



Targeting Small-Dollar Savings Suggestions to Low-Balance Customers

A STUDY WITH BECU

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The Financial Health Leaders Lab

The Financial Health Network helps companies incorporate behavioral science principles into their product design and rigorously test the financial health impact of their products. This research was conducted through the Financial Health Leaders Lab, a program available exclusively to Financial Health Network Members, which supports a select group of companies developing and testing innovations to improve financial health.

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FINANCIAL HEALTH COMPONENT



AT A GLANCE

INNOVATION

In partnership with BECU, the largest credit union in Washington state, this study examines the **impact of a new mobile app savings feature (Quick Save)**. Quick Save allows members to make spontaneous transfers of small amounts (\$3 is suggested) to their savings accounts with the swipe of a button.

IMPACT

Quick Save had different impacts for members who had different levels of savings balances at the beginning of the pilot, with more positive outcomes for those who started with lower savings.

01

For members who had *\$5 or less* in their savings accounts when Quick Save launched, **the percentage who made a savings deposit during the pilot increased 10%**.

02

For members who had *between \$5.01 and \$500* in their savings accounts when Quick Save launched, **balances increased by 17%, on average**.

03

For members who had *more than \$2,000* in their savings accounts when Quick Save launched, **deposit amounts were lower and savings balance increases were smaller**.

APPLICATIONS

01

Segment your customers when examining the financial health impact of new products and features to see how impacts may differ for key subgroups. We found that subgroups of low- and moderate-income members responded differently to opportunities to save small dollar amounts spontaneously. Collecting and analyzing data about customer segments that may respond differently to financial health innovations is critical to uncovering when a financial health solution may have mixed results.

02

Target suggestions to save small dollar amounts to those with low savings balances. Quick Save drove a 17% increase in savings balances for members who had low savings balances (\$5.01 - \$500) when the feature launched. For members who started with savings balances of more than \$2,000, Quick Save reduced the amounts they deposited during the study, resulting in a smaller increase in balances.

03

Leverage the appealing nature of small, frequent savings contributions with automation. Approximately 1 in 8 eligible BECU members used Quick Save at least once; however, the majority of Quick Save users made contributions during fewer than four of the 22 weeks of the pilot. Inviting consumers to participate in automated savings with small dollar amounts is appealing and can increase the impact of these suggestions by overcoming barriers to making ongoing deposits.

SECTION 1

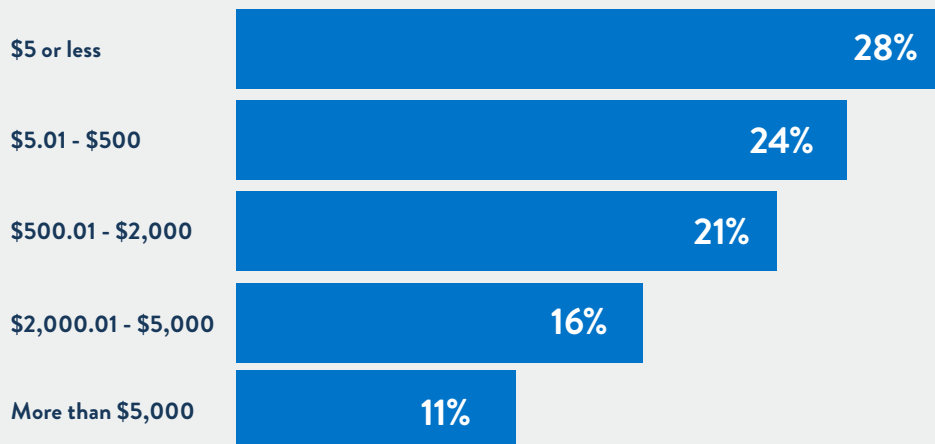
Innovation: Small and Spontaneous Savings



BECU is a credit union with over 1 million members located in Washington state. In May 2020, BECU launched a mobile app savings feature, Quick Save, that it developed in partnership with MX Technologies, Inc. to address key behavioral barriers for members with low to moderate incomes struggling to build emergency savings. BECU believed these members may have thought

they were not in a financial position to save, or might have found nontraditional approaches to savings more motivating. Among the members with low to moderate incomes whom BECU included in a pilot of Quick Save, about half (52%) held savings balances with the credit union that were \$500 or less, and their average savings balances were \$1,868 (see Figure 1).

