

# New ideas about Financial Wellbeing

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## 1. Your understanding of financial wellbeing

**Financial Security:** Having enough savings and emergency funds to cover unexpected expenses (e.g., medical bills, car repairs) and feel prepared for potential financial shocks. This includes building an emergency fund that can cover 3-6 months of living expenses. An emergency fund can provide a safety net during periods of unemployment, illness, or other disruptions to income. It can also help avoid going into debt to cover unexpected costs, which can further strain your financial security. Here are some additional tips for building a strong emergency fund:

- Determine your monthly living expenses: Track your spending for a month to understand how much you typically spend on essential needs like housing, food, transportation, and utilities. This will help you determine how much you need to save in your emergency fund to cover your basic living costs in case of an emergency.
- Set a savings goal: Aim to save a specific amount for your emergency fund. A common recommendation is to save 3-6 months of living expenses. However, you can adjust this goal based on your individual circumstances. For example, if you have a stable job and good health insurance, you might feel comfortable with a smaller emergency fund. Conversely, if you are self-employed or have a high-risk job, you may want to save a larger emergency fund.
- Automate your savings: Set up automatic transfers from your checking account to your emergency savings account. This will help you save consistently and reach your goal faster.
- Choose a high-yield savings account: Park your emergency fund in a high-yield savings account to earn interest on your savings. This will help your emergency fund grow over time.

<https://www.investopedia.com/articles/retirement/06/10secure retirement tips.asp#:~:text=Broadly%20speaking%2C%20financial%20stability%20means,the%20fear%20of%20running%20out.>

**Financial Control** is the feeling of being empowered to manage your finances effectively. It's not just about having money in the bank, but also about having the knowledge and skills to make informed financial decisions. This involves several key areas:

- Budgeting: Creating a plan for your income and expenses to ensure you're not spending more than you earn. Budgeting tools and templates can help you get started and track your progress over time.
- Tracking expenses: Monitoring where your money goes to identify areas where you can cut back and save more. Expense tracking apps can automate this process and provide valuable insights into your spending habits.
- Managing debt: Developing a strategy to repay debt and avoid accruing more. This may involve creating a debt repayment plan, negotiating lower interest rates, or consolidating multiple debts.

- Making informed financial decisions: Understanding the risks and rewards of different financial products and services before making investment choices or taking out loans. Financial literacy resources and consultations with financial advisors can equip you with the knowledge to make sound financial decisions.

<https://www.aia.com.au/en/financial-wellbeing/knowledge-hub/health-and-wellbeing/how-financial-control-boosts-wellbeing>

Financial Resilience is the ability to absorb financial shocks and setbacks and bounce back quickly. It's like having a financial shock absorber that helps you weather unexpected events without derailing your long-term financial goals. There are several ways to build financial resilience:

- Emergency savings: Having a readily available pool of funds to cover unexpected expenses like car repairs, medical bills, or job loss can prevent you from going into debt or dipping into your long-term savings goals.
- Diversification: Spreading your investments across different asset classes (e.g., stocks, bonds, real estate) can help mitigate risk and protect your portfolio from market downturns.
- Debt management: Keeping your debt levels under control, especially high-interest debt like credit card debt, can free up more cash flow to weather financial storms.
- Income protection: Having disability insurance or critical illness insurance can help replace your income if you're unable to work due to illness or injury.
- Building multiple income streams: Exploring ways to generate income outside your regular job, such as a side hustle or passive investments, can provide a financial safety net and increase your overall financial resilience.

<https://www.synchronybank.com/blog/financial-resilience/>

## **2. Your ideas about how to embed financial wellbeing into Dolfin**

Embedding Financial Wellbeing into Dolfin

Financial wellbeing goes beyond simply tracking income and expenses. It encompasses financial security, confidence, and the ability to meet current and future financial goals. Here's how Dolfin can integrate financial wellbeing:

Goal Setting and Tracking:

- Allow users to define short-term, mid-term, and long-term financial goals (e.g., saving for a vacation, emergency fund, retirement). Goal Categorization: Allow users to categorize goals based on timeframe (short-term: less than a year, mid-term: 1-5 years, long-term: 5+ years) and purpose (e.g., saving for a vacation, emergency fund, down payment, retirement).
- Goal Details: Enable users to define specific details for each goal, including:
  - Target Amount: The total amount needed to achieve the goal.
  - Target Date: The desired date by which the user wants to achieve the goal.
  - Optional Details: Allow users to add additional details like a description or motivation for the goal (e.g., "Dream vacation to Hawaii").

