's swing on the hedonic side. Young people start with small, low-risk commitments that make saving or investing feel more approachable and less intimidating. These practices keep the activity system anchored in current routines such as daily saving, while stretching the shared object of activity from "coping with today" towards "being prepared for the future". In particular, the activity system here is tuned to current-oriented financial practices, but it still contains a faint after-image of future goals.

As this orientation sharpens, *responsible choice reshaping* comes into view, with the pendulum swinging back through more reflective, eudaimonic activity. When young people make spending decisions with Enrich, contradictions emerge between speculative,

performance-oriented norms and more cautious, stability-oriented norms. Working through these tensions in practice leads young users to reframe what counts as a “good” financial decision, so it is no longer simply about high returns or immediate outcomes but about making a choice that remains liveable in their current life while still pointing towards future security. In our case, the object of activity is re-configured such that financial well-being is understood as holding together present constraints, relational commitments, and imagined futures, rather than being reduced to objective wealth accumulation.

Further, *accessible literacy enhancing* sustains the pendulum’s movement over time by reshaping the mediating tools, rules, and division of labour around financial knowledge. Everyday examples, peer discussions, and cross-referenced explanations turn intimidating financial concepts into resources that young people can appropriate and apply in their own situations. We found that expertise can be treated as distributed and provisional, remaining open to questioning and verification. This shifts the shared object of the activity system from “knowing the right answer” towards financial literacy as a live, collective object, embedded in current financial practices yet explicitly oriented towards future possibilities. In our framework, this collective object sits at the centre of the activity system, connecting hedonic exploration with eudaimonic reflection.

In sum, the three narratives from our findings indicate that hedonic and eudaimonic financial practices are not parallel tracks but intertwined moments within a single, evolving activity system. Hedonic elements in current-oriented practices help young people enter and remain in the activity—making saving, budgeting, or cautious investing feel doable and emotionally manageable—while eudaimonic moments reorganise the object, rules, division of labour, and community expectations around future-oriented financial well-being. The pendulum metaphor, as we present it, allows us to conceptualise this as an ongoing, mediated movement in which current-oriented financial practices swing through DFS-mediated activities that continually reconfigure the shared object of financial well-being, gradually pulling young users towards more future-oriented financial practices without abandoning the realities of their present lives.

In particular, the pendulum draws attention to tensions and contradictions between current-focused and future-focused objects of activity, and to rules that prioritise either immediate relief or longer-term security. DFS tools such as *coin-investment*, *Enrich-pot* and *Enrich-go* rewards intervene in these tensions by making them visible in everyday practice and by supporting small adjustments in how young people save, spend and learn about money. Over time, these repeated adjustments gradually alter how the activity system is configured. This reconfiguration occurs incrementally rather than through a single, one-off shift from one fixed state to another. On the other hand, rather than depicting several separate activity systems with arrows between them, the pendulum framework offers a compact way to represent gradual shifts within a single DFS-mediated activity system. It extends conventional activity theory diagrams by highlighting changes in the object and rules of activity over time, instead of focusing only on static configurations. This adaptation makes visible how hedonic and eudaimonic orientations are intertwined and repeatedly re-balanced in young people’s everyday financial practices while remaining grounded in core AT concepts.

Importantly, each swing is triggered by shifting socio-technical conditions, such as new DFS features, shifting peer norms, or emerging financial pressures that prioritise either relief in the present or preparation for the future. When the pendulum appears to “return” from more

eudaimonic, future-oriented activity to more hedonic, present-focused practices, this does not cancel earlier movement. Instead, prior experiences, goals, and forms of literacy remain in the activity system as traces that can be re-activated in subsequent swings, gradually reshaping how young people pursue financial well-being.

The pendulum-like framework developed from our findings also invites a re-reading of existing work on DFS, financial well-being, and youth. While prior studies have typically examined digital tools, financial literacy, and well-being outcomes as separate elements, our analysis suggests that these need to be understood together as parts of a single, evolving activity system that organises how young people move between present and future concerns. In what follows, we discuss how the framework helps to interpret and extend key themes in the literature.

