Infor Expense

A new mobile application for expense management on the go

infor

HOOK∞LOOP

Infor Expense

Ask any consultant or frequent business traveler what they think of managing their work-related expenses, and they may cringe. The truth is, it's pretty awful, and it's even worse for those who don't have time to sit down and reconcile a week's worth (or more) of receipts at once. And don't even get them started on lost or damaged receipts that lead to frantic searches and unreimbursed expenses – causing employees and the business to lose money when they can't confirm and bill costs to clients.

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The Challenge

Infor's customer, a large global consulting firm, came to Hook & Loop with a challenge: create a travel-friendly iOS companion to their desktop expense management software. It needed to allow traveling consultants to document expenses and send reports on-the-go. The current mobile app was functionally robust but presented as a scaled-down version of the legacy desktop product. This was sometimes overwhelming for mobile users who were looking for accessibility, streamlined UX, and convenient features like receipt storage and offline functionality.

H&L agreed to design and develop a product that would address these issues while presenting a human-centric experience with best-in-class, consumer-grade UX.
Our goal: transform expense management from something to suffer on a Friday afternoon, to something travelers can attend to while stuck in traffic or waiting at the airport. After all, why should a busy consultant spend hours scanning and documenting receipts when they could focus on revenue-generating activities?

Understanding the User

After meeting with stakeholders, holding user interviews, and conducting workshops, we landed on a few distinct personas to represent the variables of potential use cases. These included a Junior Associate responsible for managing his or her expenses, Mid-Level and Senior Associates who have assistants but doesn't trust them to not to make errors.

We also understood that about 95% of users interact with only about 5% of our software functionality. This is the audience we chose to focus on rather than power users. Consultants are always on the go, so it makes sense that they would want easy, relevant interactions that bring fast and impactful results. For time-pressed users, this means having the ability to capture expenses in transit, creating and sending expense reports from a handheld device.

We started this project under the working name "Infor Expense Mobile" but later changed it to Infor Expense when it became generally available on the App Store. Early on, it was clear that for Infor Expense to be a go-to expense resource, duplicating the desktop version wasn't going to cut it. It had to deliver only the most relevant features for users on-the-go with no unnecessary distractions. Drawing from interviews with consultants from around the world, H&L worked in two-week sprints to develop an early prototype and iterate based on their feedback.

We then held moderated remote usability tests and added and adjusted features based on responses. For example, the ability to save login credentials and to tap and pull down on the expense list to refresh after reestablishing connection was implemented after receiving feedback from users.

While Infor Expense was developed in partnership with a specific Infor customer, we wanted to make sure that whatever we created would be scalable and could fit various businesses and use cases.

Almost all beta testers agreed that ease of use was more important than flexibility. Here's what they told us:

They wanted a streamlined experience with fewer steps and maximum clarity.

The app should let them capture expenses in a way that feels native to the device.

Expenses must display key attributes — payment type, expense type, status, currency, amount, etc.

Highly desirable features included currency conversion, itemization, offline mode, and viewing attached receipts.

Recurring data such as location of purchase and client ID should automatically populate for subsequent expenses.

Interruptions happen on the road, so it's important that they can save incomplete expenses and pick up where they left off.

"I don't want to have to fill in a single field more than is absolutely necessary."

- Feedback from a Research Participant

The Making of Infor Expense

Infor Expense's goal was not to replicate the desktop experience and scale it to a smaller device. We aimed to create a relevant, satisfying experience where photographing a receipt was the kickoff for expense creation. This would be one of our key differentiators since many competitors follow the same flow of filling out an expense and then attaching a receipt later on. (This can also be configured based on the client's business rules.)

For our users, this encapsulates a new mental model of expense management – starting with capturing a transaction and creating a report as the final step. Ideally, users will submit expenses as they are rendered instead of waiting until later. Ultimately, we hope to drive behavior change by encouraging a mobile-first mindset toward expense management and help users arrive at "inbox zero" with expenses. Fast interactions with Infor Expense will mean real-time expense management during the day instead of doing a large number of expenses at once.

