



# Learnability: Integrating UX and Activity Theory for Intuitive Digital Products



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*additional resources at*  
**[uxlearningjourneys.weebly.com](https://uxlearningjourneys.weebly.com)**

# Presentation Outline.



## Background:

- The client case that prompted a fresh look at Journey Maps using the Activity Theory framework
- Elements of a traditional User Journey Map vs. a 'Learning Journey'

## Activity Theory Overview

- Defining 'learning'
- A crash course in Activity Theory
- Bridging Activity Theory & User Experience (UX)

## Applying Activity Theory

- How we used Activity Theory in our client case
- Coding and analysis approach
- Lessons learned

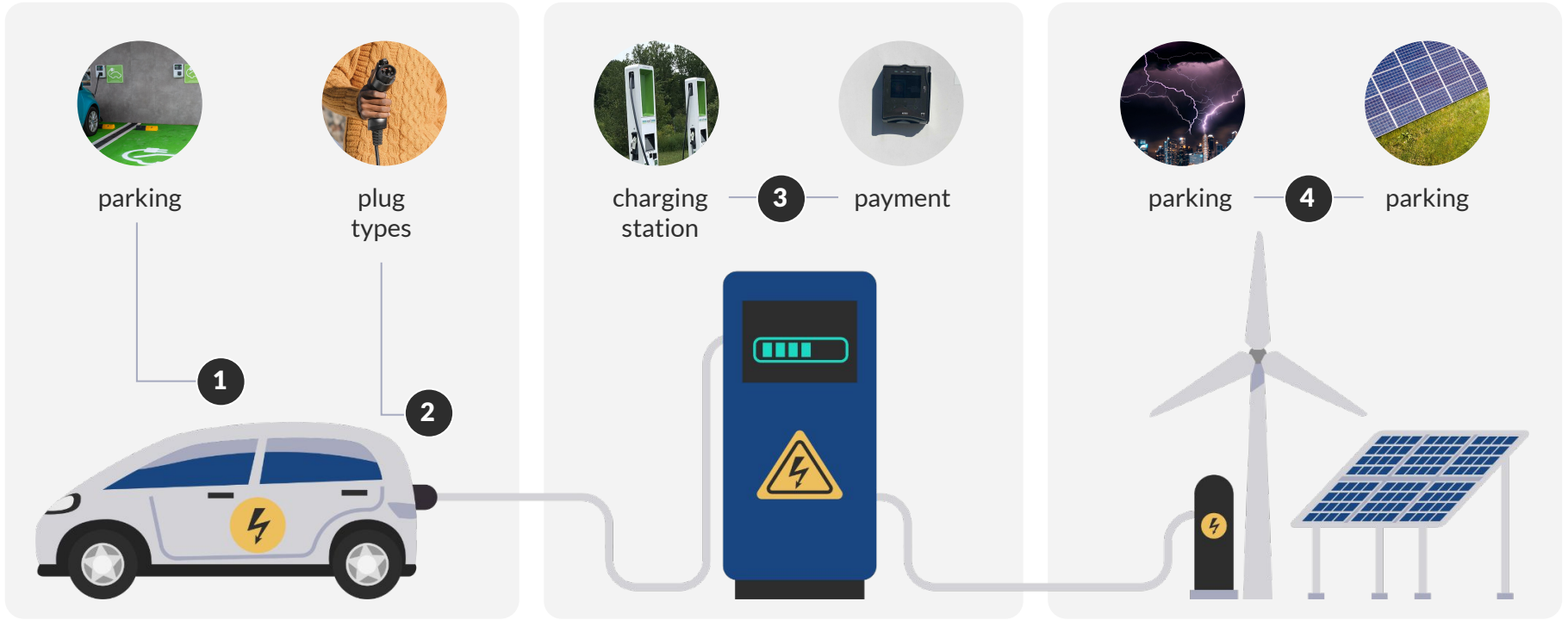
# BACKGROUND.