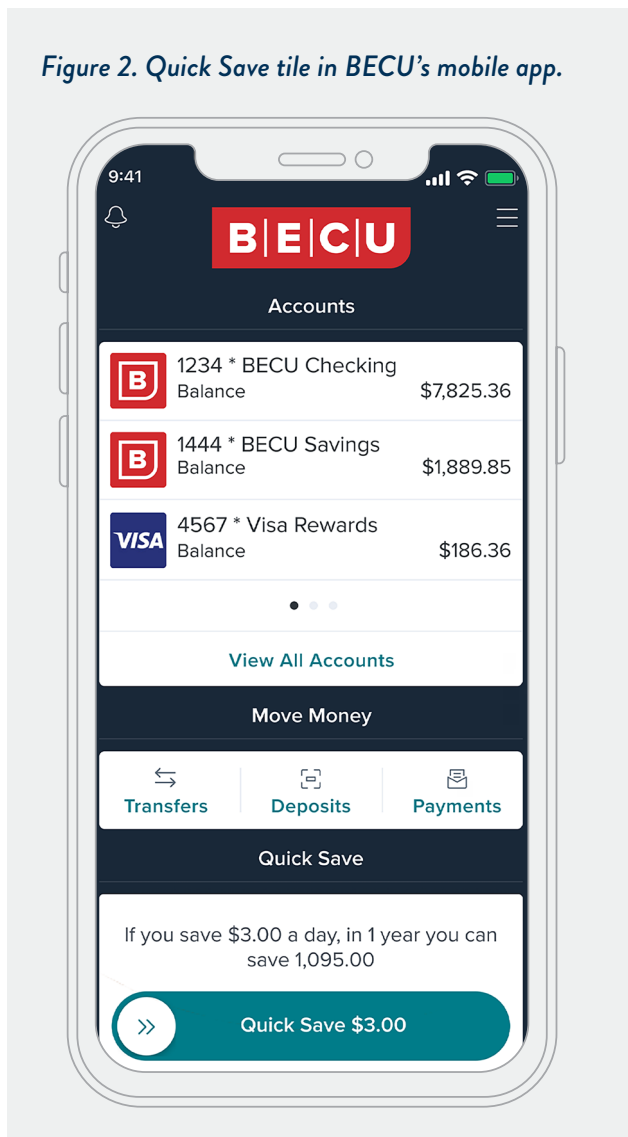
Figure 1. Savings balances for members in the Quick Save pilot.



Note: Percentages may not sum to 100% due to rounding.

Quick Save provides BECU's mobile app users, who compose over 50% of the membership base, with the option to spontaneously transfer money into savings by swiping a tile on the app's home screen. After members confirm the accounts for the transfer and the dollar amount, the settings are saved so that members only need to swipe to execute the transaction in the future (see Figure 2), reducing the friction for members to take action.

Figure 2. Quick Save tile in BECU's mobile app.



Quick Save suggests a \$3 daily savings transfer to foster a daily savings habit with small transfers that feel achievable, which members can edit to higher or lower amounts. BECU developed the default transfer amount of \$3 through qualitative research with its members, who shared that \$3 is small enough to feel achievable and not difficult to part with daily. Providing the default amount of \$3 can help to spur people to take action because **defaults** reduce the effort of making a decision about how much to save.¹

Quick Save encourages daily savings by making savings **salient**, with a visual reminder in the app to save. Previous research on savings has found that natural limits on people's attention can be a barrier to saving, which can be overcome with reminders.² The tile on the home screen of the mobile app acts as a reminder for regular mobile app users to bring savings to their attention. It also displays the significant annual savings that could be achieved through small daily transfers to motivate members by doing the math for them on how their small transfers can add up.

A potential downside to the salience of the small dollar amount that Quick Save suggests is anchoring. **Anchoring** happens when people view numbers that influence their subsequent decisions and can be impactful even when the number is unrelated to the decision. A small-dollar default may create a low anchor for members' savings decisions and could influence the size of savings deposits that members make, regardless of whether they choose to use Quick Save. By piloting the Quick Save product, BECU was able to assess whether these risks of anchoring on a low savings amount are outweighed by the opportunities that Quick Save provides for low- and moderate-income members to take action to increase their savings.

¹ Eric Johnson and Daniel Goldstein, "Do Defaults Save Lives?" *Science*, 2003.

² Dean Karlan et al., "Getting to the Top of Mind: How Reminders Increase Saving," *Management Science*, 2016.

SECTION 2

Approach: Inviting Members Who Struggle To Build Savings To Use Quick Save

BECU's mobile app includes back-end functionality to turn certain features on or off, which enables the credit union to pilot its features with different members.

This functionality provides BECU with the opportunity to roll out a new feature to a subset of its mobile app users to gather information before scaling it up. This piloting functionality also means that BECU can create a control group to explore the causal impact of a new feature by randomizing which members are invited to view various features. BECU included 180,000 members of its target audience in the study and randomized them into groups that either had the Quick Save feature in the mobile app turned on (~90%) or turned off (~10%). For the members who were invited to Quick Save, the slide-to-save tile appears on the home screen daily and is always present in the main menu. Once the member completes a Quick Save transfer, the home screen confirmation can be dismissed for the remainder of the day.

BECU launched Quick Save in May 2020,³ and the Leaders Lab explored the impact of Quick Save over a five-month period through October 20, 2020. The study launch overlapped with the early months of the COVID-19 pandemic, which may have influenced the savings behavior we observed in the study. During the five months of the study, BECU members in the study who were not invited to Quick Save increased their savings balances by 56%, from around \$1,900 to nearly \$3,000, on average. This increase is likely due to some combination of increased income from stimulus payments and reduced spending during

the pandemic. The increase in BECU members' savings balances aligns closely with national trends, including for low- and moderate-income people, during the early months of the pandemic.⁴

Because BECU randomized invitations to Quick Save, members who were and were not invited are similar on average (including their experiences with the pandemic and economic impact payments) in all ways except for their access to Quick Save.⁵ This enables us to isolate the impact of Quick Save on BECU's members despite the timing of the feature's launch. We discuss the implications of the study timing in more detail in the Applications section.