Ideation Phase

Initial development was centered on dissecting aspects of the web platform and understanding the pain points that made it less useful for frequent travelers with more expenses to manage. We did away with the web platform user flow completely and instead focused on native functionality, shifting expense management from being dependent on manual data entry to being based on capturing a transaction at the point of sale or shortly after.

It was important for Infor Expense not just to be user-friendly, but also appear natural on iOS and display the most relevant information. Given our expedited timeline, we used existing native components to speed up the building process and create an intuitive user interface. We wanted to give the client something that worked immediately but could be refined later as we tested and iterated with more users.

Making Infor Expense more mobile meant approaching it with a different mindset. We focused first on purchases most likely to be made on-the-go, such as meals and ground transportation – leaving flight and hotel expenses, usually made in advance through a corporate booking service, for a future version of the app. For this version, the MVP features are the in-app camera and receipt image storage, credit card feed, ability to edit and delete unattached expenses, offline functionality, receipt attachment, form-filling efficiencies, currency conversion, and report submission.
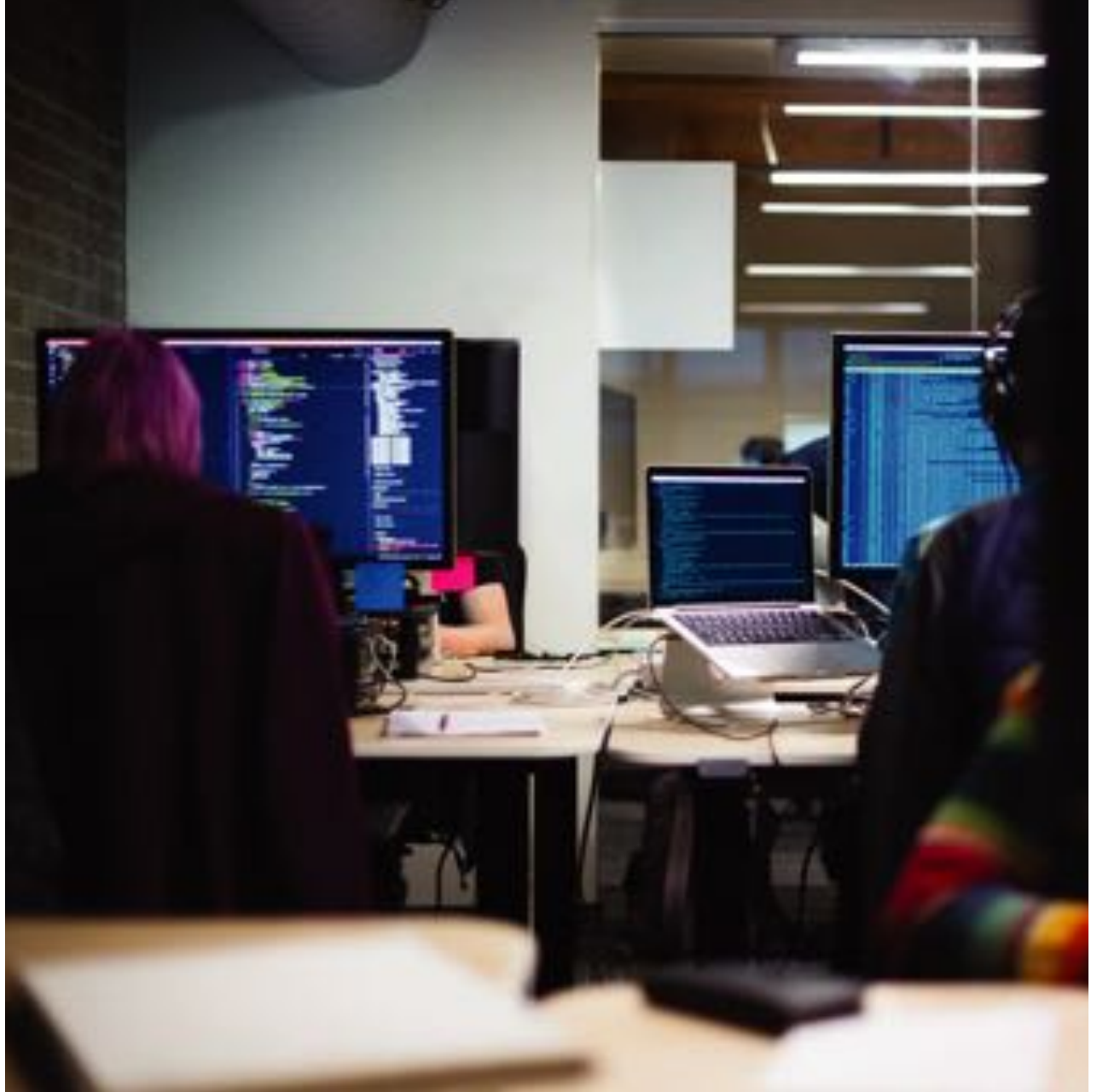
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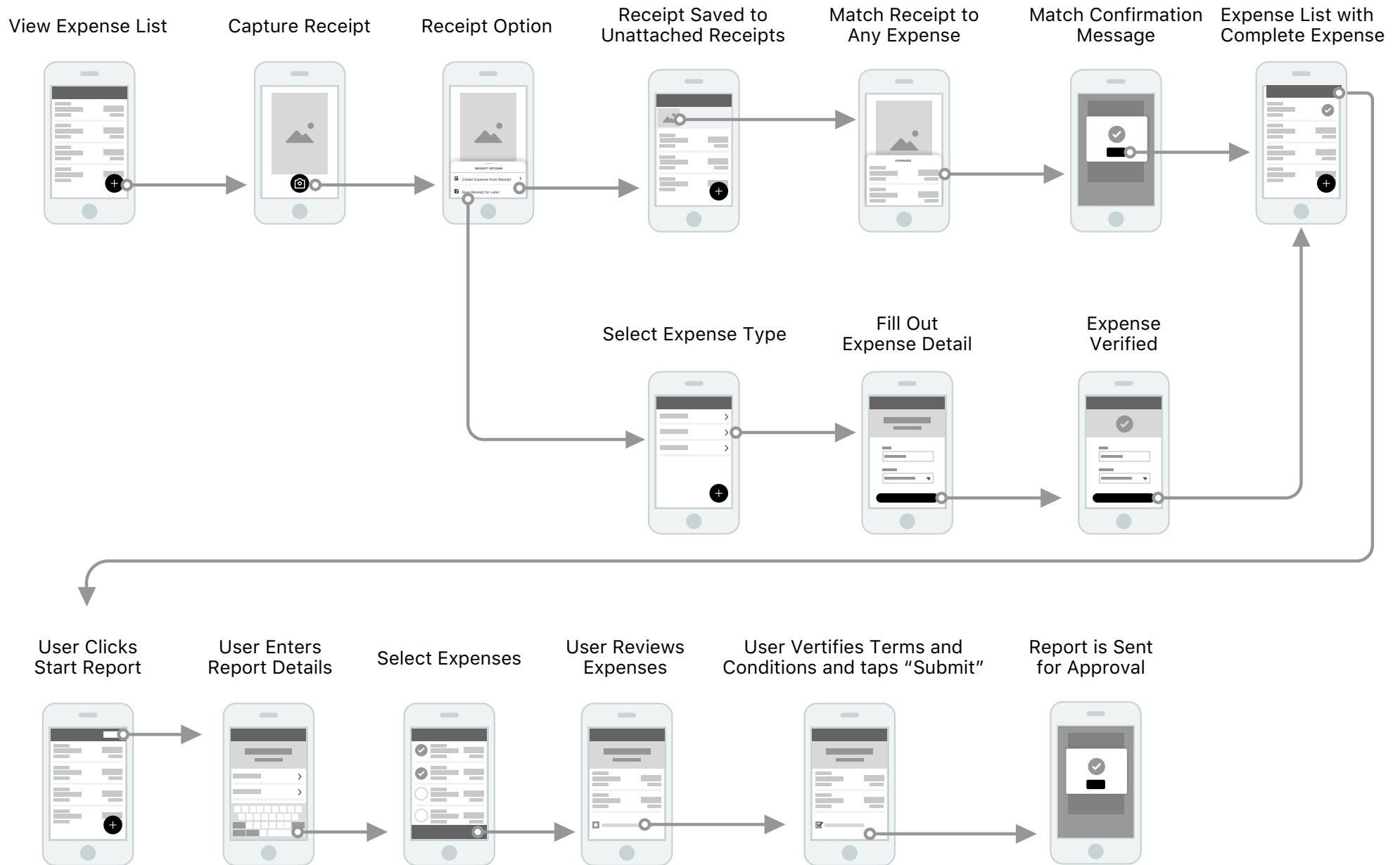
Development and UX

