
Virtual Assistant for Latinas Experiencing Domestic Violence

Liliana Savage

Civic Innovation Lab, UNAM

Luis F. Cervantes

Acceleration Lab, United Nations

XueYan Chen

HCDE, UW

Ricardo Granados

Civic Innovation Lab, UNAM

Saiph Savage

Civic Innovation Lab, UNAM

Abstract

Women from Mexico City that suffer domestic violence search help and counsel at the LUNAS centers, under the control of the Secretary of Women. Most of the service provided by these centers is in person, or by telephone, making it complex and slow for women to obtain help as fast and easy as possible. To help in that situation, we propose a new tool, a chat-bot to increase speed and easiness to provide the information needed by women in need and to reduce the workload for the people working at the centers. Women who attend to these centers need to fill the "Unique Registration Card", a registration that is fundamental to direct the women to the correct dependency, to allow work between different governmental dependencies, and to continue the follow-up of the cases. This chat-bot searches to increase the speed and the simplicity to collect the information needed for the registration. Furthermore, it intends to have a complete updated database, that could simplify the follow-up of cases and the successful entry of new cases on different government dependencies. This AI will be centered in an intersectional feminist perspective taking women as the center of the design.

Introduction

Emerging evidence has revealed that domestic violence against women and girls has accelerated due to the re-

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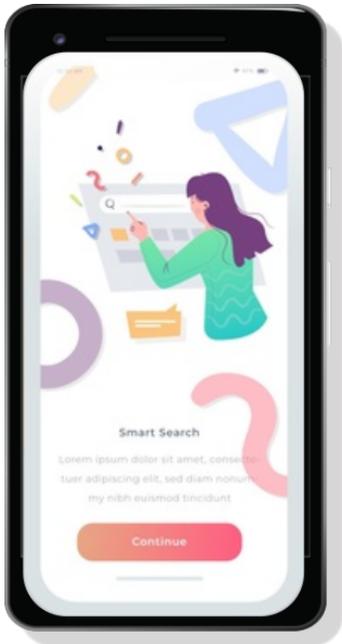


Figure 1: Interactive Feminist Interface

cent global pandemic of COVID-19. In Mexico, 43.9% of women aged 15 years and over (19.1 million) reported being victims of intimate partner abuse over the last decades [2]. Both social and economic pressure, such as loss of income and extended domestic stays extend surged the incidents of domestic violence. With social isolation and restricted movement during quarantine, battered women are forced to live in confined spaces with their abusers and found no way to escape. Many of them were afraid to seek help or call police, knowing their aggressors might eavesdrop on their phone calls and might exacerbated the situation. The United Nations Development Program (UNDP) Acceleration Laboratory in Mexico is partnering up with the LUNA Centers of the Government of Mexico City (LUNAS) to advocate immediate action to end all forms of violence against women and girls.

The first step for a woman to receive support, is to fill a "Unique Registration Card" (URC), which contains all the information needed by the institutions to provide the correct support and follow-up of the case. This form is a key tool for the Information Network of Violence Against Women (Red de Información de Violencia Contra las Mujeres - RIVCM). The file allows that other government dependencies that were not part of the filling of the URC access the information and proceed with the case. This registration card and network are the correct mechanisms to tackle the problem but there is still a lack of maturity in the technologies and methods.

Independently of the interdependency ability to work together, the filling of the URC poses also limitations. The URC is filled in person in the LUNA centers or by telephone. This filling is a tedious step, for the user and the worker who helps to fill it.

There are several layers of obstacles to tackle that are mixed in the same objective, to provide a tool useful for users, workers, and government dependencies to help in the current situation of domestic violence. We propose an Interactive Feminist Interface that will provide a framework where we can develop technology focus and centered in women. For this we take a feminist HCI approach [1], making participants all the women that will be possible users of the technology in a participatory design. We want that this technology adapts to the women using it instead of them adapting to use the technology, what is known as a Human-Centered Design [3].

With this we try not only to solve the direct problem of workload and collaboration in between dependencies, but provide a complete framework based in equity and intersectionality which could be used for other types of virtual assistants or machine learning in general [4].

Interactive Feminist Interface

As mentioned before the Interactive Feminist Interface has several layers of objectives. The first one is to provide a tool, a virtual assistant (chat-bot) that will help users to fill the information needed for the system to process their case. The second, to reduce the workload of the workers at the LUNA centers providing them with a tool that could help in orientation to fill the URC and to make it easier to access data and follow cases. And the last one, to provide a robust and reliable database handle for interdependency team work, allowing different government dependencies to access and follow the cases.

To propose the design of this virtual assistant, we have consulted users and workers, as well as people in the secretaries that are linked directly to the LUNAS center, to be able to gather the sufficient knowledge to provide



Figure 2: There are several institutes and people involved in this virtual assistant

the correct tool.

Design plan

People and institutions involved

Different laboratories, institutions and people are involved in the development of this virtual assistant. The United Nations Development Program (UNDP) Acceleration Laboratory in Mexico is partnering with the Civic Innovation Lab at UNAM, with governmental institutions, Centers of the Government of Mexico City (LUNAS), Secretary of women (Mexico), ADIP and RICVM.

Plan of development

The development plan is carefully designed to allow feedback and participation of the main users of the virtual assistant. The virtual assistant development plan follow the next steps:

- Interviews with users and workers at LUNA centers
- Starter platform prototype
- Test phase
- Prototype real interaction tests
- Start platform architecture in production
- Training of LUNAS workers and people involved
- Technology tests in production

For each of these steps different "actors" are involved, For the first step and all the test phases the workers at LUNA will be involved. RICVM will be involved in the test phase and the research of the whole virtual assistant. And ADIP will be part for the implementation and distribution of the tool.

Nevertheless, our scope is to involve all of these actors in the design, prototype testing and corrections, to be sure that the tool is not only focused to one group but is useful for each of the people involved and that fulfills and excels the needs.

Calendar of prospective prototype

- Interface design (3 weeks): Interface co-design with users and key actors.
- Fast prototyping (5 weeks): Tests with users with the interface, to gather information and iterate the design. In this stage the interface will be developed to production level.
- Training and workshops (4 weeks): Training of people involved in the use of the tool to provide services to users.
- Production: Distribution and installation of the interface. Testing on big scale.

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