



Cashflow Forecaster

Business Report : Team Steak

Concept Outline

Purpose

The main purpose of our Essentials add-on, Cashflow Forecaster, is to help SMEs visualize their cash balances and cash inflows and outflows. This is to help prevent small businesses from being out of cash in the short term late payments or unexpected expenses and entering unarranged bank overdrafts. We want to create warnings for days when the business should run out of cash or when being positive cash is dependant on on-time payments. The user interface needs to be highly intuitive so it is suitable for untrained or non-technical users, aligning with Essentials' design philosophy.

High Level Description

The Cashflow Forecaster will provide a colour coded calendar populated with expected payments (cash outflow) and invoices due (cash inflow) from MYOB Essentials. The days on the calendar will be colour coded from plain (no added colour), to yellow and red which indicates the state of cash balance on the calendar date. No colour represents positive cash balances or above a minimum threshold set by our user. Red represents negative cash balance or below the threshold set by our user (when the day's cash outflows are greater than the sum of the day's starting balance and cash inflows). Yellow represents a day with a critical invoice due, where being cash positive depends on an invoice or invoices being paid on time.

Features

Here are some of the main features which will assist in helping users to diagnose cash flow issues:

- 1) Calendar view of cash balances. Yellow days for critical invoice days. Red days for negative cash balance days.
- 2) Right hand side menu opens when specific days are clicked. It will list the day's transactions and show cash balances through the day with a bar graph.
- 3) Right hand side menu allows emails/text reminders to be sent to overdue invoices.
- 4) The left hand side menus show all the overdue invoices and bills.

Usage

CashFlow Forecaster's target platform is a web application which is run on the cloud, it is projected to cater for both desktop and mobile end users. The add-on is expected to provide a general overview of cash within a certain time period and that it will be used on a daily basis to give the user a projection of expected cash. The user can undertake necessary actions when the calendar notifies them of cash events to avoid negative cash balances and hence overdrafts.

Business Case

It is no secret that cash flow is one of, if not, the largest financial problem for small to medium sized businesses. A Forbes author has even gone to say that "SMEs live and die by the money they make from operational cash flows". Having cash available at all times is particularly a large problem for business facing SMEs who will usually provide anywhere from 14 to 60 days of credit for their clients. This is because the SME may struggle to receive that cash on time as those clients will also have difficulty receiving cash their own clients. On top of that, SMEs which also have to invest in inventory or receive large unexpected expenses. For example independent tradesman who may have to buy materials, parts or tools for urgent jobs. This may leave them temporarily too low on cash for other expected expenses. Poor planning against price changes or for the two large monthly tax payments, GST and PAYE, could also leave the business temporarily out of cash. All these factors create windows of vulnerability because it will force SMEs to accept an unarranged overdraft with their banks, penalizing them a fee of around \$5 for the month (Table 1). Else operations will have to be halted. SMEs will have to further pay interest on the daily average amount borrowed at egregious rates of around 25% per month (Table 1).

If SMEs instead subscribe to an arranged overdraft, they still have to contend against ongoing management fees at a minimum of \$5 per month (Table 1) and will still have to pay high interest rates of around 15-20% (Table 1). If the monthly fees and interest rates on credit cards are also similar except they provide around 50 days of credit instead.

Current Situation

Currently on Essentials, business owners have to click back and forth between invoice and expense pages on the website and calculate a running total up to days with potential cash problems. This not only wastes time but is frustrating for business owners and will lead to less brand confidence.

In terms of other stand-alone Essentials add-ons, Calxa Express also claims to forecast cash flow. However, this cash flow forecaster only outputs a simple line graph of cash balances for the best-case scenario (all payments on time) and worst-case scenario (all payments late). The problem with this is that the best case scenario doesn't actually warn owners of critical payments and leaves them scrambling once the payment is late. The worst case scenario is not usually useful because it is extremely unlikely for all payments to be late. Simply, their add-on does not provide owners enough granularity to diagnose which individual payments will be critical for the business to stay cash positive.