Our team consisted of UX designers and researchers, product and development managers, software developers, and data analysts. We used Agile methodologies to build Infor Expense with the idea that after every two-week sprint, we would have a usable app that we could test, gather feedback on, iterate, and test again.

With this incremental approach, we worked quickly, making enhancements and validating them through testing and QA.
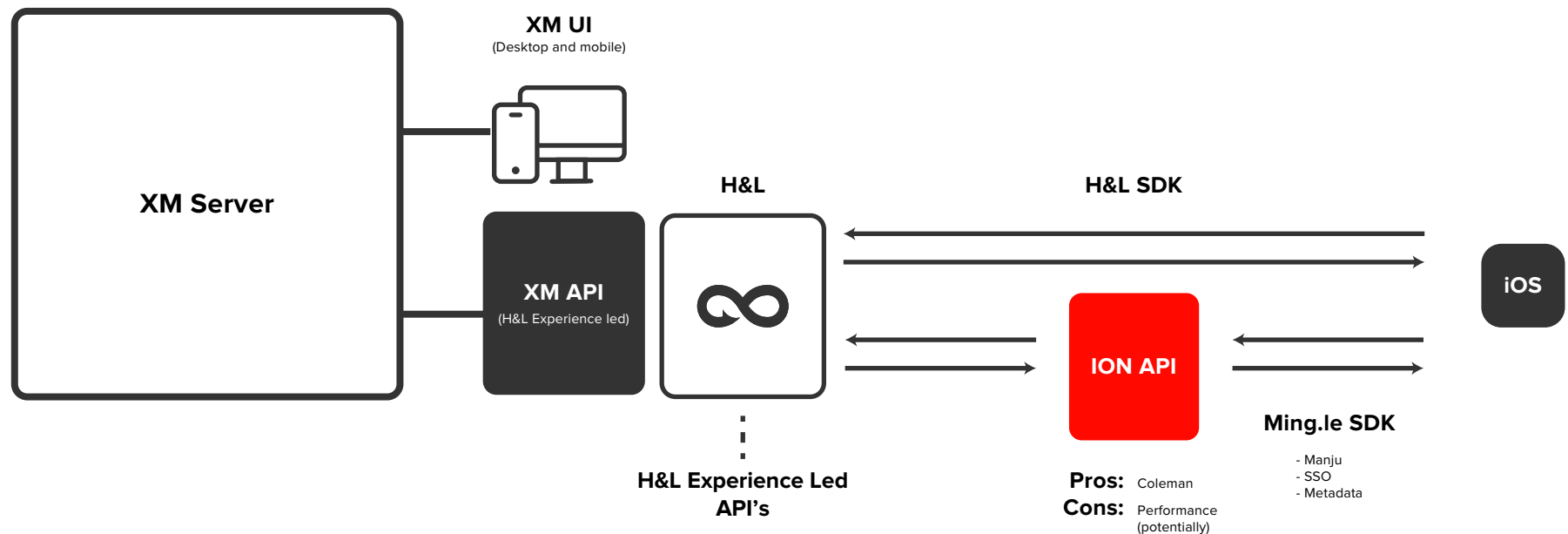
User Flow