Integrate tools to break down goals into actionable steps with timelines and progress tracking.

- Step Creation: Provide a feature for users to break down large goals into smaller, more manageable steps. These steps could be:
- Time-bound actions: Specific tasks to be completed by a certain date (e.g., "Increase monthly savings by \$100 starting next month").
- Milestone tracking: Milestones represent significant progress markers towards the final goal (e.g., "Reach \$1,000 savings by June").
- Integration with Budgeting: Link goal-related steps with budgeting features. For example, automatically adjust spending categories based on steps requiring increased savings for specific goals.

Offer visualizations to showcase goal progress and provide a sense of accomplishment.

- Progress Bars: Implement progress bars that visually represent the user's advancement towards each goal. This could be a percentage completion based on the target amount or a timeline visualization showing progress towards the target date.
- Data Visualization: Offer various data visualization tools to showcase goal progress:
- Goal Charts: Track progress over time using charts that depict saved amount vs. target amount or remaining time vs. progress made.
- Funding Sources: Visualize the breakdown of funds contributed towards the goal (e.g., regular savings transfers, additional income sources).
- Gamification: Integrate gamified elements like progress badges or motivational messages upon achieving milestones or reaching specific percentages of goal completion.

Personalized Budgeting and Insights:

- Dynamic Budgeting: Develop budgeting tools that adjust automatically based on user income, spending patterns, and financial goals. This could involve:
- Goal-based allocation: Automatically allocate funds towards different goals based on priorities and deadlines.
- Predictive budgeting: Forecast future expenses and adjust budget categories accordingly.
- Scenario Planning: Allow users to create "what-if" scenarios to test the impact of different spending decisions on their budget and financial goals.

Utilize transaction data to categorize spending and identify areas for potential savings.

- Machine Learning: Leverage machine learning algorithms to analyze past transaction data and automatically categorize spending into relevant categories (e.g., groceries, dining, entertainment).
- User Input: Allow users to refine automatic categorization, create custom categories for specific needs (e.g., "Holiday shopping"), and merge or split existing categories for better tracking.
- Recurring Transactions: Identify recurring transactions (subscriptions, bills) and categorize them automatically to simplify budgeting.

Develop personalized budgeting tools that adapt to spending patterns and goals.

- **Dynamic Budgeting:** Develop budgeting tools that adjust automatically based on user income, spending patterns, and financial goals. This could involve:
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Offer insightful analytics on spending trends and potential areas for optimization.

- **Spending Analytics:** Provide insightful analytics on spending trends:
- Track spending patterns over time (weekly, monthly, yearly) to identify areas for potential savings.
- Compare actual spending with budgeted amounts to highlight areas of deviation.
- **Optimization Recommendations:** Offer personalized recommendations based on spending insights:
- Suggest areas to cut back on spending based on historical data and goal priorities.
- Provide tips for optimizing subscriptions or finding better deals on recurring expenses.

Financial Health Assessment:

- Implement a scoring system to assess users' overall financial health based on factors like income, expenses, debt, savings, and credit score.
- Provide personalized recommendations and actionable tips to improve financial health.

Educational Resources:

- Integrate a library of educational resources on financial literacy, covering topics like budgeting, investing, debt management, and responsible credit card use.
- Offer bite-sized articles, infographics, and video tutorials tailored to different financial literacy levels.

Financial Tools and Integrations:

- Integrate tools for tracking and managing debt, including creating repayment plans and monitoring progress.
- Offer gamified features and challenges to encourage positive financial behaviors.

Benefits of Integration

- By integrating financial wellbeing features, Dolphin can:

- Increase User Engagement: Users become more invested in managing their finances and achieving goals.
- Improve Financial Literacy: Educational resources empower users to make informed financial decisions.
- Promote Financial Wellness: Personalized tools and insights help users achieve financial security and peace of mind.
- Differentiate Dolphin: A holistic financial wellbeing approach sets Dolphin apart from simple financial trackers.

#### Next Steps

- Developing a robust financial wellbeing platform requires further analysis. Here are some next steps:
- Conduct user research to understand user needs, financial goals, and preferred features.
- Partner with financial advisors and educators to develop accurate and relevant content.
- Prioritize features based on user research and feasibility.
- Design a user-friendly interface to seamlessly integrate financial wellbeing tools.