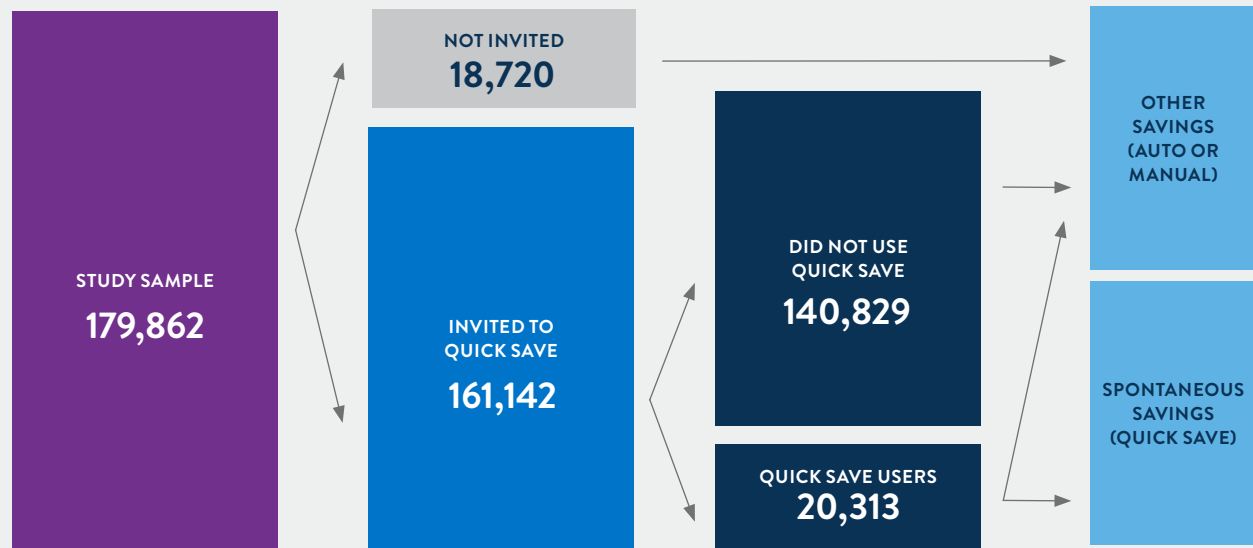


³ May 19, 2020, for Android and May 28, 2020, for iOS.

⁴ "U.S. Financial Health Pulse: 2020 Trends Report," Financial Health Network, 2020.

⁵ See the Appendix for a comparison of the characteristics of members who were invited to Quick Save and those who were not.

Figure 3. Different ways to save for BECU members in Quick Save pilot.



To assess the impact of Quick Save, the Leaders Lab compared outcomes for BECU members who were invited to Quick Save with those for members who were not invited. We looked at the dollar amount of deposits to and withdrawals from all the savings accounts members had with BECU over the study period. By measuring savings in all BECU savings accounts associated with each member, we can understand the broader impact of Quick Save, including the non-Quick Save savings deposits that members made through automated or other manual savings channels (see Figure 3).

These data provided the dollar value of each member’s savings deposits and the net change in savings balances over the course of the study. Savings deposits help us understand the difference

in savings activity between members who were invited to Quick Save and those who were not. However, more deposits do not always mean more savings at the end, as members who are saving more could also be withdrawing from their savings at a higher rate. Looking at changes in balances in addition to deposits can reveal these nuances.

In addition to savings deposits and balances, we also looked at the impact of Quick Save on a simple indicator of whether members saved (had at least one savings deposit) during the study period and on the number of savings deposits that members made during the study. Lastly, we compared the financial health scores of members who were and were not invited to Quick Save to examine whether the product impacted this holistic measure of financial health.⁶

⁶ BECU’s proprietary financial health score draws upon both administrative and survey data, and is similar (but not identical) to the Financial Health Network’s FinHealth Score®.

SECTION 3

Impact: Experiences Differ for Members With Lower and Higher Savings Balances

Quick Save Engagement

One in eight BECU members (12.6%) who were invited to Quick Save used it at least once during the five months of the study, a significant level of engagement well beyond BECU's expectations. Most of the members who used Quick Save transferred funds sporadically, though approximately 1 in 10 Quick Save users sustained their transfers with the feature at least once a week for more than three months (see Figure 4).

Nearly three-fifths of users had an average Quick Save transfer of \$3, the default transfer amount (see Figure 5). Although individual transfers may have differed from the average transfer amount for each user, this indicates that the default amount of \$3 likely influenced the amounts that users chose to transfer.

