

# Mood Spending

Client: Royal Bank of Canada

## Introduction

We are excited to talk to you about an update for the RBC bank app called Mood Spending which can help your customers to track their purchases using this special app's handy and user-friendly tools based on their emotional and mental state. Customers that use Mood Spending find it easier to control their spending, stick to their spending plan, and manage their money. Your customers can use Mood Spending to get the tools and knowledge they need to make wise financial decisions, regardless of how they are feeling—happy, sad, furious, or anxious.

Mood Spending is the ideal solution for handling your finances while on the road because it includes features like mood monitoring, analytics, budgeting, and connectivity with RBC Bank accounts. Start utilising Mood Spending right away to gain unprecedented financial control!

Here are some Key benefits of Mood spending Update on the RBC app:

Financial awareness is raised thanks to Mood Spending, which offers users an advanced technology tool to track their purchases and better understand their spending patterns.

Better budgeting: Mood Spending's budgeting and expenditure reminder feature assists users in staying within their spending limits and avoiding overspending.

Convenient and consumer-friendly: Mood Spending is the ideal tool for managing your expenses while on the go. It is a smartphone app that is simple to use and available from anywhere.

Dependable and safe: Mood Spending makes sure that customer data is secure and always accessible when needed by encrypting it and storing it securely.

Encouragement and incentive: Mood Spending offers rewards to consumers for hitting their spending targets, assisting them in maintaining their motivation, and staying on top of their money.

Growing customer involvement and satisfaction: Mood Spending promotes customer engagement and happiness with RBC Bank's goods and services by offering consumers a distinctive and innovative solution.

Mood Spending, a fresh RBC Bank offering, contributes to the bank's increased brand recognition and distinguishes it from other banking institutions.

So, it is a great opportunity for RBC to invest in the future of its brand and establish itself as a thought leader. With the looming inflation and people's inherent need to save, Mood Spending will be a game changer. So, partner up with our team and you will get innovative solutions and all-around support.

## Process description

This app is built for you and it would allow your customers to track their purchases and also track their moods or feelings when they made those purchases. On a regular basis, they would be able to keep a check on their spending which will guard them against overspending and falling into debt.

These days, we are surrounded by advertisements that tell us that we should be materialistic to get some happiness in our lives. Every time someone goes into a mall, they get tempted to buy the latest trends or get something that they do not own. In the worst-case scenario, they might shop impulsively and end up investing in products which they might not even need. RBC could help such customers by preventing the loss they face when making such purchases. The process would be simple and does not require much additional effort. The customer will be asked to provide feedback at the end of their purchase through a pop-up. They can then label their mood on the app. This data is collected throughout the month and the analysis is presented to the customers at the end of the month. Now, how does this prevent people from becoming compulsive shoppers?

Let's understand this process in a bit more detail and get to know about its features.

**Collecting Data:** Every time the user makes a purchase, they would be asked to provide data about their mood during the purchase. The user could do this immediately after the purchase otherwise they will be inquired about it whenever they use your application. The data would be collected that would help to categorise the type of purchase they made and how they felt about it. For Instance, how your customer felt when he/she did the grocery shopping.

**Tracking your Spending:** This Information that is collected during the daily expenditure of your clients would help them in keeping a track of their daily spending. So they would not have to do this task manually which could save them a lot of time and reduce the amount of effort they need to make to resist unnecessary extravagance. They will be able to view their purchase history along with the mood associated with every purchase.

**Monthly analysis:** This feature would be very beneficial to your customers who are dealing with some issues and having a hard time realising that their mental condition is reflecting upon their shopping pattern. As they fail to realise this while they go on a shopping spree, they might end up falling into debt. The monthly report that will be populated once every

month using the information gathered would help your client to reflect upon their situation beforehand.

Ergo, through these attributes of your application, your clients might be able to stop themselves from becoming a compulsive buyer and spend their money wisely. In this way, this application is not just beneficial to you but also to your customers.