# The Emerging Electric Vehicle Market.

- From early adopters to mainstream drivers
- From tech-savvy segment to a mass market
- From in-town driving to long-distance trips
- From gasoline-based to electricity-based



# Charging Is More Complicated Than It Seems.



## The Solution:

**WE NEED  
TO EDUCATE  
THEM!**

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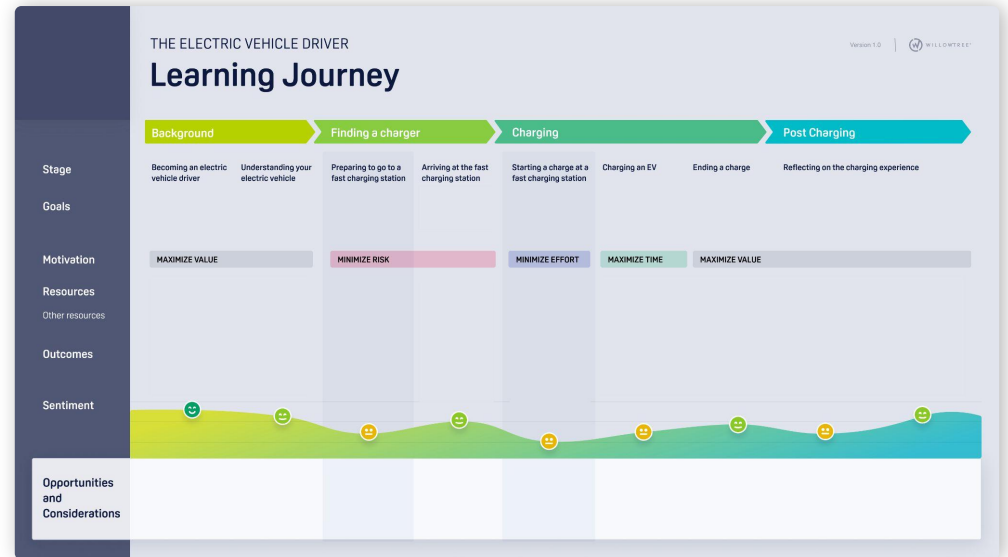
**WE NEED  
TO UNDERSTAND  
THEM!**

# User Journey Maps - Whys and Whats.

Sequential outline of key steps and touchpoints from the user's perspective

Common elements:

- Goals and motivations
- Touchpoints
- Feelings
- Opportunities





# Learning Journey



## Quick Pause 1:

# QUESTIONS?

# ACTIVITY THEORY OVERVIEW.

# Some misconceptions about learning

Learning is often defined as:

- Occurring in formal settings (i.e. schools)
- A strictly cognitive/internal process
- A uniquely individual experience
- Dependent on one's 'learning style' and 'mindset'

**BUT THIS CAN BE A PROBLEM**

When learning doesn't happen as planned, we're **quick to blame the individual.**

**But...What if there are other external factors impacting their learning?**

These factors might be **visible** (i.e no closed captions for visually-impaired users) or **invisible** (i.e. societal expectations)

# Redefining 'Learning'

Learning is...

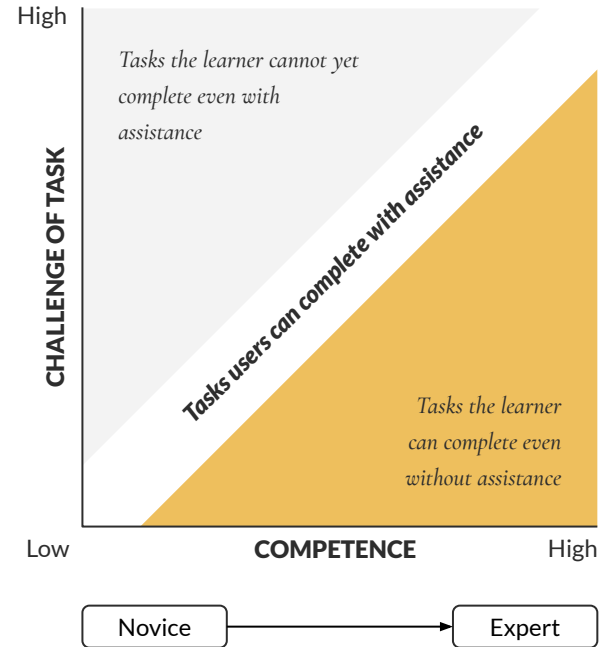
- an external, social, & cultural process
- that happens through day-to-day interactions
- and is unique to the current time & place