Savings Behavior

Quick Save created additional savers among BECU's members: Among members who were invited to Quick Save, the percentage that made at least one savings deposit was 1.4** percentage points higher than the members not invited to Quick Save. BECU members who held more than \$5 in their savings accounts when Quick Save launched all had very high rates of savings participation during the pilot; therefore, there was no meaningful impact for this group on the number of members who saved.

Figure 4. Percentage of Quick Save users, by total number of weeks with Quick Save transfers.

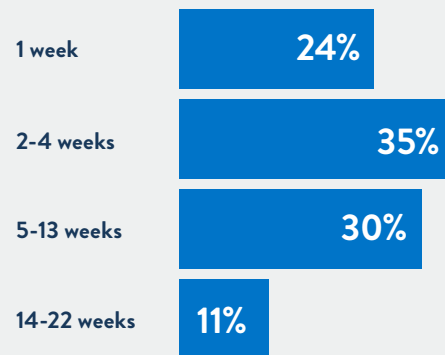
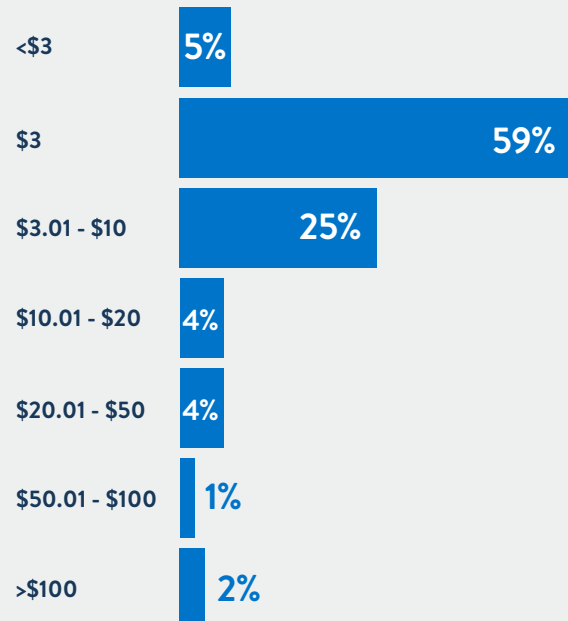


Figure 5. Percentage of Quick Save users, by average transfer amount.



* Statistically significant at 10% level ($p < 0.10$)

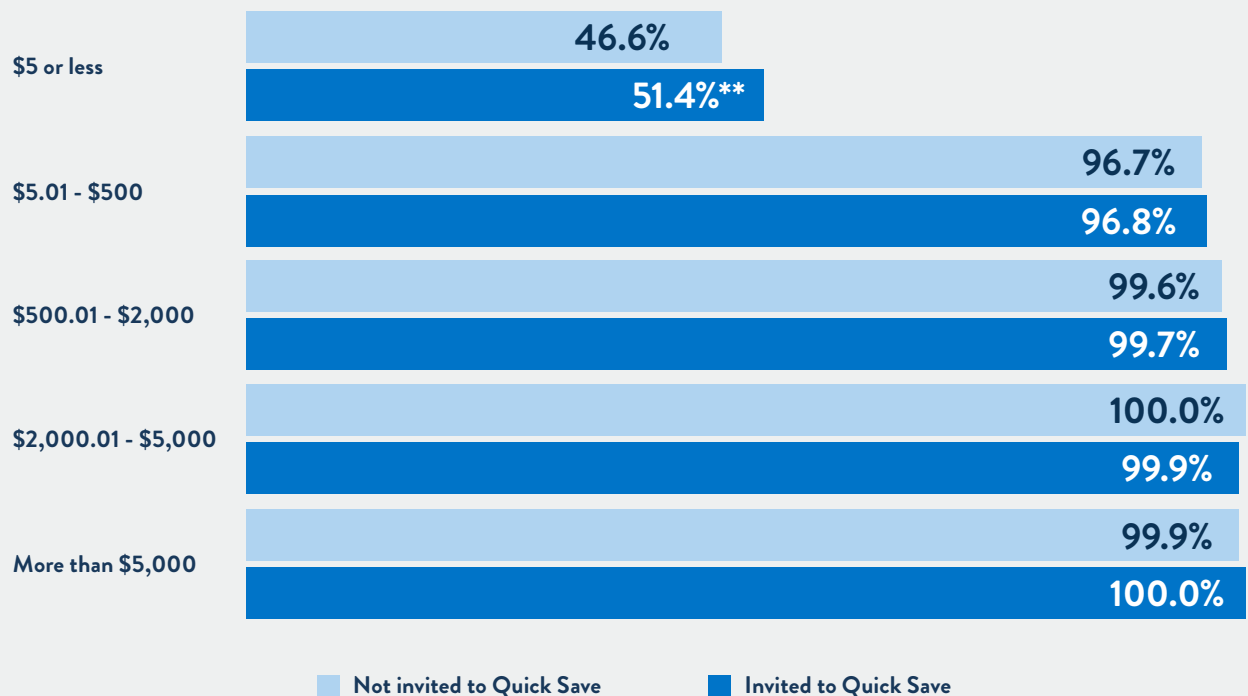
** Statistically significant at 5% level ($p < 0.05$)

The positive impact of Quick Save was concentrated among members with savings balances of \$5 or less at the start of the period: Among that group, Quick Save increased the percentage of savers by 4.7** percentage points, a 10% increase relative to the group not invited to Quick Save (see Figure 6).