## Solution Description

In this new day and age, we can't deny that people are becoming more and more aware of how their spending affects their day-to-day lives. Whether a purchase can provide them with a feeling of relief or a feeling of anxiety, or if it's a purchase that they are going to be proud of for the whole month because they've saved up for it. This has now become normal. The purchases that we do every day can greatly affect our mood. However, this also means that purchases can be made when they're angry, or on an impulse which greatly affects their monthly spending. This is normal, but the problem now is that it's becoming harder for these customers to track the reasons behind their purchases which in turn becomes a spending spree. These spending sprees can give them higher anxiety to check their bank statements every month. This leads to them not keeping track of their payments resulting in even more debt, credit or otherwise. And everything just starts to spiral from there. The question now is, how do we prevent these customers from spiralling down this path and how do we make it beneficial for the Royal Bank of Canada (RBC)?

With this in mind, we are developing an application that provides customers with an opportunity to label the purchases they've made based on their mood after each purchase. Your customers will be connecting their RBC mobile account to this application to start tracking these purchases. Every time a customer makes a purchase which is reflected in the

RBC mobile app, a pop-up will show for the customers to label the mood they felt when they spent \$100 in Shoppers Drug Mart after work on Wednesday to do their necessity shopping day. Now, how? How will this application start to track the moods of the customers on each purchase? The process was for the customers to provide feedback of some sort on each of the purchases they made. We thought of different ways to make this more fun for the customers than an obligation because, at the end of the day, the goal was to lessen their anxiety when they are looking at their monthly statements.

So what comes to mind when we talk about mood? Star? Maybe an emoji of some sort? In the end, our team decided to give them an opportunity to label their moods themselves as we don't want AI to guess real people's moods. It can be intrusive, inaccurate and worse of all, it can be insensitive. As mentioned, whenever a purchase is reflected in the RBC app, the customers will be prompted about the purchase they have made and ask them to label what mood they were in when they made that purchase. After they answer, this data will be collected and analysed based on our internal indicators. Each criterion will be labelled into a specific mood and at the end of the month will be presented to the customers in able to reflect on their spending.

## Strategy Description

Our approach to addressing the Mood Spending issue involves implementing a medium that functions as feedback. Our idea is a nuanced way through which your customers feel secure while entering their data on the app. Based on their response, the system will categorize the spending. We have intentionally avoided making assumptions about the customers' mood as it could be intrusive and inaccurate. We also recognize that assigning this task to an AI can feel impersonal and insensitive. Our aim is to simplify our customers' lives and not put them off with overly complex or invasive systems.

This new system will allow us to understand the mood of your customers while they spend their money through RBC bank. They will participate by sharing their mood for each spending, and at the end of the month, we will be able to generate a statical report on their mood, through cards or mobile transfer.

This new system will also be able to make good suggestions for spending more or less on things using the client's data. This will not only be a good opportunity to team up with other brands but also gain plenty of insights for new customers as they will be excited to see their mood results at the end of every month.

## Audience Description

Introducing the Mood Spending feature in your app can not only help your clients make more informed spending decisions but can also increase ease of use and customer loyalty. By offering personalized recommendations based on their spending habits and mood, your clients will feel like the bank truly understands their needs and wants.

For example, let's take John, a 35-year-old dentist, with high spending and an equally high monthly income. By using the Mood Spending feature, they can see how their mood impacts their spending, and get suggestions for future purchases based on their past behaviour. This easy-to-use feature can help build customer loyalty by showing that the bank cares about their overall financial well-being, not just their money.

The Mood Spending feature can help them reduce unnecessary spending and make wiser decisions when it comes to luxury purchases. By recommending high-quality, but less expensive alternatives to big brand names, they can still get the items they want without

overspending. This can increase ease of use and customer loyalty by showing that the bank is committed to helping clients make smart financial choices.

Finally, let's take Jane, a 40-year-old architect, who earns well but doesn't spend much on things that make her happy. The Mood Spending feature can help her increase her happy spending and enjoy more pleasurable activities. By providing subtle suggestions for dining out at high-rated restaurants, they can experience a more personalized and enjoyable banking experience. This can lead to increased customer loyalty and ease of use, as clients feel like the bank understands and caters to their unique needs and preferences.

Overall, the Mood Spending feature not only benefits clients by helping them make more informed spending decisions but also benefits the bank by increasing ease of use, customer loyalty, and demonstrating a commitment to their financial well-being.

## Content

With inflation rising, now more than ever, people want to track their spending. While there are some apps in the market that can help customers, simplicity and credibility may be debatable. Customers choose to not integrate their financial details and hence they end up missing opportunities to track all of their spending. We have come up with the perfect solution to the problem. Along with it, we have also figured out new ways to leverage it to get potential clients. It all starts with a simple idea. An app that will help users track their spending habits and give them incentives when they achieve their goals.

