Overview

Irresistible deals and discounts offered by retailers and manufacturers all through the year make it hard for anyone to stop from buying a product or service, not necessarily needed. Such indulgence usually leads to overspends, deficit budgets, and in some cases, cuts in expenditure on basic needs. Not a situation we want to end up in, isn’t it? But it is situations such as these that bring to the fore the need to plan and get a better grip on finances in everyday lives. Since financial planning requires a substantial amount of resources in terms of time and tools, digital financial planning that promises minimal human intervention offers an easy, reliable, and secure alternative.

Today, a multitude of digital money management options are available, provided either by financial institutions or niche online money management firms. In this paper, we attempt to make a case for digital financial management by analyzing the need, features that customers should expect from such a solution, and its potential for mass adoption.

Four forces that drive digital financial management

- **Personal financial management is an expensive affair**
  Investment advisors seek fee-based, fee-only, or commission-based compensation for managing money on behalf of their clients. This means that a fee can be levied either on an hourly basis or as a one-time fee for creating a financial plan, and commission calculations depend upon the amount invested. In addition, advisors charge a regular maintenance fee based on the assets managed. A drawback of this arrangement is that sometimes clients are hesitant to share their financial information which acts as a deterrent to financial management. These issues can be adeptly addressed with a secure digital solution to create and manage individual financial plans at no or nominal fees.

- **Mass adoption of internet-enabled devices**
  Increased use of smartphones, tablets, and other internet-enabled devices coupled with the availability of high speed networks are providing an ideal platform for banks to offer money management features across these digital touchpoints. Today’s customers spend more time online to research and buy products. And it does not end there. They review products and services, communicate with customer support, etc., through the online medium. What is more, this trend is not limited to any specific group, customers of all ages use the internet to search for information, collaborate, and remain informed and connected. Adding digital to financial management makes it easier for clients since the content can be accessed and managed with any internet-enabled device.

- **Online banking holds the key to digital money management**
  The early years of online banking included information and transaction-based services such as products and services information, account activity information, and money transfer to serve client’s information and transaction needs. However, with changing internet usage patterns and advancements in Web 2.0 technologies, the internet has begun playing an important social role. Banks are leveraging these growing capabilities to offer advisory, engagement, and other advanced financial services on their online banking menu. It is this radical change in internet banking that has brought about this shift from a service model to an engagement model.

- **Gain trust and confidence**
  Banks want to use digital channels to deepen their existing relationships and build confidence with their customers and not be limited to being another servicing channel. Through a digital financial advisor, customers can gain real-time information on their incomes, expenses, assets, and liabilities. In addition to playing the role of an information aggregator, the digital medium can be harnessed to provide features such as goal-based saving / investing, thereby helping customers reduce their expenses and save for a specific purpose and time period. At the same time, based on the goals, banks can understand the needs of their customers and cross-sell useful products.
Digital financial manager (DFM) is essentially a tool which provides a consolidated view of one’s financial standing while assisting in prudent financial planning. This tool conveys a great deal of information at an aggregate as well as a granular level. An ideal DFM solution must have certain standard features that are required to achieve the desired functionality. (Figure 1 and Table 1)

The ideal digital financial manager

**Account Management**
- Account and Transaction Summary
- Investment Portfolio Summary
- Income and Expense Tracker
- Networth Tracker

**Analysis**
- Expense Analysis
- Cash Flow Analysis
- Budgeting
- Alerts
- Peer Comparison
- Custom Reporting

**Planning and Execution**
- Self-Help
- Expert Advice
- Trade and Investment Platform
- Customer Support
- Document Inventory