Although Quick Save increased the overall percentage of savers and also the average number of savings deposits that members made (an additional 1.5 deposits** during the study period, on average), Quick Save actually reduced members' growth in savings balances. Members invited to Quick Save grew their balances by \$142* (13%) less, on average, than the members not invited to Quick Save.

However, members who had different levels of savings balances at the beginning of the pilot experienced different impacts from Quick Save. Quick Save had a negative impact on savings deposits and balances only for members with higher starting balances. Members invited to Quick Save who had savings balances either between \$2,000.01 and \$5,000 or more than \$5,000 prior to the launch deposited \$1,008** (13%) and \$1,045* (9%) less, respectively, into their savings accounts during the study period, despite a small increase in the total number of deposits they made.

Figure 6. Percentage of savers, by initial savings balances.



Notes: This analysis controls for financial health, years of membership, number of savings deposits, number of service charges, and number of mobile app sessions prior to the launch of Quick Save, and whether a member is an employee or not. Statistically significant differences are indicated with asterisks. If an asterisk is not used, then there was no statistical difference between members who were invited to Quick Save and those who were not.

* Statistically significant at 10% level ($p < 0.1$)

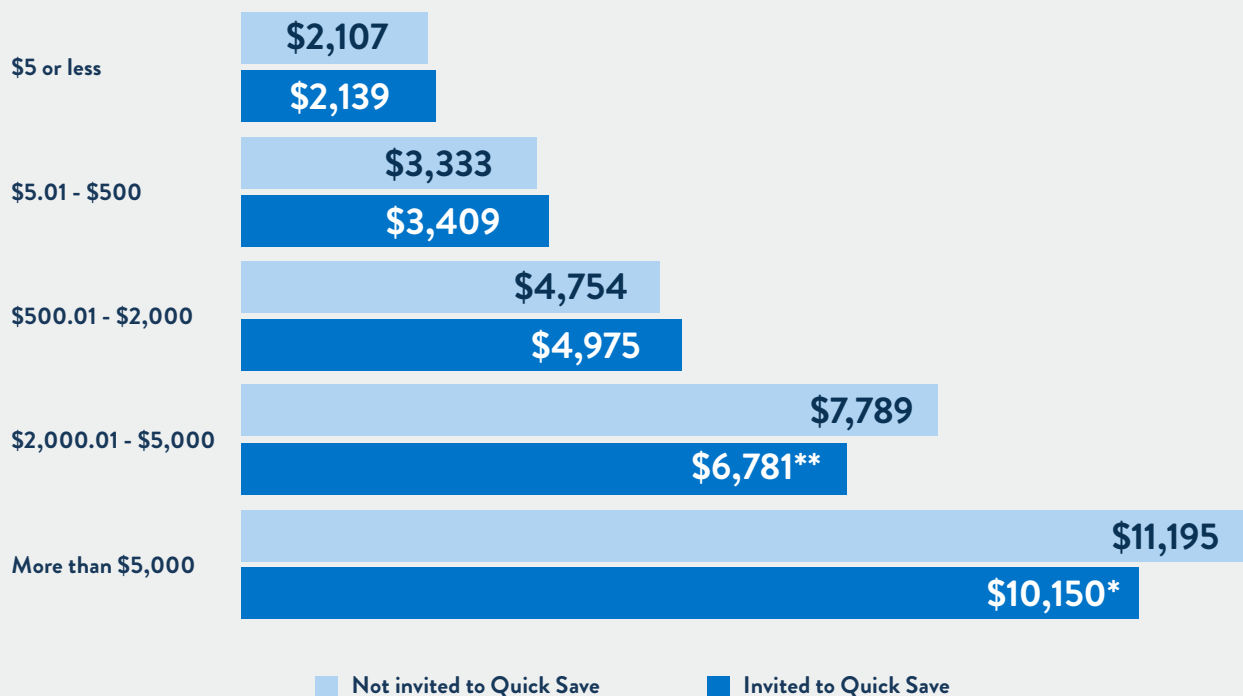
** Statistically significant at 5% level ($p < 0.05$)

As a result, these members increased their savings balances \$346* (27%) and \$863* (81%) less, respectively, than members who started with similar savings balances but were not invited to Quick Save (see Figures 7 and 8). For these members who had achieved higher savings balances at the outset of the pilot and were already saving, the anchoring effect of Quick Save’s small suggested dollar amount may have reduced the size of the deposits that they otherwise would have made.