Value Proposition

SMEs can now get organized and avoid overdrafts. Business owners can have peace of mind after a simple look on the calendar for yellow or red days. Financially, entering into any type of overdraft will result in half of the monthly cost of the add-on, in overdraft fees. Interest on the average amount borrowed will likely exceeds the remaining cost of the add-on. The fees and interest on credit cards are similar.

For example if a business is (\$300) in an unarranged overdraft for 5 days in a month, at ANZ's rate of 26.75% p.a., the interest owed will be \$32.98. The business only needs to be in overdraft for (\$230) for one day or (\$45.50) for 5 days for interest owing to be \$5.

Marketing Strategy

Pricing & Free Trials

Our Cashflow Forecaster is targeted at SMEs as a lightweight solution, as a result we are pricing our subscription at rate of \$10 per month which is low relative to all other Essentials-add ons and to the cost of the Essentials subscription itself. This is because SMEs usually have low IT budgets and are happy with less complex solutions. This in addition to a free trial to help allow customers to see the value our application brings before committing to a subscription.

Advertising

Our target audience is all SMEs in Australia and NZ but especially those who provide their clients with credit and/or ones who may have large unexpected expenses or cost of goods sold. Our target businesses are not too small such that the owner can track most payments and costs mentally and hence a demand arises to track payments and costs.

Increasing the resolution of our target audience, Cashflow Forecaster must be suited for independent contractors such as tradesmen, creative and digital freelancers as well as retailers. We expect there to be more Australian business using our add-on than Kiwi businesses.

The main advertising channel is the MYOB add-ons listing page. The main message we want to give our target audience is get organized and avoid overdrafts. Eventually we want to establish our application as an affordable necessity for all growing SMEs in the two countries. See Appendix B for our design.

Architecture Plan

Overview

The user facing site will be a frontend application backed by the React framework. The frontend will receive relevant data via a backend. The backend is backed by the ASP .NET CORE 2.0 framework, which will include an Entity Framework SQL database, and communicate with the MYOB Essentials API. The

entire stack is hosted on the Microsoft Azure Cloud. See Appendix A for a pictorial depiction of the technology stack.

React Frontend

The React framework is a popular web framework backed by Facebook Incorporated. It has excellent documentation and has a large community which means it has plentiful third-party packages to support development.

ASP.NET Core Backend

ASP.NET Core 2.0 is a framework backed by Microsoft. It has been a long standing industry standard and has a wide range of compatible frameworks available. One of which is the Entity Framework that allows for powerful database abstractions by providing a code-first approach and LINQ expression for querying. The backend will retrieve information from the MYOB Essentials API to supply to the frontend, as well as storing historical cash data for cash comparison.

Financial Plan

Initial Development Costs

For this add-on we will require a standard agile development team consisting of six members. One product owner/scrum master, one developer lead, three standard developers and one tester. We plan for this project to be finished across six one-week sprints, approximately totalling to 240 hours per member. Assuming that the developers are paid on a 2,000 hour work year, here are the following costs for each of the team members. Taking the average wage for each role from online sources, the average product owner, lead developer, developer and tester have annual salaries of \$96,000, \$104,000, \$80,000 and \$60,000 respectively, the total labour cost of the 240 hour project will be \$60,000 over the six weeks of development.

Ongoing Overheads

Maintenance

This will require on average a full time tester to maintain and perform bug fixes, costing approximately \$60,000 annually.

Azure Hosting

Two app-services, and one Azure SQL database are to be hosted on Azure. The two standard app-services will cost approximately \$1,800 annually and the database will cost approximately \$4,400 annually, totalling to a minimum of \$6,200 annually, which could increase depending on scaling requirements.

MYOB Partner Payments

Payment to MYOB Essentials will cost \$210 per month as a premium developer partner, resulting in an annual payment of \$2,520.

Overall

Overall, there will be a setup cost of approximately \$60,000 and an annual recurring cost of \$70,000. Resulting in a year one cost of \$130,000.