*Figure 1: Key Features of a DFM solution*
<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
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<tbody>
<tr>
<td>Account and Transaction Summary</td>
<td>Provides a list of accounts a user has aggregated into the DFM solution with account-level information such as account number, name, balance, opening date, etc. For each of these accounts, historical transactions categorized under various heads are available for the user to view.</td>
</tr>
<tr>
<td>Investment Portfolio Summary</td>
<td>Provides a list of user-added investment options like CDs, mutual funds, stocks, equity-linked instruments, etc. Also tracks as-of-date value, increase / decrease percentage, number of units, etc. Provides drill-down function which lists individual trades such as buy or sell, dividend payout, bonus payout, etc.</td>
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<tr>
<td>Income and Expense Tracker</td>
<td>Provides graphically represented information with aggregate values on transactions categorized under income categories such as salary, interest, commission, etc., and under expense categories such as groceries, telecom, dining, etc.</td>
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<tr>
<td>Net-Worth Tracker</td>
<td>Displays user’s financial standing across savings and investment less the outstanding liabilities and expenditure. The user can track increase or decrease of net-worth over a historical period of time.</td>
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<tr>
<td>Expense Analysis</td>
<td>Allows the user to compare expenses across various expense categories on a period scale, subject to the limit of historical data available.</td>
</tr>
<tr>
<td>Cash Flow Analysis</td>
<td>Allows users to find out their cash position, historical or future. Historical cash position is calculated on actual values. For future value, category-level aggregate values are extrapolated based on the users’ spending habits, cyclical expenses (such as holiday season, premium payment dates, tuition fees, etc.).</td>
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<tr>
<td>Budgeting</td>
<td>Allows users to set monthly budgets for each category. Thresholds can be set to send alerts to user-defined media with customizable content.</td>
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<tr>
<td>Alerts</td>
<td>Help the user to keep their financial planning on track. Alerts are broadly categorized as dues, notices, and warnings. Examples for each category in the same sequence are insurance premium due, large withdrawal, and overdraft warning. Users have the flexibility to choose a threshold value.</td>
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<tr>
<td>Peer Comparison</td>
<td>Allows users to compare their spending across different expense categories with people from the same age group, geo-location, income level, etc. This provides the user with a holistic view and assists in better financial planning.</td>
</tr>
<tr>
<td>Custom Reporting</td>
<td>Apart from the regular reports sent out by the DFM solution, it allows users to download reports for various calculations done in financial widgets with the flexibility of a user-defined period.</td>
</tr>
<tr>
<td>Self-Help</td>
<td>Discussion forum as a platform is made available to users to interact with fellow users. Such platforms enable users to help each other get a better perspective in financial planning and execution.</td>
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<tr>
<td>Expert Advice</td>
<td>The modern day DFM solution offers a service whereby users can interact with financial advisors to get an expert opinion on financial planning. These advisors can also assist in executing the financial plan. Through this feature, the user can book an appointment and initiate a call with the advisor. Also, banks and financial institutions can leverage analytics for building and cross-selling customized products and services to their customers.</td>
</tr>
<tr>
<td>Trade and Investment Platform</td>
<td>Nowadays, DFM solutions are integrated with trading platforms. Using advisors, the user can initiate trades through this option. Alternatively, users can provide rights to their advisor who on their behalf can initiate and track trades akin to the financial plan.</td>
</tr>
<tr>
<td>Customer Support</td>
<td>Helps users address issues they might be facing with any feature or functionality of the DFM solution. Users can choose the media of their choice such as web, telephone call, or text.</td>
</tr>
<tr>
<td>Document Inventory</td>
<td>Allows users to maintain an online safe repository for confidential documents. Right from digital signature, trade receipts, deposit acknowledgements, to soft copy of education certificates, CDs, etc., are stored in this online safe deposit vault.</td>
</tr>
</tbody>
</table>

Table 1: Description of Key Features
Three main components of an effective DFM solution

- **Consolidated account management**

A DFM solution provides users with a consolidated view of their accounts. Most DFM solutions provide a dashboard view to the users with financial widgets like account summary, transaction summary, investment portfolio summary, etc.

To this end, DFM solutions use account aggregation technologies (screen scraping and data feed). Users can aggregate account and transaction-level data for account types such as savings, checking, credit card, mortgage, loans, investment, etc. A few DFM solutions also allow users to add rewards or miles accounts and make them available in a consolidated view.

The accounts added from various financial institutions are classified based on their type and treated accordingly by the DFM solution. For example, transaction categories of accounts classified as personal checking account differ from that of small business checking account.

Transaction categorization is an essential component of the DFM solution. An effective DFM solution relies heavily on correct transaction categorization. Aggregate values in transaction categories are used in expense analysis, ascertaining cash position, budgeting, and so on.

Dashboards are highly customizable in terms of layout, and look and feel to suit different customer categories. In addition, financial widgets available on the dashboards are customizable for size, location on the dashboard, and pinned/unpinned status. This ability provides users with additional flexibility to arrange the dashboard according to their needs.