In contrast, members invited to Quick Save who had smaller balances in their savings accounts (\$5.01 - \$500) saw an increase in their savings balances while also making a small increase in the number of deposits they made. These members’ savings balances increased by \$179* (17%) more

than members who had similar savings balances but were not invited to Quick Save (see Figure 8). This difference is marginally statistically significant, which means that we can’t be fully confident about Quick Save’s impact on this group, but this pattern of results indicates that a tool such as Quick Save may be specifically useful for people who have begun to build savings but are encountering challenges in growing their balances.⁷ Although we are not able to detect a statistically significant impact of Quick Save on the amount of savings deposits for these members, they may have benefited from Quick Save’s increased salience of savings to begin to build and maintain their savings balances.

Figure 7. Average dollar amount of savings deposits, by initial savings balances.



Notes: This analysis controls for financial health, years of membership, number of savings deposits, number of service charges, and number of mobile app sessions prior to the launch of Quick Save, and whether a member is an employee or not. Statistically significant differences are indicated with asterisks. If an asterisk is not used, then there was no statistical difference between members who were invited to Quick Save and those who were not.

* Statistically significant at 10% level ($p < 0.10$)

** Statistically significant at 5% level ($p < 0.05$)

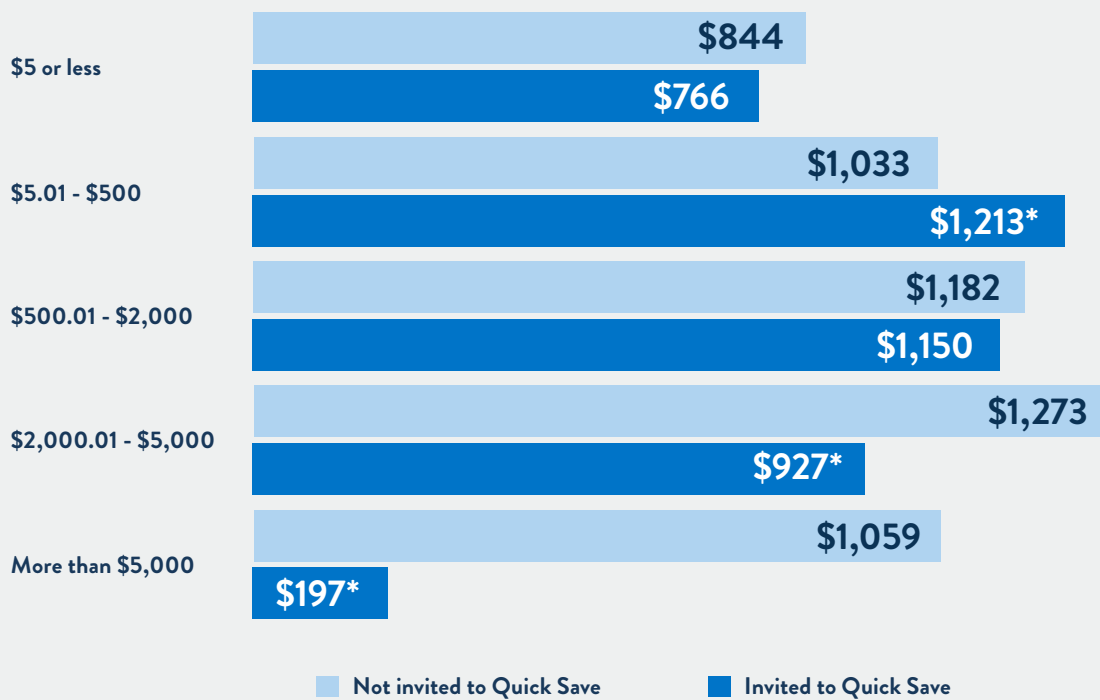
⁷ The p -value for this result is just under 0.1, which makes it statistically significant at the 10% level, a generous threshold for assessing statistical significance.

Quick Save did not impact savings deposits or balances for members who held either very low (\$5 or less) or moderate (\$500.01 - \$2,000) balances in their savings accounts. For these members, the savings deposits and balances for those who were and weren't invited to Quick Save are not statistically different. This can happen despite an increase in the percentage of savers for the lowest-balance group if those who were

already saving chose to save less and thereby offset some of the increased savings from new savers, or if the additional savings that new savers contributed were too small for us to be able to detect a statistically significant difference.

Lastly, Quick Save's impacts were concentrated on savings behavior and did not impact its members' overall financial health scores.

Figure 8. Average increase in savings balances, by initial savings balances.



Notes: This analysis controls for financial health, years of membership, number of savings deposits, number of service charges, and number of mobile app sessions prior to the launch of Quick Save, and whether a member is an employee or not. Statistically significant differences are indicated with asterisks. If an asterisk is not used, then there was no statistical difference between members who were invited to Quick Save and those who were not.

* Statistically significant at 10% level ($p < 0.10$)

** Statistically significant at 5% level ($p < 0.05$)

SECTION 4

Applications: Target Small-Dollar Savings Suggestions to Low-Balance Savers

By piloting Quick Save with its members, BECU was able to reveal valuable insights about how to best design a savings tool that resonates with members with low and moderate incomes who may struggle to save before rolling it out more broadly.

