Emmanuel Cuevas
UX Consultant

## Case Study

## Telcel - App Factory

## Fingerprint e-Sign Paperless

## My role

I led this project's Product Design, User Experience, and User Interface. I also received feedback from other designers to improve and get other perspectives on the design.

## Challenge

Build a mobile application that allows users to register their fingerprints into the system. The fingerprints are a new method to authenticate the clients to Telcel.
This solution allows the clients to authorize, check movements, and change plans or payment methods with the company without showing any identification.
It also helps the Client Executives (CE) to reduce the time they solve the problem or necessity from the client.

## Platform

The app was designed for Android, it's native, and the device selected by the company was a Galaxy Tab A.

## What I did

- User research.
- Define the personas and the journey maps.
- Establish the scenarios and happy paths.
- Wireframes
- Define a design language
- Conduct user testing
- Low-fidelity prototypes
- High-fidelity designs and guidelines


## User Case |Telcel

## What is Fingerprint

Fingerprint is a mobile application allowing the Client to achieve two goals. The first one is to enroll its fingerprints into the system in a fluid and easy way and, secondly, authenticate itself without needing physical identification and approve changes and purchases into its account.

## How does it work?

1. The Client decides to enroll in the program, and the Client Advocate uses a fingerprint reader connected to the tablet to save two fingerprints into the system.
2. The App shows a percentage of efficiency in gathering the minutiae of the fingerprint. Once the quality of the sample is $100 \%$, the App shows a success message to the Client.
3. The Client Advocate authenticates the Client by its fingerprint.

## Business Goals

1. Enroll $50 \%$ of the clients with post-paid plans into Fingerprint (7 mil users) within the first three months of release.
2. Reduce $90 \%$ of the complaints about identity theft within the company and non-recognized activities in the first year of release. 3. Reduce the average time that a Client Advocate attends a client.


## User Case | Telcel

## Users Goals

1. Enroll in the system in a few simple steps.
2. Attain security to personal information
3. Authorize movements and purchases with the sole use of my
fingerprint.

## Discovery

## HOW ARE OTHER COMPANIES IMPLEMENTING BIOMETRICS TO AUTHORIZE MOVEMENTS?

An essential question in the discovery phase was to learn how other industries are implementing biometrics and why. After the first round of research, the team identified that most banks use biometrics to authorize client account movements. Another important point was that most of the Clients still go to a branch to clarify movements or non-recognized charges. And finally, it was discovered that even the Company has a Call-In service, the users prefer to visit a Branch rather than call.

车 1 Futuro escanario de experiencia en CAC / Contratación de plan Post-pago para cliente primera ves.


## User Case |Telcel

## Define

In the define phase, three points were stated:

1. Users go to branches to open, add or cancel lines, and clarify nonrecognized movements in their accounts.
2. Users are customed to using biometrics in their phones.
3. The enrollment should be easy for the User.

Other questions came up as part of this phase, like how many fingers were a good number to provide a high level of security and which process should be included in the first phase.

## Ideate

In the first sprint, the team focused on enrolling the client with ten fingerprints. After proposing to reduce the number to two fingerprints to the technical team, other questions came to light, like what fingers we should enroll in rather than letting the user select. After making some polls with real users in the branches, the answers started to flow and filled the holes in the path. Users preferred to be told which fingers to enroll, and if there was a particular case, they could select which finger to use.


## User Case | Telcel

## Develop

With the first round of iterations, creating the happy path for this system was enlightening. First, KPIs like time of attention and information clearness were important. So one groundbreaker in the project was the use of requests sent from a terminal to avoid losing time in grabbing the tablet, typing the information, and starting the process.
Additionally, showing precise information on the screen, the addition of a success message, and proof sent to the User by SMS validated the confidentiality of the system.

## Deliver

On the second to last sprint, the team identified a task wanted from the User, which was signing contracts with the fingerprint. So, this feature was added to give more value to the User in enrolling its fingerprints into the system.
Telcel is divided into nine different zones across the country. The first zone to release the application was Mexico City and the metroplex area that contain $50 \%$ of the Users in post-paid plans. The app was released to the other eight zones covering the whole country in the following months. For the first two months, the number of Users was close to two million, focusing the team's strategy on other topics to promote this tool.

