

# FinTrack: A No-Code Automated Platform for Personal Finance Management

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## ABSTRACT

Personal financial management is needed for financial security, savings, and effective decisions. However, the manually operated methods of income and expenses are tedious, time-consuming, and often inexact. Most of the existing exigent financial tracking software requires the manual re-entry of incomes and expenses, or limits advanced features for premium users, both of which tend to lessen penetration to the market by the general public. FinTrack offers a no-code, totally automated approach to personal finance by innovative use of all sorts of cloud software integrations. SMS/wireless banking alerts or e-mail from the banks are parsed by using Parseur to the financial institution, and the specific transactions are moved interactively to Airtable. The related data is supplied automatically and processed into information, and made available through different clouds via Zapier automation software between the various apps. The ultimate finance is visualized by various apps, so that the FinTrack app is automated. The financial data is visualized by Google Looker Studio by Coupler.io data visualization software, giving manufactured financial dashboards that show income, expense, and trending types of spending statistics and trends by type in real-time. Through corporate semi-automated or subscription-based formats of expense tracking, the personal FinTrack software is offered free, with total automation, and right from any device, with no programming needed by the user. FinTrack is also suitable for students with limited funds to own types of businesses with complex financial products available. The FinTrack financial product automates the entire financial product chain of useful, competent financial management by no-code enabled software platforms, inducing money knowledge, accuracy in the money process, and meaningfulness of data generated, allowing development of sustainable financial behavior for self and more learned economic decision making by the users of this improving product.

**Keywords** — Personal Financial Management, No-Code Platforms, Expense Tracking, Automation, Data Visualization, FinTech.

## 1. INTRODUCTION

The effective management of individual financial matters is a vital way to attain

financial stability, to improve savings, and to construct an adequate basis on which to base daily decision-making. The proper recording of financial transactions will enable

individuals to ascertain their methods of expenditure, to identify inessentials, and plan for future investments and liabilities. Nevertheless, in spite of its great importance, the fact remains that few keep proper records in a consistent fashion. Research studies have found that most individuals, after a few weeks of recording their expenses, will forget it because of the monotonous and tedious task of recording the same items over and over again [1]. The normal means of recording financial transactions by means of spreadsheets or notebooks is not only time-consuming but also very prone to human error, and hence, often inaccurate reports and poor budgeting results [2].

These problems have given rise to several new mobile and web applications, such as Mint, Walnut, MoneyView, etc. These applications claim to simplify the management of financial affairs because of their capabilities to combine automation with digital management. However, the inherent necessities of voluntary use by the customer, limited input alterations, and subscription methods of obtaining services invariably mitigate against their durable use and possibility of being utilized by the layman [3]. Most of these products are built via traditional programming systems, requiring frequent technical updating, making it difficult for non-technical users to keep up.

FinTrack was conceived and built as a full-stack personal finance management application. The outcome is a combination of no-code tools Parseur, Airtable, Zapier, Coupler.io, and Google Looker Studio working together to deliver a smooth, end-to-end automated expense tracking pipeline. You can obtain transaction details from SMS and email alerts in real time, automatically parse, store, categorize, and visualize them with zero manual effort. This automation minimizes

duplication, reduces human error, and provides users with a constantly updated view of their finances.

In addition, FinTrack is built to be user-friendly for novices, while also allowing simple solutions to be extended into more complex automation workflows by experienced users. Users can check their money anytime, anywhere, on any device, be it iOS, Android, or Windows. FinTrack bridge the gap between no-code personal finance management offering ease of use and a powerful cloud-automated experience, which fosters financial literacy and accountability, with transparency of data for its users.

## **2. LITERATURE REVIEW**

The space of personal finance management has also seen the rise of digital tools to facilitate and improve recording the income and outgo of users. Devices such as technology demonstrations can be utilized to help improve financial literacy and encourage good budgeting habits in expense management apps. This is in the name of services provided by Mint a known brand in the United States offering an all-in-one solution to expense tracking, transaction-categorizing, and financial dash-boarding, suited to the U.S. market [3]. Walnut, too, which is popular in India, focuses on clean expense tracking by automatically fetching transactions and giving bill reminders [4]. MoneyView goes a step further by integrating both expense tracking and lending services, providing users with a more holistic view of their financial health [5]. While useful, these applications do come with some drawbacks. Most require you to input data manually, don't allow you to customize very much, or even take some features behind paywalls, which may make them less accessible and convenient for users in general.