BECU's approach to include a control group in the pilot was also key to generating insights about the impact of Quick Save. BECU worked with its vendors to ensure that it could turn certain features off and on in its mobile app, which gave it the ability to compare members for whom Quick Save was and wasn't available. With this control group, we were able to determine when Quick Save did and did not help BECU members to accumulate savings. This approach can be replicated for other new features and adopted by other financial health providers to best learn about the financial health impact of their innovations. From BECU's experience, we learned several things that other companies should incorporate into the design of their financial health products:



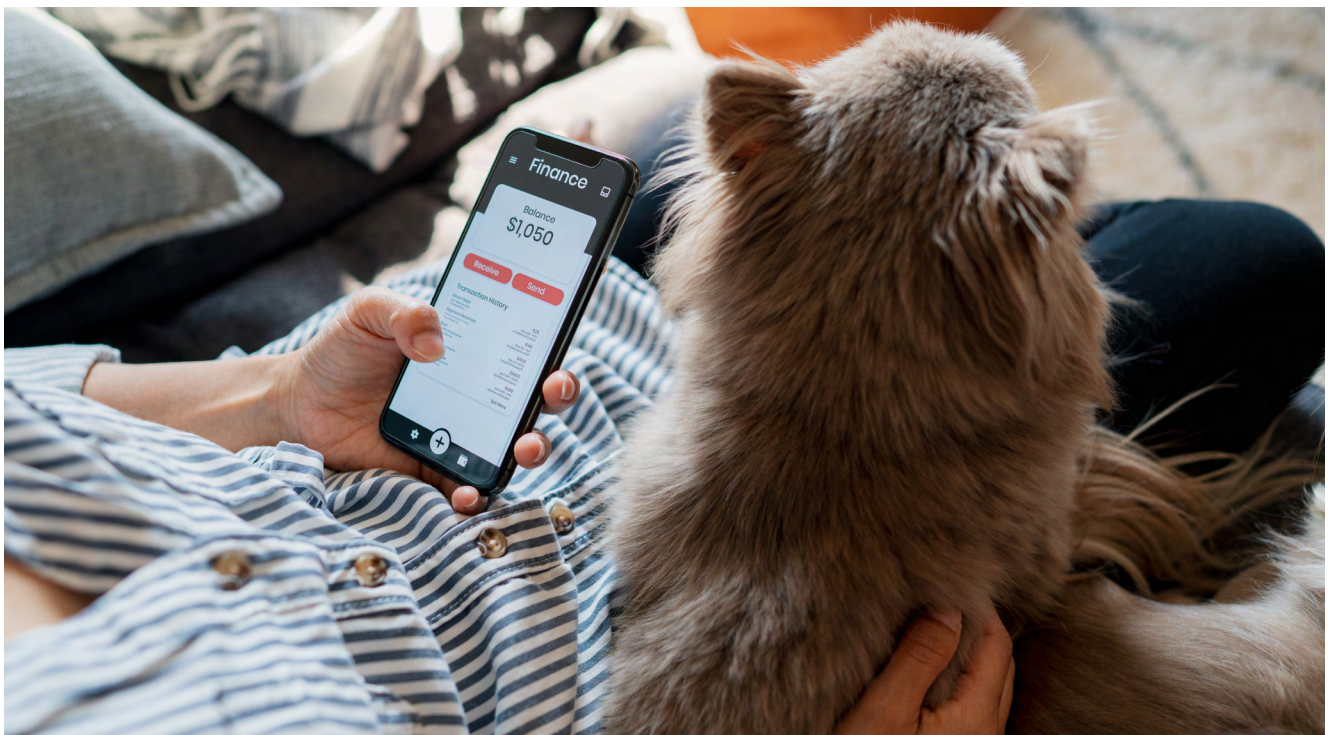
01 Segment your customers when examining the financial health impact of new products and features to see how impacts may differ for key subgroups.

BECU designed Quick Save for its members with low to moderate incomes and rolled out the product to a subset of these members in a pilot. We found that within this segment, there are important subgroups that respond differently to opportunities to spontaneously save small dollar amounts. Quick Save appeared to be helpful in building balances for members who had begun to save in small amounts (with balances \$5.01 - \$500), while it reduced savings deposits and balances for those with relatively higher levels of savings (more than \$2,000) at the beginning of the pilot. Collecting and analyzing data about customer segments that may respond differently to financial health innovations is critical to uncovering these types of insights and learning about when it may be appropriate to target a financial health solution to a particular subgroup of customers.

02 Target suggestions to save small dollar amounts to those with low savings balances.

People who struggle to build emergency savings may need to start small and could benefit from accumulating small, regular savings. BECU found that a suggested \$3 daily savings transfer felt achievable for its low- to moderate-income members, and it motivated some members who had not been saving to get started. For those with minimal savings when Quick Save launched (\$5 or less), the feature drove a 10% increase in the percentage of members who made a savings deposit, or an additional 4.7 percentage points of members. The small-dollar suggestions also helped members with savings \$500 or less to build up their balances.