First, the framework clarifies why increased DFS usage and improved financial skills and behaviours do not automatically translate into future-oriented financial well-being. Existing research links DFS both to greater convenience and supportive behaviours (Agarwal & Ann, 2024; French et al., 2021) like automated saving and to heightened risks of overspending, debt distress, and financial anxiety (An et al., 2025; Yue et al., 2022; Zhang & Zhao, 2025). Our findings suggest that these seemingly contradictory outcomes reflect how current-oriented financial practices are configured in the activity system. DFS may lower friction and make actions feel manageable, but unless the shared object of “what I am doing this for” is gradually reworked, these practices can remain locked into current-oriented routines rather than contributing to future well-being (Salignac et al., 2020). Finding 1 therefore draws out the contrast between DFS-supported short-term convenience in everyday money management and the longer-term configurations that are needed for future-oriented financial well-being. We also show that the three narrative findings describe one possible way in which DFS can support this reworking of the shared object, while still leaving open the possibility that financial decisions stabilise only the hedonic side of the pendulum.

Second, the framework helps connect psychological debates on hedonic versus eudaimonic orientations with the structural configurations created by DFS. Prior work shows that hedonic motives can undermine long-term goals when they dominate decision-making, whereas eudaimonic motives are more strongly linked to durable resources and resilience (Delle Fave et al., 2011; Lee et al., 2021; Leo et al., 2019; Ryan & Deci, 2001). Our analysis indicates that in DFS-mediated youth finance, what counts as hedonic or eudaimonic is not only a matter of internal orientation but is also shaped by the tools, rules, division of labour, and social relations that frame particular actions. In our pendulum framework, these shifts are captured as changes in the shared object of activity, moving from current-focused aims such as coping or small treats toward future-focused aims such as stability and progress. For instance, a small purchase or low-risk investment may function as a fleeting treat in one configuration but as a step toward a future-consistent plan in another. This suggests that interventions aimed at strengthening eudaimonic financial well-being cannot focus solely on individual motives. They must also consider how digital contexts shape the opportunities and choices for reflection, comparison, and re-evaluation that are available in everyday practice. Finding 2 unpacks this by showing how concrete elements of the DFS setting, such as specific interfaces, reward mechanisms and OCs, configure these opportunities rather than digital context operating as a single, uniform backdrop.

Third, the framework speaks to work on digital financial literacy and youth inclusion (OECD, 2020) by foregrounding the collective character of financial knowledge in DFS settings. Our findings resonate with emerging arguments that financial and digital literacy matter for well-being only when they are embedded in social and institutional contexts that allow young people to act on what they know (Choung et al., 2023). The pendulum metaphor therefore invites financial educators to treat literacy not as a separate “add-on” but as an integral part of the activity system that continually reconfigures the shared object of financial well-being. Finding 3 also highlights the role of DFS designers in shaping the tools, rules and community arrangements through which this literacy is taken up, positioning them alongside educators as co-designers of how young people move between hedonic exploration and more eudaimonic, future-oriented financial practices.

7 Theoretical and Practical Contributions

Our work responds to calls for more future-oriented IS research (Chiasson et al., 2018; Markus & Mentzer, 2014; Pee et al., 2021) and advances our research objective of reframing DFS-mediated youth finance toward longer-term financial well-being within increasingly digital financial contexts. In doing so, it foregrounds a non-economic form of value centred on young people’s financial well-being and reduced financial stress, rather than on transactional efficiency or short-term profits. It has several theoretical contributions.