View Expense List

Capture Receipt

Receipt Option

Receipt Saved to
Unattached Receipts

Match Receipt to
Any Expense

Match Confirmation
Message

Expense List with
Complete Expense

Select Expense Type

Fill Out
Expense Detail

Expense
Verified

User Clicks
Start Report

User Enters
Report Details

Select Expenses

User Reviews
Expenses

User Vertifies Terms and
Conditions and taps "Submit"

Report is Sent
for Approval

API Functionality

One of Infor's strategies is to expose its products through a common API layer, called ION API, to power cross-application/cross-suite experiences in the Infor CloudSuite. Hook & Loop came into play as an agent of change around which API endpoints need to be exposed and combined to deliver users an efficient and delightful experience.

As we were building out the mobile app, we leveraged the design to ensure that the APIs serving the mobile app were RESTful and modular enough to be used in other experiences. We wanted the right data to flow in the correct order and format to power not only the Infor Expense experience, but also potentially other experiences throughout Infor's product ecosystem. This could be a homepage widget, a mashup or some other in-context app experience for a use case that hasn't even been thought of yet.

XM Server

XM UI
(Desktop and mobile)

XM API
(H&L Experience led)

H&L

H&L SDK

H&L Experience Led API's

ION API

Pros: Coleman
Cons: Performance (potentially)

Ming.le SDK
- Manju
- SSO
- Metadata

iOS

Visual Design

It was important that Infor Expense's UI allowed for an engaging, user-friendly experience. We opted for native icons per Apple's Human Interface Guidelines because they are familiar to users and have a specific, well-known meaning when used accordingly. From our perspective, there was no reason for Infor Expense to be any less beautiful or enjoyable than other consumer-grade applications.

While native icons and other components provide a sense of familiarity, we also wanted to convey the H&L design philosophy through a cohesive visual experience. Our UX design team mocked up two unique stylescapes that align with Hook & Loop's pillars of an ideal user experience:

Approachable — As human-centered as consumer technology

Focused — Minimize complexity, eliminate distractions

Relevant — What's important to the industry, the business—and the user

**Perceptive** — Continually learning what users need and leading them to success
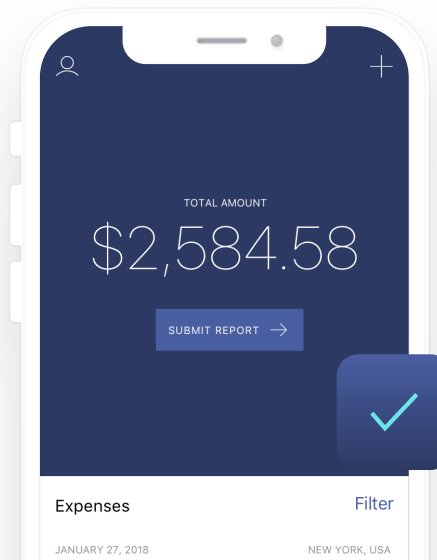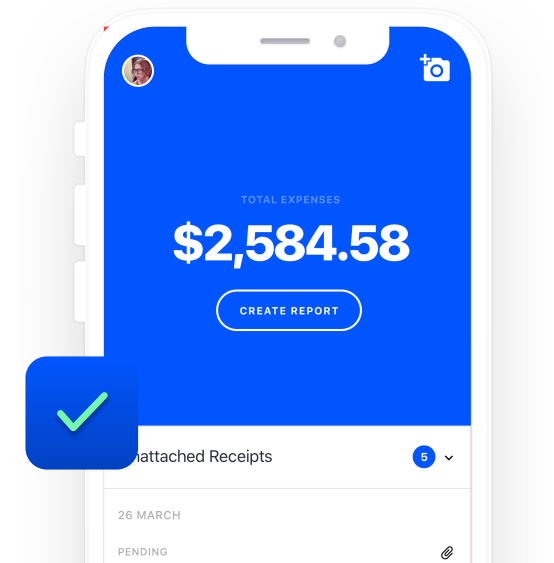
Merging Functionality with Personality

Most business apps are not known for attractive design or engaging UI, but it was important that Infor Expense be relevant to business travelers while also having a look and feel that enhanced the experience. It took us several rounds of design and user testing to land on the final look of this app, but eventually, we went with the one that best characterized the functionality and personality of Infor Expense.