[^0]
## User Case | Telcel





Espera un momento.
Se estâ firmando el locumento

lector biométrico para firmar el documento

Images. On top left, the standby state for the tablet is shown. Next to the right, a pdf view of the contract is on the screen with the line's details. This feature was identified in a late research phase of the project. The down left image shows the screen asking the user to put the fingerprint in the reader to sign the contract. Next to the right, a loading screen shows the progress to the user.

## User Case | Telcel

## What is e-Sign?

e-Sign is a mobile application allowing the User to sign contracts with the fingerprint previously saved into the system or by a smartpen.

## How does it work?

1. The User asks for an additional line to its account, and the Client Advocate prepares the details in the system to create an electronic document to be signed.
2. The User signs the document on the tablet using its fingerprint or smartpen.
3. The system sends the document to a third-party certification system and responds with a signed copy.
4. The User receives the contract signed by email and an SMS with a notification of what happened.

## Business Goals

1. Sign $100 \%$ of the new contracts with e-Sign from the release date.
2. Reduce in half the budget used to store the paper contracts with Iron Mountain within the first six months of the app release.
3. Reduce the number of scams on new contracts for identity stolen in the following years.

Image. On top view of the contract with the line details previous to being signed. The bottom image shows a quick tutorial on how to navigate within the contract and signed it.


Nombre: Gómez Velazquez Margarita De Los Angeles ABDC987654RE1

ID Documento
ABCD1234

## ব

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$\square$


## User Case | Telcel

## Users Goals

1. Sign new line contracts in an easy and secure way.
2. Received a certified copy of the contract by email.

## Discovery

Based on the initial discovery of the fingerprint app, one output was identified to be included in this application—signing contracts either by fingerprint or smartpen in the system.

## Define

In this phase, creating new journeys was the most important outcome. What was the best set of steps to sign a contract digitally and in a smooth process?
We had two possible scenarios, the first and most common at the beginning of the app's release was that most of the users were not enrolled in the system, and the latest was that they were registered.

## Ideate

In this phase was essential to have a clear image of the two different scenarios so that the system could be smart enough to continue with the process even though the User was not enrolled in Fingerprint. Adding some variables to the process, like if the User takes out the smartpen from the tablet or places its finger in the reader.

## Develop

Creating a prototype and testing with all the possible scenarios helped to make tweaks to the application and the process. Also, the guidelines for the Client Advocates were updated in order to invite Users to enroll in Fingerprint.

## User Case | Telcel

## Deliver

The use of the mobile app helped the User to sign contracts digitally. In the first month of the release, $90 \%$ of the new contracts were signed through e-Sign which helped to increase the number of Users enrolled in Fingerprint.


Images. In the pictures above, it can be seen the process of signing a contract with Fingerprint or Smartpen. It was essential to make it in just a few steps, so the User could take just three screens to sign it and receive a success message at the end.

## My role

I was accountable for the UX and UI of the tracker app. I designed the mobile versions in Android and iOS.

## Challenge

Create a system that helps clients, truck drivers, and Jobsite managers to track, deliver and get proofs of deliveries respectively.
A mobile app was created to serve all these personas; log into the app, check the person's profile, and load the information related to his/her profile.
Gathering information from all these profiles helps Cemex • better enhance its clients' service and understand them.

## Platform

The app was designed for Android, iOS, and wearables.

## What I did

- Co-facilitate Design Thinking workshop
- Establish the sçenarios and happy paths.
- Conduct user testing
- Define user stories
- Establish development sprints
- Align user stories with high-fidelity wireframes
- Define business cases


## User Case | Cemex Go

## Discovery

During this phase, a set of Design Thinking workshops were delivered with Cemex stakeholders. The audience target was a selected group of decision-makers within the organization. These persons were experts in how Cemex works, its processes, and its pain points.

Some outputs were that the company received multiple complaints regarding the on-site deliveries. This is applied to cement and aggregates.

## What is Cemex go?

Cemex Go is an application that allows users to track cement deliveries to one or multiple job sites. It includes real-time tracking and proof of delivery documents.