First, this study advances DFS research by shifting attention from access and usage towards the current- and future-oriented financial practices that DFS make possible for young people. Prior work shows that DFS can enhance convenience, reduce transaction costs (Lai & Liew, 2021; Nguyen et al., 2021), and broaden access to formal financial services, with potential benefits for financial inclusion and economic growth (Kamble et al., 2024; Li et al., 2024; Pazarbasioglu et al., 2020), but also that easy access to digital credit and mobile payments can fuel impulsive spending, over-indebtedness, and heightened financial stress, especially among young users with lower financial literacy (An et al., 2025; Javaheri et al., 2024; Yue et al., 2022; Zhang & Zhao, 2025). In response, our findings address this persistent tension by foregrounding DFS as mediating tools that organise young people’s movements between present financial ease and future financial security in everyday practice. We extend recent work on the dual role of digital finance as both a business enabler and a mechanism for mitigating risk (Ng & Pan, 2024; Ng et al., 2023) by showing how youth-oriented DFS can be intentionally configured to support human-centred, non-economic forms of value such as financial well-being and reduced financial stress (Chamakiotis & Petrakaki, 2024).

Second, our study contributes to the literature on financial well-being through operationalising the dual current- and future-oriented nature of financial well-being, and its hedonic and eudaimonic aspects, within a single, evolving activity system. Existing definitions emphasise that financial well-being involves both meeting present obligations and feeling secure about the future (CFPB, 2015; Netemeyer et al., 2018; Salignac et al., 2020), entailing reduced stress in the present and the perceived possibility of pursuing meaningful goals over time (Iannello et al., 2021; Nanda & Banerjee, 2021; Shin et al., 2023). Also, while prior empirical work often treats hedonic and eudaimonic orientations as distinct (Leo et al., 2019) or competing (Bao et al., 2024; Lee et al., 2021), our framework illustrates how they can be mutually reinforcing. The pendulum metaphor extends this literature by suggesting that small hedonic gains (such as low-risk commitments and manageable treats), when repeatedly reflected upon and

re-evaluated, can be folded into a more eudaimonic understanding of financial well-being that holds together present constraints, financial responsibilities, and imagined futures, rather than being reduced to objective wealth accumulation. Moreover, we reconceptualise financial well-being not as a static end state but as dynamic, ongoing practices that offer a more actionable understanding of how DFS can cultivate financial well-being over time.

Third, our pendulum-like activity system contributes to work on financial education (Panos & Wilson, 2020; Van Klyton et al., 2021) by conceptualising financial literacy as a shared, movable object of activity rather than a static, individual attribute. Policy and education initiatives often treat literacy as an individual competency to be raised through modules, tutorials, or workshops (Morgan, 2021; OECD, 2020; Panos & Wilson, 2020), yet young people frequently report such materials as unengaging or difficult to apply (Sharma & Sharma, 2019). In contribution terms, the pendulum metaphor reframes financial literacy as an embedded practice within DFS activity systems that continually reshapes the shared object of financial well-being, rather than as a standalone input delivered to individual users.

In addition, this third strand also advances the use of AT in IS (Allen et al., 2013; Karanasios et al., 2018) and DFS research by showing how AT can be combined with a pendulum metaphor to analyse youth-oriented financial practices that support human intentionality and socially mediated activity. In particular, while activity theory has been widely used to examine organisational technologies (e.g., Abhari et al., 2022; Benbunan-Fich, 2019; Knote et al., 2020), it has been applied far less to personal, consumer-facing DFS. This study shows that objects, tools, rules, community, and division of labour are dynamically reconfigured as young users move between hedonic and eudaimonic orientations in DFS-mediated settings. It provides a concrete way to link financial practices to trajectories of financial well-being rather than to usage alone. Importantly, we conceptualise the relationship between current and future states of activity systems through the lens of tertiary contradictions (Karanasios, 2018). In our case, these tensions do not take the form of a one-off replacement of an “old” activity by a fully “new” one. Instead, youth financial practices repeatedly oscillate between more hedonic, present-focused and more eudaimonic, future-oriented configurations. In this view, elements of both “old” and “new” arrangements coexist and are continually renegotiated within the same evolving activity system, under conditions of pervasive digitalisation.

In terms of practical implications, our findings offer insights for financial institutions developing DFS, emphasising the need to intentionally orchestrate movements between current- and future-oriented financial practices. Also, the conceptual framework proposed in this study provides a roadmap for financial institutions to support young users’ long-term behavioural transformation through the strategic design of financial activities. Our framework further offers a lens for financial institutions and policymakers to assess whether specific DFS features, such as spending affordances, savings challenges, or literacy modules, keep young users anchored in present-oriented convenience or also help re-configure their shared object of financial well-being toward realistic future security while recognising present constraints.