Financial Projections

As of December 2017, MYOB has 399,000 paying online subscribers which comprise of accounting practices and SMEs who use Essentials or AccountRight. We aim to acquire 300 subscribers to Cashflow Forecaster by the end of 2019 (1 year and 3 months). This results in the first year's revenue to be \$30,000. We hope to gain much more traction in 2020 (year 2) after we take user feedback and perfect the UI and features. We believe we can acquire 2,000 customers by the end of year 2, earning us a revenue of around \$140,000 and our first profitable year at \$65,000.

By year 5 or the end of 2023, we aim to provide for 5000-6,000 subscribers resulting in \$500,000-550,000. Assuming that no more additional engineers are needed for maintenance, we can expect a profit of \$300,000-\$330,000. Financial projections can be very precise but are never fully accurate. These projections are better described as our minimum goals as we will strive to take on as many subscribers as possible.

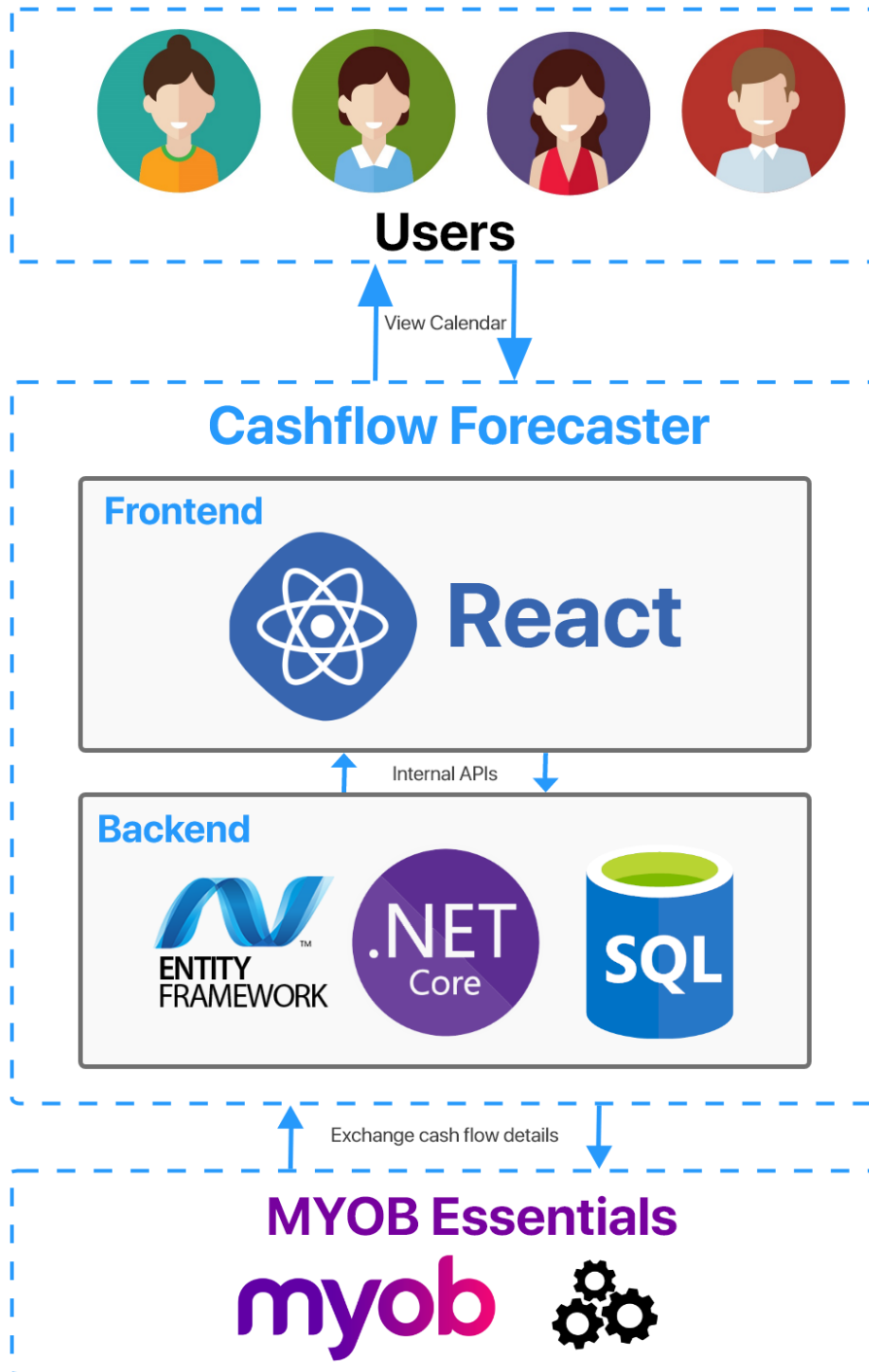
Return on Investment

A net present value analysis (NPV) of our add-on gives us a value of \$2-2.5M. Our key assumptions were that we used a high discount rate of 0.15 which we believe will appropriately account for the risk of the project. After we estimated achieving 5000-6,000 subscribers by the end of 2023 (year 5), we grew subscribers by 30%, 30%, 20% and 15% for the following years in our NPV. We accounted for small increases in maintenance costs due to salary increases and moderate increases in Azure hosting costs. Taxes are calculated at the corporate rate of 28% and the initial loss in 2018 and 2019 will be deducted for 2020. After discounting costs, we arrive at an ROI of 300-350% for the project.

There are 2 important factors we see that will drive Cashflow Forecaster's growth. Firstly, we hope MYOB will list our add-on at the top of the listing webpage. This is because there are many other add-ons and no way to filter down by functionality or even which platform the add-on is for (Essentials or AccountRight etc). If we do not get exposure at the top of the page, SMEs will only see our add-on if they specifically search for a cash forecaster. Secondly, being able to listen to maintain and improve user satisfaction by gathering feedback and adapting the user interface, design and features to suit existing and potential users. This is because the monthly subscriptions means that customers can unsubscribe from the add-on as fast as they can join it.