First, we will launch an app specifically made by RBC. This will instil trust in customers because of they have an inherent trust in the brand. By leveraging the faith customers have in RBC, we can fill the obvious gap in the market with an app that helps customers track their purchases depending on their moods. There will be customizations at many touchpoints in the app journey and insights in the form of infographics that will make it easier for your customers to track their spending.

It will also give your customers an intuitive experience. The homepage taxonomy will make the customers' journey seamless as they navigate the moods of their purchases. The content in the app would tie in with RBC's brand values. The app would not only provide customers with insights, but it will also allow them to monitor their spending thus helping them to save more.

In conjunction, we have identified several opportunities for RBC to create an everlasting impression. This will not only make you the leader in the industry but will also help you reel in more customers due to its lucrative benefits. The data gathered by tracking purchases as per your customers' consent would in turn provide great brand loyalty and recognition thereby creating substantial growth opportunities. This app is an incredible opportunity for the Royal Bank of Canada to grow its market share and turn existing customers into loyal ambassadors.

## Interaction

Banks should know about their customers' mood spending because it can provide valuable insights into their financial behaviours, preferences, and attitudes. By understanding how a



customer's mood affects their spending habits, banks can offer personalized financial advice and services that better meet their needs.

As professionals, it is our goal to ensure that the Mood Spending app we develop is easy to understand and use for all customers. We understand that financial management can be complex and overwhelming, and our aim is to simplify the process and provide an intuitive and user-friendly interface.

To achieve this, we will employ a user-centred design approach, which involves gathering feedback and input from customers throughout the development process. We will also conduct user testing to identify any areas where the app may be confusing or difficult to use and make the necessary adjustments to improve its usability.

Furthermore, we will incorporate best practices for design and usability, such as using clear and concise language, providing visual cues and feedback, and minimizing the number of steps required to complete tasks. By prioritizing ease of use in the app's design, we believe that we can make financial management more accessible and engaging for all customers, regardless of their level of financial literacy or experience.

## Constraints analysis

Now let's dive into technicalities. Constraint analysis in the context of Mood Spending refers to a method of understanding and managing the limitations or constraints that impact the

spending behaviour of an individual or a household. This type of analysis helps us identify various limiting factors that prevent someone from spending in the way they would like, and help us find ways to manage these constraints so customers can improve their financial well-being.

Some examples of constraint analysis include income level, employment status, debt levels, living expenses, family responsibilities, and personal preferences or habits. Once we have identified these constraints through the app, customers can explore different strategies to manage or overcome them. This can include finding additional sources of income or adjusting their budget to prioritise their spending.

The goal of constraint analysis is to help individuals or households find the resources and strategies they need to achieve their spending goals and to help them build a more stable and sustainable financial situation over time.

The system, goals and constraints are always changing, it's important to continuously monitor the system's performance and analyse the constraints to identify new opportunities for improvement. Constraint analysis in the case of mood spending (also known as discretionary spending) can involve several following steps:

**Identify the goals:** The first step is to identify the specific goals related to mood spending, such as reducing overall spending, increasing savings, or reducing debt.

**Identify the constraints:** Next, identify the constraints that are limiting the ability to achieve the goals, such as lack of budgeting skills, lack of self-control, or lack of financial education.

**Prioritise the constraints:** Once the constraints have been identified, prioritise them based on their impact on the goals.

Develop solutions: Develop solutions to remove or mitigate the constraints. These solutions may include budgeting tools, financial education, or creating a savings plan.

Implement the solutions: Implement the solutions and monitor their effectiveness over time.

Types of constraint analysis in the context of personal finance and spending:

Income Constraint Analysis:

This type of analysis looks at the constraints imposed by your income. It involves evaluating your monthly or yearly income and then setting limits on your spending to ensure that you live within your means.

Budget Constraint Analysis:

Budget constraint analysis involves creating a detailed budget that outlines your expected expenses and income. This analysis can help you identify areas where you might be overspending, and find ways to cut costs and save money.

Time Constraint Analysis:

Time constraint analysis in personal finance involves examining the amount of time you have to work and earn money. This analysis can help you set realistic financial goals and determine how much money you can save or spend in a given period.