In particular, for DFS providers, the three narratives in the framework suggest concrete design priorities. *Incremental commitment building* points to the value of small, low-risk actions that make saving and investing feel approachable while keeping activities grounded in everyday routines, rather than pushing young people immediately into high-stakes products. *Responsible choice reshaping* emphasises that spending-related features should surface, rather than hide, tensions between speculative and stability-oriented norms, supporting young users

in articulating what counts as a “liveable” decision now that does not undermine their future position (Yue et al., 2022; Zhang & Zhao, 2025). *Accessible literacy enhancing* indicates that educational components are most effective when embedded into ongoing activity, supported by peer interaction and open, revisable expertise, rather than delivered as static, one-off content (French et al., 2021; Morgan, 2021).

Finally, for regulators and educators, the framework underscores that interventions aimed at improving youth financial well-being in DFS contexts should be evaluated in terms of how they reshape the whole activity system, not only individual knowledge scores or app uptake. This implies aligning consumer protection, digital literacy initiatives, and product governance with the goal of sustaining pendulum-like movements in which hedonic and eudaimonic financial practices are repeatedly brought into relation, allowing young people to manage the realities of their present lives while building towards financially and psychologically sustainable futures.

8 Conclusion and Future Research

Despite the rapid growth and widespread uptake of DFS among young people, concerns remain about whether their day-to-day digital financial practices genuinely support financial well-being, rather than reinforcing passive or short-term financial behaviour highlighted in policy debates in Australia and elsewhere (Australian Securities and Investments Commission, 2025; UNSGSA, 2020). In response, this study set out to reframe DFS-mediated youth finance toward longer-term financial well-being by examining how current- and future-oriented financial practices are organised through youth-focused tools. Drawing on a qualitative case study of a youth-focused DFS, we developed a pendulum-like framework of DFS-mediated activity systems that conceptualises how young users oscillate between immediate concerns (such as coping with living costs) and longer-term financial aspirations, and how this movement is shaped by financial activities, peer interaction and evolving norms around financial knowledge, thereby contributing an activity-theoretical lens (Engestrom, 2000; Foot, 2014; Karanasios et al., 2018) that links DFS use to the ongoing reconfiguration of the shared object of financial well-being and foregrounds financial literacy as an embedded practice rather than an external input. Our findings carry implications for both research and policy, as guidelines and discussions on digital finance, including the FinFuture in Australia White Paper (2019), stress that DFS must move beyond providing access and sophisticated technology to support the formation of reflective, future-oriented financial practices among young people, and our analysis extends this agenda by showing that attending to the dynamic interplay between present-oriented coping and future-oriented planning in DFS contexts is crucial for tackling persistent financial passivity and vulnerability among youth.

Nonetheless, this study did not investigate how particular configurations of DFS-mediated practices translate into objective financial outcomes, such as income trajectories, saving accumulation or investment performance over time. Future research could employ longitudinal research designs to trace how shifts in current and future-oriented digital financial practices, as articulated in the pendulum framework, shape both subjective financial well-being and observable financial trajectories across different life stages. There is also a need to extend this line of inquiry beyond youth to groups such as older adults, whose digital financial behaviours remain underexplored yet figure prominently in broader financial health and inclusion agendas.

Last but not least, this study points to important ethical considerations surrounding DFS for young people. Design choices such as gamified investing metaphors and the use of social media to deliver financial literacy content may inadvertently normalise risk-taking, encourage impulsive engagement, or expose young users to distraction and misinformation. These issues are closely connected to our concern with young people's financial well-being, security and capability, and to our aim of supporting more reflective and less exploitative forms of DFS-mediated engagement. While a detailed ethical analysis lies beyond the scope of this paper, our findings suggest that future research could build on AT perspectives to examine how DFS can be developed in ways that are not only supportive of financial well-being but also sensitive to the broader ethical implications of mediating young people's financial lives.