The user’s financial data is displayed in graphical format with appropriate use of graphs and charts. This way more information is represented on the screen with minimum screen real estate in an effective way (Figure 2).

![Dashboard providing a snapshot of all the bank accounts](image-url)
Financial standing

Apart from representing a user’s financial data in a consolidated view, a DFM solution assists users to ascertain their financial standing. Financial widgets such as expense and income tracker, budget tracker, net-worth tracker, cash flow analysis, etc., enable users to accurately determine their financial well-being (Figure 3).

DFM solutions allow users to set alerts for defined budgets. These alerts are delivered to users through various channels such as web application, email and/or SMS based on the customer’s choice and alert priority. For offline analysis, it allows users to download financial reports akin to available financial widgets (Figure 4).

A few DFM solutions also provide tools such as peer comparison and social discussion platforms, allowing users to compare their financial standing on criteria like age, income, and geo-location. This helps motivate users to plan their spending better. Discussion platforms provide users with the freedom to formulate a better view on options available in financial planning. These tools provide an inclusive approach and are ideal for a DFM solution.

Planning and implementation

A DFM solution seamlessly integrates financial planning with execution. Once the user has determined his/her financial standing with the help of financial widgets provided, options/links are readily available for the user to continue with planning and execution.

Some DFM solutions are tightly integrated with the investment wing of the financial institution. They allow users to opt for either an online discussion with an advisor or fix an appointment to meet in person. Advisors are given, with the user’s consent, a read-only access to the user’s dashboard. This helps the advisor determine the user’s net-worth.
and investment risk appetite, in turn assisting in better financial planning.

Planning also includes goal-setting. Users are allowed to define financial goals with parameters such as target amount and time frame to achieve the set target. Financial widgets are provided to track defined goals and set reminders available on the DFM’s dashboard (Figure 2).

Further to planning, a few DFM solutions integrate with trading and investment platforms. This allows users to execute trades and invest in options available seamlessly through the DFM’s interface. For tracking, these trade and investment platforms provide DFM’s financial widgets with regular updates, which in turn help users to track progress of their financial plans.

Strategy for quick adoption

- **Understand the financial management needs of the customers before rolling out the solution**
  
  Banks and financial service firms must focus on understanding the financial management needs of their customers based on demographic and online banking usage patterns. Key features such as dashboard view, account aggregation, etc., should be a part of any standard solution. But to ensure adoption of these solutions, banks must take a step further and listen to their customers to understand their needs, challenges, and factors for creating a seamless digital financial management experience. In addition, the products that banks offer as part of their cross-sell strategy should be customized, based on customer needs helping them to achieve their goals.

- **Provide training to employees and educate customers**
  
  Before the rollout, the staff must be trained to educate customers, create awareness about features of the new solution, and to address any possible queries. Until the customers are receptive and confident about the new solution, the DFM may not be able to achieve its potential benefits.

- **Financial institutions should focus on making digital financial management the focal point of their online banking strategy**
  
  Offering services and features in customer service models is no guarantee of success in online banking as almost all banks offer similar features with insignificant variations. Instead of delivering the DFM solution as a link to a new page or a separate section, integrate it with the landing page for the customer as soon as he/she logs in with internet banking credentials. For example, once a customer logs in, the home page of the bank’s internet banking website should display a dashboard with all the information of his/her current financial condition to keep him/her up-to-date. This will ultimately help the bank in getting its customers utilize and embrace the benefits of digital financial management.

- **Provide financial advice online and help them achieve their goals**
  
  Features such as ‘online chat’ and ‘call an advisor’ should be available to provide the human touch when accessing the DFM solution. Consider this example: a customer gets an attractive loan offer to buy a car as a cross-sell opportunity by the bank and opts for the loan offer. In this case, the DFM solution should provide real-time information on existing loans, financial obligations for short- to medium-term, or any goals in progress, and how the new loan fits in the scheme of things. If the customer is unable to decide, he/she should be able to chat or call an advisor so that an informed decision can be made. This will help instill trust and confidence in customers thereby leading to a long-term relationship.

Conclusion

Today, a major guiding theme for online banking strategy is providing DFM tools on the banking website or creating separate DFM websites. This is key to competing with third-party account aggregation websites. With the help of social media tools, banks integrate account aggregation applications, and provide widget and mashup features on their websites. The addition of these features increases the value of internet banking as a retail delivery channel.
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