### 3. Technical details

#### Goal Setting and Tracking:

- Database: Implement a new database schema to store user-defined goals, including goal type, target amount, deadline, and progress tracking data (amount saved/achieved so far).
- *Users: This table stores user information.*
- *Attributes:*
- *user\_id (INT PRIMARY KEY): Unique identifier for each user.*
- *username (VARCHAR(255)): Username for login.*
- *(additional user attributes as needed, e.g., email, name)*
- *Goals: This table stores user-defined financial goals.*
- *Attributes:*
- *goal\_id (INT PRIMARY KEY): Unique identifier for each goal.*
- *user\_id (INT FOREIGN KEY REFERENCES Users(user\_id)): Links the goal to the specific user who created it.*
- *goal\_name (VARCHAR(255)): Descriptive name for the goal (e.g., "Vacation Fund", "Emergency Savings").*
- *goal\_type (ENUM('short\_term', 'mid\_term', 'long\_term')): Categorizes the goal based on timeframe.*
- *target\_amount (DECIMAL(10,2)): The total amount of money needed to achieve the goal.*
- *target\_date (DATE): The desired date by which the user wants to achieve the goal.*
- *description (TEXT): Optional field for additional details about the goal.*
- *Goal\_Progress: This table tracks the progress made towards each goal.*
- *Attributes:*
- *progress\_id (INT PRIMARY KEY): Unique identifier for each progress entry.*

- *goal\_id* (INT FOREIGN KEY REFERENCES Goals(goal\_id)): Links the progress entry to the specific goal.
- *progress\_date* (DATE): Date on which the progress was recorded.
- *amount\_saved* (DECIMAL(10,2)): Amount of money saved towards the goal on this specific date.
- (optional) *milestone\_reached* (BOOLEAN): Flag indicating if a milestone was achieved on this date.
- (optional) *note* (TEXT): Optional field for user notes regarding the progress update.
- Relationships:
- A User can have many Goals. (One-to-Many relationship)
- A Goal is associated with one User. (Many-to-One relationship)
- A Goal can have many Goal\_Progress entries. (One-to-Many relationship)
- A Goal\_Progress entry belongs to one specific Goal. (Many-to-One relationship)

### **Frontend:**

Develop an intuitive interface for users to define and manage goals. This might involve forms, progress bars, and goal visualization tools (charts, graphs).

#### *Layout:*

- *Imagine the screen divided into two main sections:*
- *Top Section (60% of screen space): This section displays a list of user-defined goals.*
- *Bottom Section (40% of screen space): This section provides a detailed view of a selected goal or a dedicated screen for creating a new goal.*

#### *Top Section - Goal List:*

- *This section showcases all the user's financial goals in a list format.*
- *Each goal is represented by a visually appealing card with a rounded background.*
- *The card displays essential information about the goal:*
- *Goal Name: Clearly displayed at the top of the card (e.g., "Vacation Fund").*
- *Progress Bar: A horizontal progress bar visually represents the user's progress towards the goal (percentage filled based on completion).*
- *Target Amount & Date: Shows the total amount needed and the target date for achieving the goal displayed below the progress bar.*

*Quick Action Icons: Small icons on the bottom right corner of the card allow users to:*

- *Edit goal details (pencil icon).*
- *Add progress updates (plus sign icon).*
- *View detailed progress history (graph icon).*
- *Bottom Section - Goal Details/Creation:*
- *This section changes based on user interaction with the goal list.*
- *When a user taps a specific goal card in the list, the bottom section displays details about that particular goal.*
- 1. *It can include:*
- 2. *A larger version of the progress bar with the option to view historical progress data.*

3. *Goal name, target amount, target date, and optional description displayed prominently.*
4. *Buttons for adding progress updates (amount saved) or editing goal details.*
5. *When the user taps a "Create New Goal" button, this section transforms into a goal creation screen.*
6. *It includes clear forms for entering goal details like name, type (short-term/mid-term/long-term), target amount, target date, and an optional description field.*
7. *A "Save Goal" button confirms the creation of the new goal.*

#### **Overall Design:**

- *The interface should be clean, modern, and user-friendly with intuitive icons and clear labels.*
- *A consistent color scheme can be used throughout the app, with different colors potentially highlighting goal types or progress levels.*
- *White space can be effectively utilized to avoid clutter and enhance readability.*

#### **Personalized Budgeting and Insights:**

- **Data Analysis:** Leverage existing transaction data for advanced categorization using machine learning algorithms. This allows for automatic spending classification and trend identification.
- **Budgeting Tools:** Develop dynamic budgeting features that adapt to user spending patterns and adjust based on goals. Utilize rule-based automation for recurring transactions and create custom categories for specific needs.
- **Visualization Tools:** Implement data visualization libraries to create insightful charts and graphs that depict spending trends, budget adherence, and potential areas for saving.