Appendices

Appendix A - Software Architecture



Appendix B: Add-on Webpage

Browse all add-ons
Related categories ▾

Search add-ons

Cashflow Forecaster

#1 Cashflow Visualisation Software

Cashflow Forecaster

Cash flows visualised

Why you need Cashflow Forecaster:
Cashflow Forecaster is a cash flow consolidation software which provides cash flow awareness for small to medium business owners so that they can avoid unnecessary bank overdraft fees.

Who is Cashflow Forecaster for:
Our Cashflow Forecaster is suitable for any SME, but in particular it is most suitable for those whom frequently provide their clients with credit and/or ones who may have large unexpected expenses or cost of goods sold. No accounting software knowledge required, suitable for users of all range.

- Creative and Digital Freelancers
- Tradesmen
- Independent Retailers

Key features include:

- Calendar view of cash balances. Highlighting of Overdraft and critical invoice days. Yellow days for critical invoice days. Red days for negative cash balance days.
- Breakdown of cash flow on individual days.
- Option to send clients or customers an outstanding invoice reminder via text or email.
- Lists overdue invoices and payments.

Click here to learn more

Developer **Team Steak**

Only \$10/month

Contact & Support

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Website **developer website**

Integration Details

Essentials

Table 1: Business Overdraft and Credit card costs in Australia and NZ

| Bank | Arranged Overdraft | | Unarranged Overdraft | | Credit Card | |
|------------------------|--------------------|--------------------|----------------------|--------------------|-------------|--------------------|
| | Monthly fee | Interest rate p.a. | One time fee \$5 | Interest rate p.a. | Monthly Fee | Interest rate p.a. |
| ASB | 0.12% | 19.50% | 0.12% min \$10 | 22.50% | \$6.67 | 19.95% |
| ANZ | 0.12% min \$5 | 19.75% | One time fee \$5 | 26.75% | \$3.33-5.83 | 15.20-20.95% |
| Commonwealth Bank (AU) | 0.15% of limit | 14.55% | N/A | | \$2.50-7.50 | 13-20.95% |
| Westpac (AU) | 0.12% of limit | 12.12% | N/A | | \$6.25 | 14.25% |