## How does it work?

1. The Driver has its side app, where he receives a scheduled agenda for the deliveries on the day.
2. The User receives a notification when the driver leaves the plant to the job site and a notification when the driver reaches the geo-fence. 3. The User gets proof of delivery from the application when the site manager signs in the tablet.

[^1]

## User Case | Cemex Go

## Business Goals

1. Reduce the complaints from Clients about the proof of deliveries. 2. Increase the accuracy of the billing and reduces the time to receive payments from clients.
2. Reduces the wrong deliveries from the Drivers to multiple job sites.

## Define

The ideation session helped the team to identify all the features that would help the users with their specific tasks. Some of the top ideas were:

- The use of geofences for plants and job sites that allow delivery within the app.
- Let the Jobsite Manager sign with the app and send proof of delivery with the signature.
- Use for dispatch alerts to notify the drivers when a delivery has been canceled.
- Five-step security process that helps the driver to do a checklist before he starts his deliveries.


## Ideate

Matching the User stories with the features selected by the Product Owner was a challenge because this mobile app was the first of its kind. No other app in the market had included too many features based on the industry requirements.

The first idea was to make a timeline with all the deliveries during the day.


Images. In the pictures above, the different flows were defined by the team. The first row was the login section for the application, the next was a view with multiple tickets and the locations, and the third and fourth were the use of data visualization for the users.

## User Case | Cemex Go

## Develop

Due to Cemex's implementing a Digital Transformation and a UserCentered design, the company does not have a Design language. The challenge was to implement it and demonstrate a sense of belonging. Once some design guidelines were implemented, all the platforms adopted them and helped users quickly identify some features in each channel.

Icons, colors, buttons, and design features were archived in the confluence site for all the team members that worked on the project.

## Delivery

I created some prototypes in InVision to help the dev team understand the rules and complete the user stories.
Design guidelines in Sympli help the dev team to create the layers in less time for Android Studio.

As part of the infinite loop, all the steps were done continuously within the time I worked on the project.

Images. On top, there is the login screen for Drivers. The application communicated which user intended to log in. Backward, the view of the agenda for the driver.


## User Case | Cemex Go



Images. The first image on the left shows the timeline for the Driver and the job site to deliver the product. The following picture presents a chunk of multi-deliveries, where the Driver does not leave the whole product in one place. Finally, the third image shows the multiple job sites for a Driver to give a perspective of the area where the multi-deliveries should be completed.

User Case | Cemex Go


## User Case | Bancomer Web

## Discovery

For this first phase, interviews with key stakeholders were performed to gather all the information from the business perspective. Some findings were:

- The department in charge had received feedback from users that described the interface as too complicated to dig in.
- The users were commonly brokers and investors.
- It was too difficult to find the reports.
- If the user had changed the language of the page, the reports were still in Spanish.


Persona

## Job: Broker

Age: Mid 40s

## Concerns: Find reports easy

Tech: Technology native, easy use

Recinión Bancomer (invecsionstas)

- Los usvarios no encuentran la cuformación de forma rápida
- Dentro del sitio existen reportes anvales - Lara inversionsta. y Trimestrales.
y Trimestrales.
grrupan $\rho$
- Reci
sitio.
- Las usuarios sun inversionistas y brokers - Para entrar al stio es necesano novegar for
la päg. prirepal del bawo



Otros pobtemas problemas:
Los reportes no estan clasificadas
$\rightarrow$ conrectamente

* El sitro no es agradable visoalmente al usuario.


## * Dentrodel portal si el osuario cambia

 de idioma, los repurtes siguen en espar o viceversa: ¿Coestion de programaain * La bósqueda de los reportes no es eticaReportes

```
- Año
- Trimestre
- Compañia ¿Oaintas hay?
- Sección.
```

- Tipo.