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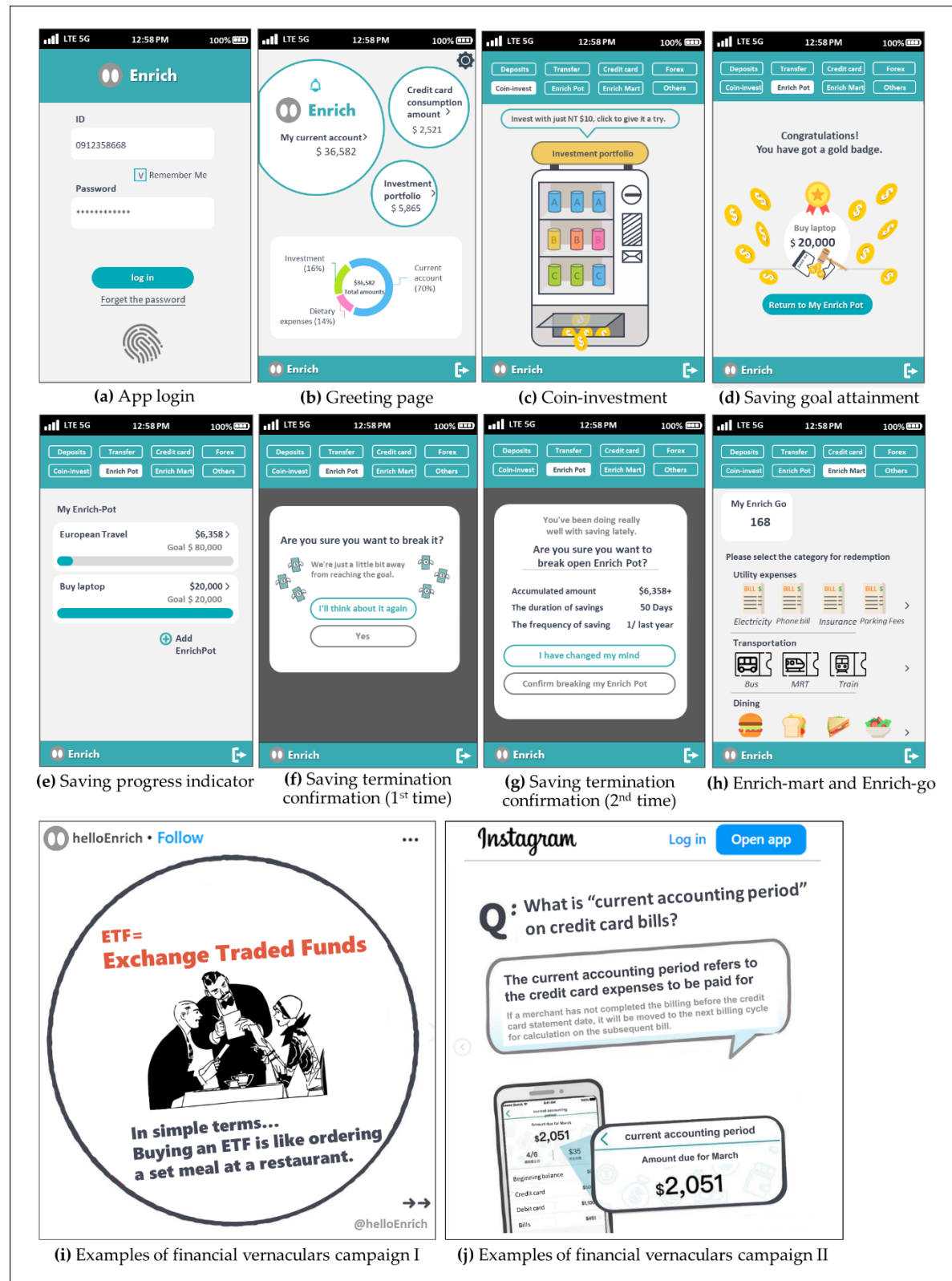
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Appendix A