Verifiable evidence has shown that immediate feedback and a structured format are both useful in improving budgeting behavior [6]. Visualization tools provide insight into spending, allow for identification of superfluous spending, and use the information to make financial decisions. At the same time, expense categorization, such as fixed and discretionary spending, allows you to analyze expenses in a more organized way and also look further ahead. However, the solutions are often provided separately for automation and visualization. Some applications allow you to log expenses automatically but without visual, dynamic reports, or require you to enter data manually in interactive reports [7]. Such fragmentation can reduce the impact of financial management tools because users have to jump between different applications or manually pull all the data together to get a complete view.

Recently, no-code has been touted as a great alternative for constructing custom financial automation. Airtable offers a very flexible database structure that can be used effectively to store and organize financial information. Using Zapier, you can automate all repetitive tasks, such as when a record is updated or when you want to send notifications, while Coupler.io lets you integrate data pipelines with just a few clicks without writing code [8], [9], [10]. Based on the combination of all these no-code tools, you will be able to develop scalable, inexpensive, and totally automated systems to keep up with your personal finance tracking. Users can customize workflows, automate repetitive tasks, and bring visualization into one place without the boundaries imposed by traditional apps and without stepping into code-driven solutions.

Overall, the literature indicates that although

traditional personal finance applications have established a foundation for digital money management, the integration of automation, visualization, and no-coding is considered as the next stage that can render financial tracking more intuitive, accessible and actionable for a wide range of users.

### **3. PROBLEM DEFINITION**

Managing your personal finances is the foundation of a stable and growing economy, but most of the systems for tracking them are lacking when it comes to real world usability and the truth. Manual and semi automatic tracking methods are prone to human error due to inconsistencies and oversight. These systems are usually so cumbersome that most people seldom keep track of all their financial dealings, which can easily lead to incorrect accounting, poor fund management, and improper budgeting decisions [2, 6].

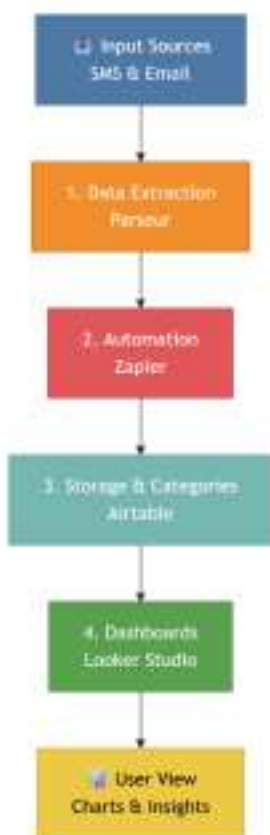
Subscription-based applications provide some degree of automation and advanced functionality but are invariably accompanied by considerable drawbacks. Often, high costs and restrictions on key functionality make them unsuitable for a wide group of users, especially those sensitive to budgets or those who value flexibility in managing their finances. The complexity of the interface and the requirement for a certain level of technical knowledge act as further barriers to adoption.

Hence, the fundamental problem is that there is no simple, inexpensive, fully digital instrument that can capture high-fidelity information about transactions, organize expenditures systematically, and provide real-time, actionable insights without needing a lot of technical skill. Solving this gap will also help users sustain orderly financial behavior, improve savings, make informed choices, and bring convenience to accuracy in managing

personal finances.

#### 4. METHODOLOGY

The FinTrack is an end-to-end automated no-code solution that enables you to track your personal finances accurately and seamlessly along with scalability and real-time access. The approach focuses on four main entities, which concatenate to form a single pipeline for ingesting, processing, and displaying data:



##### 1. Data Extraction

In this step, the transactional data is captured exactly from multiple sources, e.g., SMS and email receipts. Parseur, a specialized parsing solution, is used to parse our essential transaction details the date, vendor, transaction amount, and other metadata [8]. This tool uses the pattern-matching and parsing rules that can be customized to convert unstructured financial data into a structured format that can be read by a machine. This eliminates the

possibility of human error for manual input and allows data acquisition in near real-time.