#### **Financial Health Assessment:**

- **Scoring Algorithm:** Design a scoring system that considers factors like income, expenses, debt-to-income ratio, savings, credit score (with user consent), and investment portfolio (if integrated).
- **Security:** Ensure secure storage and transmission of sensitive financial data following industry best practices.
- **Recommendation Engine:** Develop an AI-powered recommendation engine that analyzes user data and financial health score to provide personalized tips for improvement (e.g., debt repayment strategies, saving plans).

#### **Educational Resources:**

- **Content Management :** Implement a CM for managing financial literacy content (articles, videos, infographics). This allows for easy addition, editing, and categorization of educational resources.
- **Personalization:** Integrate user data with the CMS to personalize the learning experience. Users can see content relevant to their financial goals and literacy level.

## *Integrating a CM with Financial Literacy Content in Dolfin Frontend*

### *CM Selection:*

- *Ease of Use: The website should be user-friendly for non-technical staff to add and manage financial literacy content efficiently.*
- *Scalability: The chosen CMS should be able to handle a growing amount of content as Dolfin's user base expands.*
- *Security: Ensure the CMS has robust security measures to protect user data and financial content.*

### *Content Management:*

- *Content Types: Define different content types within the CM for articles, videos, infographics, and other financial literacy resources.*
- *Categorization: Implement a system for categorizing content based on financial topics (e.g., budgeting, saving, investing), audience level (beginner, intermediate, advanced), and user goals (e.g., retirement planning, debt management).*
- *Content Creation: The web interface should allow authorized personnel to easily create, edit, and schedule financial literacy content. This could include WYSIWYG editors for articles, upload functionality for videos and infographics, and scheduling options for publishing content at specific times.*

### *Frontend Integration:*

*Here's how the content can be integrated with the Dolfin user interface:*

- *Content Display: Develop dedicated sections within the app to showcase financial literacy content.*
- *Content Categories: Allow users to browse content by category using filters or navigation menus based on the categorization system defined in the CMS.*
- *Personalized Recommendations:*
- *Leverage user data (financial goals, spending habits, score from the scoring system) to personalize the content displayed to each user.*
- *Recommend articles, videos, or infographics relevant to a user's financial needs and literacy level.*
- *This can be achieved through:*
- *User profiles: Allow users to define their financial goals and risk tolerance.*
- *Integration with the scoring system: Display content targeted towards improving specific areas identified in the user's financial health score.*
- *Utilize the CMS to tag content with relevant keywords or target audiences to facilitate personalized recommendations.*

### **Financial Tools and Integrations:**

- *APIs: Integrate with APIs from financial institutions (banks, investment platforms) to enable secure features like bill pay, fund transfers, and investment tracking.*



- **Debt Management Tools:** Develop features for users to track debt balances, create personalized repayment plans, and monitor progress toward debt elimination.

#### *API Integration with Financial Institutions:*

- *Secure Approach:* Prioritize secure access to user financial data. Utilize industry-standard protocols like Open Banking (OB) or Plaid for secure connections with financial institutions (FIs).
- *Open Banking (OB):* A standardized approach allowing users to securely share their financial data with authorized third-party apps like Dolfin. Users grant explicit consent to FIs for data sharing.
- *Plaid:* A popular third-party service that facilitates secure connections between apps and FIs through user authorization.

#### *Integration Process:*

- *Partner with FIs:* Establish partnerships with relevant financial institutions to access their APIs for functionalities like bill pay, fund transfer, and investment data retrieval.
- *API Implementation:* Integrate the chosen API (OB or Plaid) into Dolfin's backend infrastructure to securely connect with user-linked financial accounts.
- *User Authentication:* Implement secure user authentication methods (e.g., multi-factor authentication) for accessing and managing financial data through Dolfin.

#### *Benefits:*

- *Seamless Bill Pay and Fund Transfers:* Integrate bill payment functionalities with user bank accounts, allowing users to schedule and manage bill payments directly within Dolfin.
- *Enhanced Tracking:* Utilize APIs to retrieve investment account data, enabling users to track their investment performance and asset allocation within Dolfin.