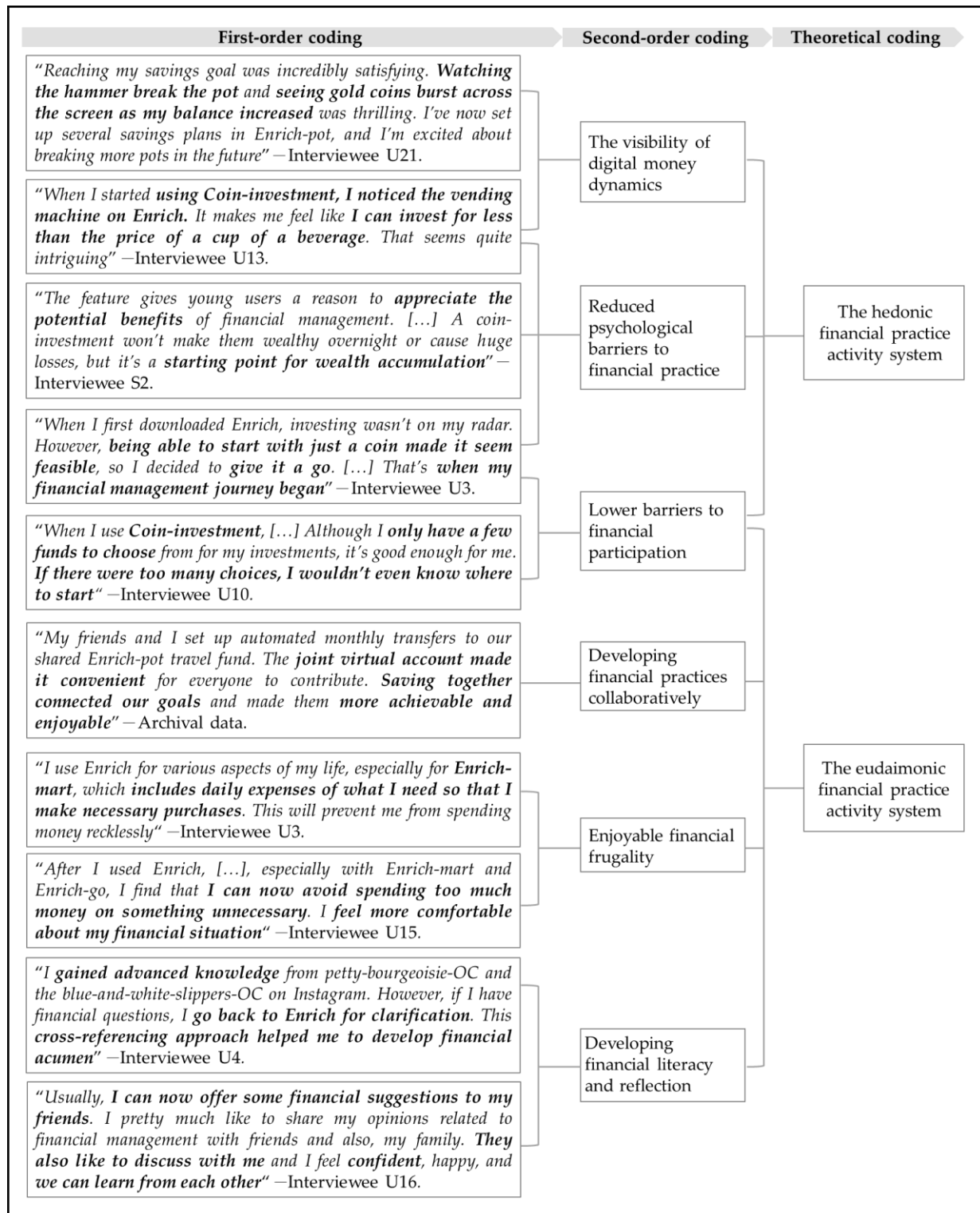
The following figure illustrates examples of Enrich financial activities⁴.



⁴ All figures presented are schematic representations redrawn from Enrich, preserving core analytical elements while fully anonymising all identifying information.

Appendix B

The following figure illustrates examples from the coding process.



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