## User Case | Bancomer Web

## Defined

- Surveys were conducted with stakeholders to gather general information from the site.
- A series of interviews were led to get more information with specifics; the people were brokers from the bank that used the site.
- A series of workshops and benchmark studies were made to find the top competitors of the bank.
- Also, a task was compared in the different sites.
- The personas were defined.
- Some low-fidelity wireframes were made from sketch


## Ideate

Once the prototypes were developed, a user testing session was performed to gather information from the users. The first approach gave the following outcomes:

- There were three principal sections the users started to search: a) Financial Information, b) Information about BBVA Group, and c) Contact.
- There was important for all the users that a message from the CEO appears on the page.
- Information about how the Bank helped the community also was relevant.


Ind...blet Inde...enu Ind....load


## User Case | Bancomer Web

## Develop

Once the website was reviewed with high-fidelity wireframes, some decisions were taken:

- The site was developed in WordPress.
- The icons were taken from the Design Language that the Bank already had.
- Images were proposed, regardless the marketing team was the decision-taker for this topic.


## Delivery

The team had three sprints once the backlog were defined to had a first approach to the site before it went to production.




## My role

I was responsible for the UX and UI for different features within the POS that is going to be implemented for the Home Lending team.

## Challenge

The challenge was to implement a middleware that could help the Home Lending Advisors improve productivity and quickly offer clients quotes.

## Platform

A web POS that includes different features from diverse tools.

## What I did

- Establish the scenarios and happy paths.
- Create and propose icons for the DLS
- Define user stories
- Create hi-fi wireframes and prototypes
- Facilitate design product conversations to align team outcomes.
- Document user stories and visual defects findings for further enhancements.


## User Case I Chase

## Persona

Andrew is a Home Lending Advisor at Chase. For several years he has advocated helping clients find the best rates on the market to acquire a home or refinance their loans. He is focused on details, a hard worker, and a very cheerful person when he talks with clients.


## Process

Within the bank, we used the approach of the double diamond.

1. Discover the current situation of the environments for the HLAs.
2. Define the problem that made the HLAs not make their quota on the quantity for loans.
3. Define a quick solution that could solve $80 \%$ of the problems that HLAs had. (Pareto law)
4. Deliver prototypes and visual designs that help stakeholders to make decisions on the strategy they want to follow.

## User Case I Chase

## Discovery

One of the main tasks was to map all the activities that the HLA makes to complete his tasks. Create empathy with Andrew and see a typical day in his life.

Define where the problem is, ask questions to the HLAs, and see his frustrations.

## Define

Once the real problem was identified; start to ideating to see what could solve most of his problems. Make quick wireframes and map them out with the current process to see if it makes sense.

## Ideate

For this phase, some ideas came to light. The first was to increase the productivity of the HLAs, so setting the number of quotes per session was one of the ideas to help the Users.

## User Case | Chase

## Develop

After testing the process and prototypes, make tests with the HLAs and get feedback to see what are the most impactful ideas. Document the UX instances that worked and started over to enhance the prototypes.

## Delivery

Work with dev teams to document the user stories in Jira and make QA testing to deliver a product with quality in short sprints that help the teams to iterate quickly.

Images. In the photos, the top right and left bottom show the different flows allowed in the system. After each review and testing session, the team gathered all the user feedback as UX instances to evaluate them and include the idea or reject whatever was the case.


Initial lock


Rat
Rate Lock_UC Rate L


Rate Lock_UC


Rate Lock_UC


## User Case | Chase



Image. It shows the main view of the system where the HLA could search, compare different rates, and create a quote. This view also includes the visibility of three quotes so that the user can work simultaneously with different scenarios.

## User Case | Chase

## Scenario Save, Compare and Share



Image. It shows the main view of the system showing results for different products.

## User Case | Chase

In-progress quotes Saved quotes

## Saved quotes




## User Case | IBM Multicloud Management Platform

## Persona

Craig is a Senior developer, lives in Austin, TX, and he's 41 years old. He is considered the Guru in his organization due he's skills in DevOps and Agile, and he is the evangelist.

He has limited visibility when he is searching for services in his organization. Has no control over the approval process.
When he asks for a service, he can't view where he is in the approval process.