#### *Security Considerations:*

- *User Consent:* Obtain explicit user consent before accessing any financial data through APIs.
- *Data Encryption:* Implement robust data encryption methods to protect user financial information during transmission and storage.
- *Regular Security Audits:* Conduct regular security audits to identify and address any potential vulnerabilities in the API integration.

#### *Debt Management Tools:*

- *Debt Tracking:* Allow users to add their various debts (credit cards, loans) to Dolfin, specifying details like outstanding balances, interest rates, and minimum payments.
- *Repayment Plan Creation:* Develop features for users to create personalized debt repayment plans. This could involve:
- *Snowball Method:* Prioritize paying off debts with the lowest balances first (regardless of interest rate).
- *Avalanche Method:* Focus on paying off debts with the highest interest rates first.
- *User-Defined Plans:* Allow users to customize repayment plans based on their preferences and financial situation.

- *Progress Tracking: Provide users with visualizations and progress updates to monitor their debt repayment journey. This can include charts that depict decreasing debt balances over time and milestones achieved.*

#### *Technical Considerations:*

- *Data Storage: Design a secure database to store user debt information and track progress towards repayment goals.*
- *Security Measures: Implement data encryption for sensitive debt details.*
- *User Interface Design: Create a user-friendly interface for users to easily manage and track their debt information.*

#### **Gamification:**

- *Game Mechanics: Implement game mechanics like points, badges, and leaderboards to incentivize positive financial behaviors like on-time bill payments, meeting savings goals, or completing financial literacy modules.*
- *Rewards: Partner with financial institutions or merchants to offer real-world rewards for achieving financial goals within the app.*

#### *Implementing Gamification in Dolfin for Financial Wellness*

- *Goal: Motivate users to adopt positive financial behaviors through engaging game mechanics and rewarding experiences.*
- *Game Mechanics:*
- *Points: Award points for completing specific actions within the app, such as:*
- *Setting financial goals.*
- *Making on-time bill payments.*
- *Transferring money to savings accounts.*
- *Completing financial literacy modules.*
- *Badges: Offer badges for achieving milestones or demonstrating consistent positive behavior, like:*
- *"Savings Starter" badge for initiating a savings goal.*
- *"Debt Slayer" badge for paying off a debt.*
- *"Financial Guru" badge for completing advanced financial literacy modules.*
- *Leaderboards: Implement optional leaderboards to foster friendly competition among users (with privacy settings).*
- *Leaderboards can track metrics like points earned, savings progress towards goals, or debt reduction achievements.*
- *Users can choose to participate or keep their progress private.*

#### *Reward System:*

- *Virtual Rewards: Offer virtual rewards within the app for reaching milestones, such as:*
- *Unlocking new financial literacy modules or educational resources.*
- *Gaining access to personalized financial tips or consultations (simulated).*

- *Leveling up within the app's gamification system.*
- *Real-World Rewards (Optional): Partner with financial institutions or merchants to offer real-world rewards for achieving financial goals within Dolfin.*

*Rewards could include:*

- *Discounts on financial services (e.g., lower loan rates).*
- *Cashback bonuses for using specific debit/credit cards.*
- *Free trials or subscriptions to financial education platforms.*
- *Implementation Considerations:*
- *Balance is Key: Ensure the gamification elements enhance user experience without overshadowing the core financial management functionalities.*
- *Personalization: Tailor game mechanics and rewards to individual user preferences and financial goals.*
- *Optional Participation: Make participation in leaderboards and real-world reward programs optional to respect user privacy and comfort levels.*
- *Progress Tracking: Provide clear visualizations of progress towards goals and earned rewards to maintain user motivation.*
- *Avoiding Predatory Practices: Avoid mechanics that encourage unhealthy financial behavior (e.g., excessive debt accumulation for points).*

*Technical Aspects:*

- *Game Logic Development: Implement the game mechanics (points, badges, leaderboards) within the app's backend using programming languages and frameworks suitable for the chosen platform.*
- *Reward Integration: For real-world rewards, establish secure partnerships with financial institutions or merchants. Integrate APIs or reward management systems to facilitate automated reward delivery upon achieving goals within Dolfin.*
- *User Interface Design: Create an appealing visual interface for the gamification elements, showcasing points, badges, leaderboards, and available rewards in a user-friendly manner.*
- *By implementing a well-designed gamification system, Dolfin can transform financial management from a chore into an engaging and rewarding experience, motivating users to make positive financial decisions and achieve their financial goals.*