

## De facto personal financial archives:

Rethinking the design of banking apps and websites to support long-term financial memory and care of self and others

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Financial apps and websites have become “de facto financial archives” for many people when used as a long-term strategy for preserving and maintaining access to personal financial documents and data. This position paper reviews related works on invisible information work, personal archiving burden, and de facto archiving strategies. It presents examples of de facto financial archiving among young adults (18-25) collected through in-home guided tours. It concludes with a discussion of design implications for the future of HCI and money such as adding additional personal archiving features to enhance recordkeeping functionalities of existing systems.

CCS CONCEPTS • Document management and text processing • User characteristics • Human computer interaction

**Additional Keywords and Phrases:** Personal information management, Personal archiving, Financial recordkeeping, Young adults, Banking apps and websites, Benign neglect, Optimism, Opportunism

## 1 INTRODUCTION

De facto archiving is a form of uncritical reliance on online service providers to maintain and provide long-term access to personal records that can result in loss of personal information [16, 18, 19]. Fintech, in the form of banking apps and websites, becomes de facto financial archives when used to store and provide long-term access to personal financial data and documents. But why do some people trust and rely upon financial apps and websites to maintain their personal financial information? How can we reimagine the recordkeeping experiences that people have with fintech? In this position paper, I argue that de facto archiving and recordkeeping burdens are key design challenges for the future of money and HCI. To support my argument, I present qualitative data from a field study on young adult personal financial information management to illustrate how de facto archiving beliefs and practices contribute to uncritical reliance on fintech to preserve personal financial records.

## 2 RELATED WORKS

Personal information management (PIM) is information work associated with the maintenance of personal collections that are unique, actionable, and informative to individuals [1]. Information work refers to the labor associated with creating, finding, using, and sharing information with a particular emphasis on its costs as time, effort, resources, and outcomes [7]. Due to limited recognition of the labor costs and value generated by PIM, non-professional recordkeeping activities are frequently under-supported by technologies and taken-for-granted [4, 5, 21]. In the context of personal finance, the important roles financial data and records play in managing the self, navigating life transitions, and collaborating with

others is often invisible and under-valued [6, 11, 12]. Past research found that people make limited use of existing specialized digital financial information management systems, instead relying on analog records and labor-intensive practices to maintain awareness of their current financial situation. As such, adoption of fintech solutions depends on a good match between the user's information needs and the system's capacity to manage associated labor costs [15].

De facto archiving entails a combination of three overlapping beliefs and practices: opportunism, optimism, and benign neglect. Opportunism refers to the practice of distributing files over a variety of online services not intended for long-term preservation of digital objects [16, 18, 19]. Optimism refers to the belief that digital objects will persist online for long periods of time and are therefore infinitely regenerable [16, 18, 19]. Benign neglect refers to a belief that digital objects are inherently ephemeral in nature [16, 18, 19]. In combination, de facto archiving is used to justify limited personal investment in digital curation as people cope with the invisible burdens of stewardship [16, 18, 19]. Discovery of loss often occurs after a significant period, limiting opportunities for system-enabled recovery [19]. The tendency towards de facto archiving is a specific design challenge for the future of HCI and money that can be addressed through a more careful consideration of the information and preservation needs presently unfulfilled by existing fintech.

### **3 EXAMPLES OF FINANCIAL DE FACTO FINANCIAL ARCHIVING AMONG YOUNG ADULTS**

To support this argument, I present qualitative data collected from a field study of twenty-three young adults (18-25) in Eastern Canada [11]. Using guided tours, participants reflected on their integration of fintech into their recordkeeping practices, which provided insight into the ways in which existing banking apps and websites are treated as de facto archives.

#### **3.1 Optimistic use of fintech to preserve financial records**

Young adults expressed much optimism about the ability of fintech to provide long-term access to financial data and documents. For example, Jake, an undergraduate athlete and aspiring actor, described his employer's app that he used to access his pay stubs as, "a permanent record of what I was paid so I don't ever keep it updated, it already is the way it is." Similarly, Jenny, an undergraduate economics student, saw her online banking statements as having a diamond-like quality, "I think they are there forever, right? Because they are all online." Mike, an international undergraduate student, felt digital objects were less susceptible to loss than physical objects, "if it is a bill or something, I can always look it up online but I have lost credit cards and stuff before." Across tours, young adults expressed beliefs that digital objects maintained by fintech exist and therefore impervious to loss with limited awareness of service provider retention periods or consideration that financial apps and websites could become unavailable in the future.