However, for members in the target audience who had achieved higher savings balances at the outset of the pilot and were already saving, the \$3 suggested for Quick Save transfers was a low anchor that influenced members' non-Quick Save savings behavior as well: Members invited to Quick Save who had savings balances of greater than \$2,000 when the feature launched ended up depositing about \$1,000 less into their savings accounts than those not invited to Quick Save. Be cautious about using a low anchor for a suggested financial health action that customers may already be taking, such as contributing to savings, and target suggestions for low dollar amounts at new savers to help them get started.



03 Leverage the appealing nature of small, frequent savings contributions with automation.

Quick Save was designed to make small, daily savings transfers achievable for BECU's members who struggle to save. This was demonstrated by the significant engagement that BECU saw with Quick Save: Approximately 1 in 8 eligible BECU members used Quick Save at least once. However, the majority of Quick Save users made contributions during fewer than four of the 22 weeks of the pilot. While Quick Save significantly reduced the friction involved in saving, making it as easy as swiping a tile on the mobile app home screen, other obstacles can prevent consumers from taking action as frequently as intended.

Automation can be a solution when consumers experience challenges with persisting in taking steps to save: By taking an action once, to sign up for automated savings, a consumer doesn't need to take any further action for their savings

to continue to grow. Recent research with the small-dollar investing app Acorns suggests that Quick Save's approach of suggesting a small dollar amount to save is a promising way to facilitate enrollment in automatic savings.⁸ The study found that suggesting small daily contributions (\$5 per day) yielded an enrollment rate in the automated savings program that was more than four times the enrollment rate when the suggested amount was equivalent but framed as a larger dollar amount transferred less frequently (\$150 per month).⁹ Importantly, lower-income consumers were particularly more likely to enroll in automatic savings when framed as a small daily contribution versus a larger monthly contribution, which makes this approach promising for encouraging small-dollar savings for the consumers who are most likely to benefit from it. Providers can graduate those who have started small-dollar savings through a feature like Quick Save to an option to automate, or provide the option to automate at the outset.

⁸ Hal Hershfield, Stephen Shu, and Shlomo Benartzi, "Temporal Reframing and Participation in a Savings Program: A Field Experiment," *Marketing Science*, 2020.

⁹ *Ibid.*

Impact of COVID-19

The timing of BECU's pilot of Quick Save coinciding with the COVID-19 pandemic provides critical context for our findings. When Quick Save launched in May 2020, many people in the United States were receiving the first round of economic impact payments from the CARES Act. Approximately 17% of disbursements were made in May 2020, and an additional 2% of disbursements occurred over the following months.¹⁰ These economic impact payments likely contributed, in part, to BECU members significantly increasing their savings balances during the study period.

We found that Quick Save reduced the size of savings deposits for members who held relatively higher savings balances at the time the feature launched. This impact was concentrated specifically in the first few months of the pilot following Quick Save's launch, coinciding with the period when some members would have been receiving large deposits from the economic impact payments.

Members in the pilot who both were and were not invited to Quick Save experienced these external dynamics, which means that the financial dynamics of the pandemic didn't impact our ability to find the causal impact of Quick Save. The timing of the study does have implications, however, for the situations in which we would expect to see the same pattern of results. For example, the pilot may provide a view of how consumers will respond to suggestions to save small dollar amounts when they are faced with an opportunity to save from a large payment such as a tax refund, additional income from overtime work, an additional paycheck within a month for workers paid biweekly, or a bonus. While the impacts of Quick Save on its members' savings behavior may not have been as pronounced at a different time, they nonetheless provide helpful lessons for how to design and target savings tools for consumers who experience barriers to saving.



¹⁰ Dan Murphy, "Economic impact payments: Uses, payment methods, and costs to recipients," *Brookings Institution*, 2021.

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Appendix

Group Comparisons Across Demographics

	Not Invited to Quick Save	Invited to Quick Save	Total
Sample Size	18,720	161,142	179,862
Account Characteristics			
Average Savings Balance (As of May 1)	\$1,872	\$1,867	\$1,868
Average Number of Savings Deposits (One Month Prior)	0.3	0.3	0.3
Average Number of Service Charges (Six Months Prior)	0.73	0.69**	0.69
Average Years of Membership	8.2	8.3	8.2
Average Number of Mobile App Sessions (Three Months Prior)	65.1	64.8	64.9
Financial Health Tier¹¹			
Vulnerable	41%	40%	40%
Coping	47%	48%	48%
Healthy	7%	7%	7%
Missing	5%	5%	5%
Savings Balance (As of May 1)			
\$5 or Less	28%	28%	28%
\$5.01 - \$500	24%	24%	24%
\$500.01 - \$2,000	21%	21%	21%
\$2,000.01 - \$5,000	16%	16%	16%
More Than \$5,000	11%	11%	11%






¹¹ BECU uses administrative data along with survey data to determine the financial health of its members and a system of classifying members into financial health tiers that is similar (but not identical) to the Financial Health Network's scoring framework.

** Statistically significantly different from "Not Invited" group at 5% level ($p < 0.05$)



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