## Process

1. Discovery phase was performed with stakeholder interviews, market investigation, and comparison states with competitors. Use Design Thinking framework attributes like Persona definition, Empathy maps, Journey maps, Ideation, etc.
2. Define the problem statement for the most reachable pain point.
3. Define journey maps for future states in the solution. Create Io-fi wireframes to identify the platform's flaws and create blueprints for the complete process using service design.
4. Create prototypes to test with users and have definitions of the next steps for the design process.

## User Case | IBM Multicloud Management Platform

## Develop

Use of IBM Design System that helped to create hi-fi wireframes after the confirmation of the user experience. Once the team defined UX, the hand-off for the development team was made by third-party apps to create the website in less time than expected.

## Delivery

The delivery of the final design was made in phases once tested. Those phases included different journey paths defined by the product team and validated by the Design team.

Image. Below it can be seen the paths that a user has to follow to search for a specific API or service within the platform.


## User Case | IBM Multicloud Management Platform



## User Case | IBM Multicloud Management Platform



## User Case | IBM Multicloud Management Platform



## User Case | IBM Multicloud Management Platform



## My role

My responsibility in this project was to define the strategy and maintenance for the Design System Language used in this solution. Also, I worked on the designs for mobile and led the effort for the final designs.

## Challenge

The challenge was to manage the number of requirements from the client when we showed new designs to the stakeholders. Neighborly is a company that holds more than twenty brands focusing on household services. Our main effort was to create a library and components that we could use to replicate the designs on each brand, however each brand had its own Brand President and Marketing Executives.

Platform
Web solutions on mobile and desktop.

## Case Study



What I did

## - Definition of UX strategy

- Management of DSL
- Design Ul for mobile
- Create Hi-Fi wireframes and prototypes
- Present outcomes to CX-level executives


## User Case | Neighborly

## Persona

Tom is the user that always is busy finishing those projects in his house; that's the primary reason he looks for a company he can rely on to make those updates, tweaks, or solve his house's problems.

Tom is willing to pay more to get a certified expert and avoid dealing with back and forths on the quote and get a good quality job.

## Strategy

1. Evaluate the state of the current Design System from Neighborly.
2. Define the correct approach to set a DSL
3. Set the rules and standards to follow
4. Manage and versionate changes on the DSL

## Process

We used the approach of the double diamond.

1. Discover the current situation of the websites for the different brands.
2. Define the problem that users were caught in each step of the website to request an appointment
3. Define a quick solution that could solve $80 \%$ of the problems that users had. (Pareto law)
4. Deliver prototypes and visual designs that help stakeholders to make decisions on the strategy they want to follow.


## User Case | Neighborly

## Develop

Set the Design System Language for Neighborly (Flowbite) that allow the design team to set one source of truth to create hi-fi screens in short sprints and make reviews with the client to validate ideas and direction on the project.


Image. Below it can be seen some of the pages created for the initial sprints. These pages were included in a review file to get feedback and steer the direction of the designs. On the right there is an old version of the site for desktop.


## User Case | Neighborly

Image. Review-file with all the screens from the sprint on it. It included color code sticky notes to get feedback and documentation, the user stories for the sprint, and the features acceptance criteria to have a trusting environment with all the participants.


## User Case | Neighborly

## DSL Management

Part of this project was to evaluate, implement and manage a DSL that could serve all the brands and include the right requirements. One of the first issues with this topic was which DSL to use to save time on the initial sprints and have outcomes quickly.

Another red flag was that all the libraries selected by the client had file-load issues and made the implementation and its publication hard to keep. The solution was to break the main file into four sources of truth to keep the file memory low and publish updates speedily.

Once the main library was published and managed the creation for a brand library came into mind to create component, layouts and imagery with the same standards.


Image. Initial mockups for the creation of brand components. These were included in the main library and grouped by brand to have a smooth design of pages through the sprints.
(4) We have the power to make things beterer:

Frame 34070
(4) service You Can Tuss!