Easy-to-understand iconography was one of the most important things we featured on the interface. Assuming that the majority of users would be using Infor Expense on-the-go, we wanted them to understand how the app works at a glance. Simple instructions and approachable copy help define the usability and overall helpfulness and humanity of the experience.

Snap
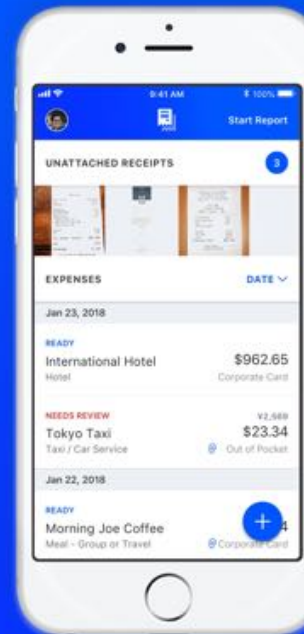Take a receipt photo to start an expense.
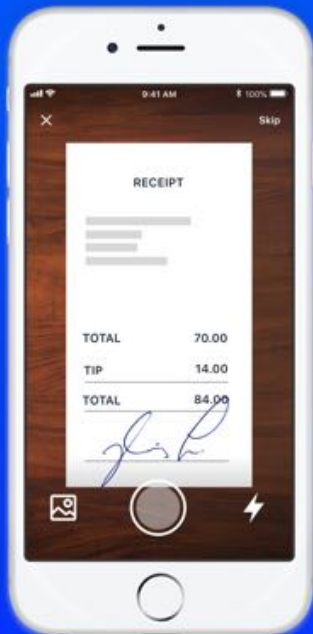
Attach
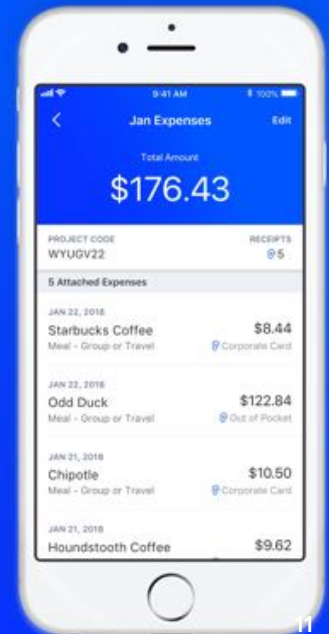Pair receipts to expenses and add a few details.

Review
See expense status and fix the ones flagged for review.

Submit
Select your expenses, complete your report — and send.

Next Steps & Future Impact

In the near-term, we plan on continuing our research to improve the experience by holding more usability studies and gathering feedback from active users, as per our user-centered philosophy.

To further improve the app based on user feedback we've already received, we plan on designing these features:
- AI-driven suggestions, reminders, and efficiencies
- Uber and Lyft integrations to pull transactions from the third-party apps
- Calendar integrations

An added benefit of our process is that we are able to take the learnings and assets from the Infor Expense app and apply them to other workflows and use cases. For example:
- A lightweight HCM app that allows employees to submit time-off requests and access important company information from their smartphone
- An integrated tool for field sales via our CRM platform which helps sales reps work efficiently instead of dense data
- An ecosystem of APIs for Infor's tools that also targets the casual user and delivers consistent experiences app-to-app and software-to-software

As the first net new mobile app designed, built, deployed and supported by Hook & Loop, Infor Expense represents an important step in our efforts to provide satisfying experiences that deliver always, only, exactly what the user needs right now.

Interested in Infor Expense?

Contact Johnny