## Budget

You can find the breakdown of the budget below. After much deliberation, we have mapped out the entire budget according to the task list that will be required to build the Mood Spending app.

Budget item	Amount (\$)
Interaction	124,000
Content	53,000
Development	107,000
Deployment	66,000
<b>Total</b>	<b>350,000</b>

## Timeline

To show you how the app-building process would progress through the weeks, we came up with a timeline. This includes tasks that the team would need to perform in order to successfully launch the app. As our clients, you will have access to a much more detailed timeline and a list of actionable items when we start this project together.

Week → Task ↓	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Interaction																	
Content																	
Development																	
Deployment																	
Final phases																	

## Conclusion

In conclusion, RBC Bank's Mood Spending app is a highly beneficial and unique tool that has several advantages for both clients and the bank itself. Customers can use the app to track their spending, create more effective budgets, and acquire a deeper understanding of

their spending patterns. Customers can make better financial decisions, prevent overspending, and reach their financial goals with the aid of this app.

Mood Spending is a potent new tool for RBC Bank to boost client engagement and happiness. It demonstrates to the customers RBC's dedication to innovation and outstanding service, by providing an advanced app that provides value and information. This app will also help RBC Bank stand out from the competition by raising brand recognition.

Additionally, mood spending may result in greater customer loyalty. Users are more likely to be loyal to RBC Bank when they receive a valuable and innovative service, which lowers churn and raises each customer's long-term value. As a result, RBC will grow its overall revenue and position itself as a market leader in the industry. Along with advantages for customers and the bank, we anticipate that Mood Spending can benefit the financial sector, at large.

This app would rebrand RBC as more than just a banking app. It will show your customers that you are willing to go the extra mile to help them keep a track of their spending. Your customers will be able to link their RBC account with the app to easily track their expenses. The Mood Spending app would let customers keep track of their expenses smartly by letting them select the mood they are in when they make a purchase.

The app might encourage other banking firms to engage in comparable tools by showcasing the importance and impact of advanced technologies in personal finance, fostering more innovation and advancement throughout the entire industry.

This app is an advanced technology which is a useful tool that provides a range of advantages for both customers and the bank. Mood Spending is ready to transform the world of personal finance with its unique approach to tracking expenses based on mood, advanced features, and a consumer-friendly design. It will also help RBC Bank grow by increasing customer engagement. So join hands with us to successfully create an app that make your customers' life better through data and insights.

## Team description

**Gahee Choi**, a versatile professional with a background in computer science and civil engineering. She is currently pursuing Web development studies at Humber College, where she is acquiring the necessary skills and knowledge to excel in this dynamic industry With a strong foundation in problem-solving and critical thinking.

**Mary Louise Abrena**, a Web Developer student at Humber College, honing her expertise to excel in the tech industry. She found her passion in building websites from frontend to backend by creating websites using templates from Squarespace, Wix and WordPress for small businesses and grassroots organisations she was part of.

**Devki Choudhary** is a Content Strategist with over 4 years of experience in brand strategy, social media analytics and brand management. With her extensive knowledge and her passion to get the best results, she ensures that every project is a success.

**Navdeep Kaur** is a Web development student at Humber College with a computer engineering background who now aims to become a full-stack developer. She is passionate about coding and her ability to identify problems, brainstorm, analyse answers and implement the best solutions is what drives her towards her goal to flourish in this field.

**Nency Modi** is a Web developer student at Humber college with 6 years of computer engineering experience capable with many computer languages like java, c, c++, HTML, etc. she is ambitious and goal-oriented with more than 3 projects she undertook as part of her assignments, she is capable in generating good outcomes with her best inputs.

**Gajendra Suwal**, is a web developer with a decade of Electronics engineering background experiences, who is fond of bringing the designs to life by writing code. He is a person with growth mindset, always looking for ways to improve and takes each failure as a gem of success.

**Azmat Pathan** is a dedicated and effective full-stack developer with 3+ years of experience in application layers, presentation layers, and databases. Passionate to explore and learn new technologies. Seeking a challenging position that will enable me to create, implement and innovate new dimensions. Longing to expand my knowledge and contribute to the short and long-term goals of the organization by utilizing my technical and managerial capabilities