#### **3.2 Opportunistic use of fintech to reduce physical and affective labours in financial recordkeeping**

Several young adults also described opportunistic use of financial apps and websites to reduce physical and affective labour associated with maintaining personal information collections. For example, Mike justified his use of fintech to limit physical labour, "I like e-statements better because they keep all the records for you. So it is actually much easier. Less paper, especially because I don't know how permanently I am here in Montreal, so to transport all of that stuff is a lot of work." Similarly, Jake strategically adopted fintech to reduce effort associated with managing paper collections, "my bank account information or credit card statements, also, anything like insurance claims are all done online. I don't have anything on paper for that anymore. I used to but as soon as they had the application, I used the application." Cathy, a recent graduate working for a game design company, revealed an affective challenge that accompanied financial recordkeeping labour, "I am not really one to keep records. I feel like I try because I know it is something that I should be doing but I consciously don't make an effort to do it."

#### 4 DESIGN IMPLICATIONS FOR THE FUTURE OF MONEY AND HCI

The combination of optimistic belief in and opportunistic use of financial apps and websites to maintain and provide long-term access to personal financial data and documents results in a form of benign neglect in which curatorial responsibility for records is displaced to fintech. As such, the embedding of long-term financial recordkeeping within financial apps and websites expands their functionality beyond being a communication system between financial service providers and their clients in ways similar to appropriation of email for task and team management [9]. Reliance on fintech to preserve financial records allows for young adults to position themselves as consumers rather than curators of their financial data and documentation, potentially resulting in loss of control and access over time [1]. Designers should remain ever mindful of Zipf's finding that people always seek to minimize current and future effort when evaluating potential solutions [22]. Therefore, future fintech should: (1) be mindful of the tendency of consumers to neglect financial recordkeeping when technologies provide means for storing and accessing financial records, and (2) seek to reduce physical, cognitive, and affective burdens associated with financial recordkeeping for their clients.

Existing PIM literature provides some insight into ways to reimagine fintech as a more effective long-term storage solution for financial recordkeeping for individuals or collaborative groups. Designers can create information work zones that support different kinds of interactions with personal financial data and documents (e.g., action and communication in the crossroads; financial planning and decision-making in the archives-on-use; and financial self-understanding in the archives), with the ability for users to supplement and contextualize financial data captured by the system using labeling, annotation, and features that allow customization of visual prominence of information [21]. Implementation would enhance the capability of existing systems to "witness" the financial lives of individuals and groups by supporting capture of supplementary evidence about their transactions [2, 8, 13, 14, 20]. Reduced recordkeeping burdens can also create greater user capacity to engage in meta-level PIM activities including organizing, evaluating, sense-making, and sharing personal information [10], which can enhance the collaborative work and communication around personal finance.

On the flipside, fintech can also be reimaged to respond to de facto archiving by creating opportunities for higher levels of personal recordkeeping accountability. For example, interfaces could be designed to proactively guide users through the creation and execution of a data curation plan that allows them to export data or documents in batches at regular intervals to locations of their choosing to reduce labour associated with backing up records [17]. Shifting primary responsibility for preservation back onto users may prevent loss of documents as business-as-usual arising from lack of user awareness of service provider retention schedules that result in routine loss of digital records [19]. To reduce reliance on financial service provider websites and apps as a preservation strategy, systems could develop resources that improve recordkeeping literacy among users and promote critical evaluation of recordkeeping functions within existing fintech [3].

#### 5 CONCLUSION

When users rely on financial apps and websites to maintain and provide long term access to personal financial data and documents, fintech becomes de facto personal financial archives. Users rely on financial apps and websites to address unresolved challenges associated with personal financial information management. The physical, cognitive, and affective burdens of PIM represents both a challenge and opportunity for fintech designers. Optimistic and opportunistic use of financial apps and websites that results in benign neglect of personal financial records can be addressed through intentional rethinking of the recordkeeping functions and experiences built into fintech information systems.

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