

Re-Designing Online Banking Interfaces: Supporting Those Banking on Behalf of Older Adults



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Motivation

Many older adults have informal caregivers support them with banking tasks via online banking systems, but **current systems may not support the informal caregivers well.**

Additionally, **impropriety by caregivers can be a concern**, even when they are well-intentioned.
Everyone makes mistakes!

Background

Proxy Accounts

- **Allow a primary user to give a delegate access to bank on their behalf [1].**
- Can set limited permissions on what information delegates can view and transactions they can perform.
- All actions performed by a delegate can be **attributed to them directly.**

Behavioural Nudges

- Design elements used to **influence choice without eliminating options [2].**
- Categorized based on the psychological effects they leverage to influence [3].
- Categories include nudges that suggest alternatives, raise visibility of user actions, or leverage positioning of elements.
- Already used in designs in many domains, however **using them to nudge informal caregivers is novel!**

How many nudges can you find in our design?

Bank of Bank <User Name> [Settings] [Logout]

My Accounts Services Transfer Funds Pay Bills

Mortgage Offer

Switch your mortgage to Bank of Bank and get pre-approved within the week.

Speak with a Representative

Transfer Between Accounts

Account From: Savings Account 1234-**** (\$5000.01)

Account To: Close Other's Account 6789-****

Amount: \$500.55

Would you consider uploading a receipt or invoice for this transfer? **Attach**

This transaction is large enough (>\$200) that a notification will be sent to the primary account holder.

Cancel **Submit**

Funds Being Transferred

10% 90%

Transfer Analysis

[Bar chart showing transfer analysis]

Transfer History

Date/Time	From Account	To Account	Amount
04/01/2022	Savings	Chequing	\$101.01
03/15/2022	Savings	Chequing	\$11.11

Bank of Bank Home Accounts Transfer Funds Manage Payments Add Services Logout

You are currently banking on behalf of Maggie Winters. **Switch Accounts**

Transfer Funds

From: Account A (SAVINGS) - 00549-****654 (\$2,875.55)

To: Telecom Wireless Inc. - TelcoWireless (76732110)

Amount: \$ 560.00

This payment is large enough that a notification will be sent to Maggie.

The value of the payment to this payee is different from your usual amount. Would you like to reset this to the usual amount, or submit with this new amount?

Submit **Reset**

Recent Transactions

[Bar chart showing recent transactions]

Transaction Categories

[Donut chart showing transaction categories]

Manage Payees

Telecom Wireless Inc. - TelcoWireless (76732110) [Delete]

This poster has been designed using images from Flaticon.com

Initial Findings

Proxy Accounts



Participants Like Additional Control...



...And Appreciate Inherent Transparency

Behavioural Nudges



Improve Accuracy When Banking



Dubious About Efficacy as Deterrents

Informal Caregiving



Many Older Adults Do Not Have Support Plans



Bank Policies Often Raise Caregiver Burden

References

1. Latulipe, C., Quandt, S. A., Melius, K. A., Bertoni, A., Miller, D. P., Smith, D., & Arcury, T. A. (2018). Insights into older adult patient concerns around the caregiver proxy portal use: Qualitative interview study. *Journal of Medical Internet Research*, 20(11). <https://doi.org/10.2196/10524>
2. Richard H. Thaler. 2008. *Nudge: improving decisions about health, wealth, and happiness*. Yale University Press, New Haven
3. Caraban, A., Karapanos, E., Gonçalves, D., & Campos, P. (2019, May 2). 23 Ways to Nudge: A review of technology-mediated nudging in human-computer interaction. *Conference on Human Factors in Computing Systems - Proceedings*. <https://doi.org/10.1145/3290605.3300733>



Study Website

celinelatulipe.net