Ecosystem Map

A Systemic View of Edmonton's Transit System

Interaction III: Service Design
Bachelor of Design
Lisa Cox

Introduction

What is an Ecosystem Map?

"Ecosystem maps are tools designers create to understand the relationships and dependencies between the various actors and parts that contribute to creating customer experiences. An ecosystem is these actors, parts and dynamics. The maps reveal areas to optimize services to deliver the best customer experiences." (Interaction Design Foundation).

Edmonton Transit Service (ETS)

ETS was our community partner for Interaction Design III, where we explored digital solutions to improve Security & Safety for ETS Riders. As part of our Discover & Define phase of research, we created an Ecosystem map to understand the ETS Service, its actors, parts, and dynamics to improve the overall ETS experience.

Methods

Service Inventory

Before creating the Ecosystem map, we took inventory of all parts of the ETS service. In collaboration with ETS, their website, and other documentation, we gained an understanding of the complex moving parts that make up the ETS service.

User Interviews

In order to better understand the Rider Journey, user interviews were conducted with ETS riders. Each rider has unique needs that are dictated by the type and phase of service they are interacting with and their personal experiences. This Qualitative research method enabled a deeper understanding of ETS riders and allowed rider-centered journey mapping within the ecosystem map.

Acknowledgments

I want to thank ETS for the opportunity to work with them as well as their time and collaboration. I would also like to thank my Faculty Mentor, Dr. Isabelle Sperano, for her expertise, guidance, and support throughout this project.

Explaining the Map

Stakeholders & Actors

ETS operates within the larger City of Edmonton System and has complex pain points regarding safety and security both within and outside of their control.

The top of the map shows the system hierarchy and the interdependent relationship between the ETS System and the Rider Experience. Rider Experience affects riders' willingness to participate in the ETS System (Ridership), affecting the ETS System through funding and budget. The Community Partners, Emergency Services, and ETS Personnel chart within the hierarchy shows the top-level influence of these stakeholders & actors within the greater ETS system.

Rider Journey by Phase

Phase 1: Stop Experience
Phase 2: Station Experience
Phase3: On-board Experience.

Rider Touch-points by Phase

Touch-points are categorized by interaction type. Information, Actors/Stakeholders, Safety Features, and Security Risks.

Each touch-point type is indicated through iconography, defining the different characteristics of that interaction. The User/Rider loops back into the top-level of the ecosystem map, outlining the interconnected nature of the ETS System.

Conclusion

Analysis of the ETS Ecosystem through a Design Thinking Lens and User-Centered approach enables a deeper understanding of the ETS System and how to best proceed when designing future solutions.

References

Interaction Design Foundation. (n.d.). Ecosystem Maps. In Interaction Design Foundation. Retrieved April 20, 2022, from https://www.interaction-design.org/literature/topics/ecosystem-maps

EDMONTON TRANSIT SYSTEM ECOSYSTEM MAP