##### 2. Automation and Data Storage

Once the transaction data has been extracted, Zapier automates the transfer of information into Airtable, a flexible cloud-based database [9]. This stage eliminates the need for manual intervention in data handling, which ensures that financial records are continuously updated and organized. Airtable provides the backbone for storing structured data with support for relational organization, search, and integration across other platforms.

##### 3. Categorization

To help with analysis and allow for meaningful insights to be developed, financial entries are grouped. The keyword based rules engine of Airtable assigns expenses to pre-built categories such as transport, utilities, food, entertainment, and others. This kind of categorization, too, makes for a uniform monitoring that enables users to have a quick overview of how they spend their money and where to look for possible budget cuts. With the automation of categorization, FinTrack also eliminates user cognitive load and makes financial data uniformly structured and actionable.

##### 4. Visualization

The last step is to make the data easy to understand and interact with. Airtable is integrated with Coupler.io to import Airtable data to Google Looker Studio, which is useful to create live dashboards to visualize expenses. With dashboards, even non-technical users can interact with their financial data, drilling down through graphs, charts, and trend analysis to uncover insights at a glance. The integration guarantees that all visualizations are updated in real time as new

transactions are added, enabling financial decisions to be made on time.

This cloudy approach secures a device-independent access where users can check their financial status from smartphones, tablets, or desktops with lightweight latency.

**5. RESULTS AND DISCUSSION**

The development, deployment, and evaluation of the FinTrack system confirmed enhanced efficiency, accuracy, and user experience in personal finance management. Quantitative assessment showed that the system introduced about 90% of labor saving compared with the conventional method of using spreadsheets. This dramatic saving in human efforts highlights the benefit of automatic data extraction and cloud-based workflow management to reduce repetitive operations and potential human mistakes.

**Accuracy** The automatic spending classification was about 85% correct, and depended on that spend somewhat reliability on the classification into most spending classes, such as transportation, utilities, and food. While not perfect, this level of accuracy means that users can gain useful insights into their spending patterns, for better budgeting and financial planning.

Visualization with Google Looker Studio dashboards was also instrumental in helping users to understand their financial behaviour. Interactive graphs and trend analyses made it easy to see patterns in spending, areas where the budget was exceeded, and where money could be saved. Responses from students as well as other participants indicated that the application enhanced their knowledge of personal finance and that they felt more confident about budgeting, thus emphasizing the educational as well as pragmatic benefits

of the system.

Nevertheless, FinTrack has several limitations. It depends on the standardization of bank SMS and email notification which may differ from bank to bank and might hamper the extraction of information automatically. The system also requires the use of an active Internet connection, which makes it inaccessible when offline.

In terms of future work, there are many more opportunities to improve the system using machine learning. Predictive budgeting models can predict spending patterns, and adaptive transaction categorization can adapt to changes in users’ finances over time and become more accurate by learning from users’ corrections [7]. These future directions suggest that FinTrack promises not to be a one-size solution that fits very well but expects data intelligence and user requirements to keep growing to become a much higher platform.



Fig.1 shows the FinTrack Dashboard, which shows current financial information, debit and credit information on a merchant-specific basis, financial flow on a bank-specific basis, and a summary table showing the aggregate of categorized expenses and income as furnished

by the system

## 6. CONCLUSION

FinTrack system proves the viability of no-code automation in personal finance management with the joining of a Parseur, Airtable, Zapier, Coupler.io, Google Looker Studio and others tools. The end result is a platform that provides a low cost, high precision, easy to use solution with minimal manual input and which allows for real-time monitoring, categorizing and visualization of financial data. FinTrack helps foster transparency and informed decision-making in finance with increased affordability by reducing the barrier to repetitive data input.

Rather than efficiency gains, the project demonstrates how routine jobs can be flowed as automated, structured, and programmatic workflows using no code tools. FinTrack brings the management of your finances a step closer to convenience and also proves that technology focused on the user can help promote

financial literacy, positively encourage disciplined budgeting, and assist the masses in making smarter financial decisions. This is a method for bringing automation to day-to-day activities that offers a sneak peek at how digital solutions can blend accessibility, utility, and educational value in a single, enclosed product.

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