Frame 1236 $\qquad$


Frame 34069


Frame 34066


## User Case | Neighborly

Image. Home page for Mre. Electric brand. Left is desktop version and right mobile version


## We Are Residential \& Commercial Electricians

[^2]

Name
Bonnie Green

## User Case｜Neighborly

Image．Testimonials page for Mre．Electric brand．Left is desktop version and right mobile version．

A Home＞Why Us＞Testimonials

## Testimonials

## Real Stories，Real Results

Discover what our customers have to say about their experience with us．From insightful feedback to honest opinions，this page is a testament to our commitment
to providing exceptional customer service


Micheal Gough New York，New York
＂What a great team＂


Jane Cooper New York，New York ＊＊$\star \star$

We were impressed with the skill and knowledge of the technician．They respected ur home and kept it clear conna we trust company we trust．


## Neil Sims

Santa Claus，Indiana
＊＊＊＊＊


Karen Nelson
Athens，Georgia
ネ ネ ネ $\star$
It＇s always a great day at our house because we know we have Mr．Electric on speed dial． Their technicians are extremely knowledgeable and extremely trustworthy．Letting someone in one＇s house is always nerve－racking，but Mr． Electric is someone you can trust．．．．and their pricing is great，too！


Savannah Nguyen
Miami，Florida
$\star \star \star \star \star$
II had my outdoor porch \＆retaining wall lighting fixtures replaced．Also，had a new motion－sensor flood light installed on the back lised to pressiory attentively．He was listened to my needs very attentively．He wa pricing In record time ，the estimate was e－ mailed to me．I called the next day \＆the office was very helpful in scheduling the work．A professional was dispatched \＆he took care of everything in a fine manner．He was polite \＆

A
Albert Flores
Athens，Georgia ＊$\star$＊$\star$＊

We were absolutely delighted with the professionalism，cleanliness and speed with which the technician did the requested work he work and experience was beyond our expectations．This company is outstanding in performance，courtesy and timeliness．We will have them back to wire our backyard．Just can＇t say enough good things about this company

Owner Response：＂Thank you for your review．We strive to keep our customers happy from start to finish


Savannah Nguyen
Miami，Florida
$\star \star \star \star \star$

I had my outdoor porch \＆retaining wall lighting fixtures replaced．Also，had a new motion－sensor flood light installed on the back


Mr．${ }^{4}$ Electric

## Testimonials

## Real Stories，Real Results

Discover what our customers have to say about their experience with us．From insightful feedback to honest opinions，this page is a testament to our commitment to providing exceptional customer service

## Micheal Gough <br> New York，New York <br> ＊$t \rightarrow+$

＂What a great team＂

## Investment Banking Site

$\checkmark$ Santander

## Santander-iWatch

This app helped the user to get information from branches and currency exchanges and review the status of the accounts. Also, the app notified the user every time a spent was made through notifications.
If the user needed more information about it, he had to go to the phone app to see the complete report.


## Web User Experience

## $Y$ <br> ALIMENTO <br> PARA TODOS

## Website Analysis

The objective of this project was to analyze the website for the Organization selected by the Corporate and Citizenship board member as part of pro-bono initiatives within IBM. Some of these Organizations were Government Ministries, NGOs, Partner Foundations, and Universities.

The project consisted in conducting a website analysis based on the 10 Jakob Nielsen's heuristics, redesigning the Information Architecture in case it was needed, finding pain points in the tasks selected as essential, and presenting an alternative design to the Organization.

Other actions that were part of this project were to teach students with students how to conduct User tests and realize some wireframes that could improve the website.

Some Organizations that benefited from this initiative were:

- Alimento Para Todos IAP
- Gobierno del Estado de Sonora
- Gobierno del Estado de Baja California
- Centro Mexicano para la Filantropía (CEMEFI)



[^0]:    Image. On top, a screen for the stand-by state of the tablet is shown. This code was revealed only when the connection between the tablet and the station was broken. On the bottom, a message of waiting request is showing a loader.
    Down, a success message was shown to the User showing additional information, like an operation id, that was included in the SMS sent by the system to the User's phone.

[^1]:    Images. These images show part of the Design Thinking workshops used to gather information from the Company and set the problem statement in the discovery phase.

[^2]:    We take pride in our workmanship at Mr. Electric, and we want to you be proud to recommend our services to your family and friends. That starts with trust, and you can trust our professional electricians at Mr. Electric because they have passed thorough background checks and license registrations.