# Everyone has a learning journey.

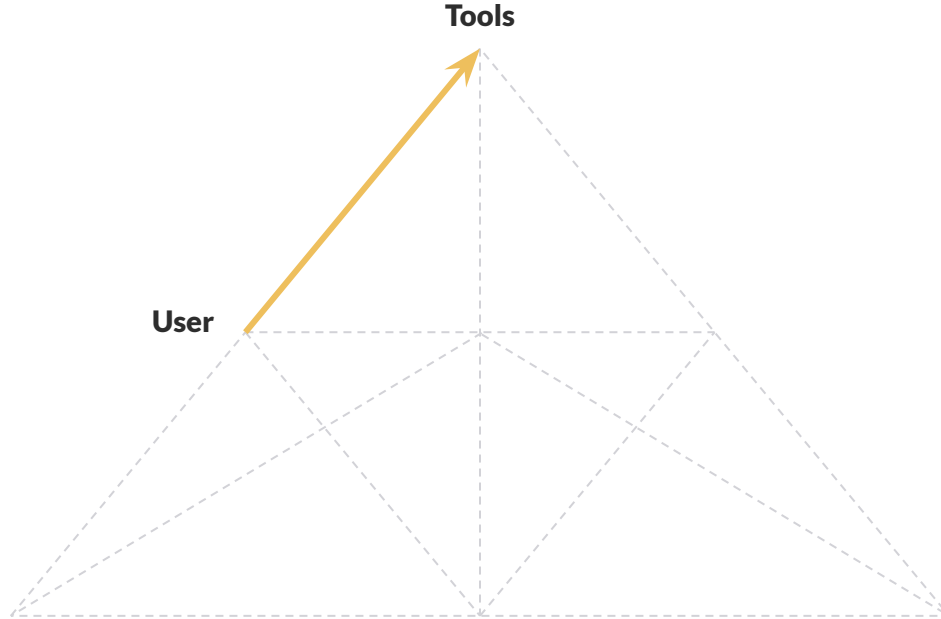
- As users gain competence/expertise (through learning), they can complete more challenging tasks
- Users can complete more challenging tasks with assistance compared to alone
- Our designs can assist users to complete more tasks than what they could do alone

**Let's discover and design supports to meet users where they are in their learning journeys.**



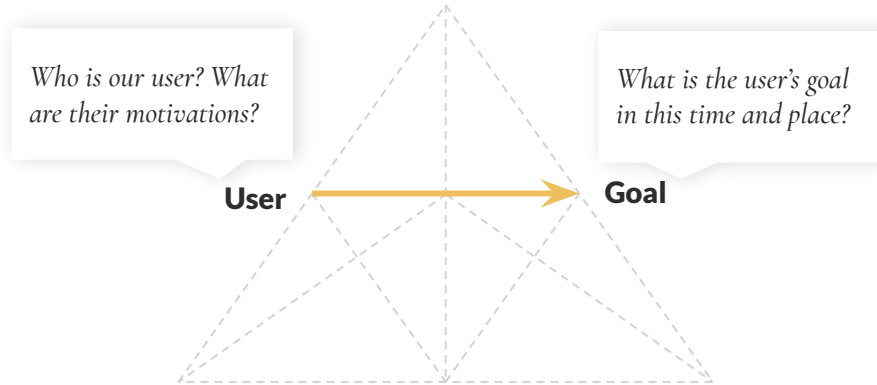
# The Activity Triangle

Expanding our view of users' experiences



# Defining the core activity.

What are users (consciously) trying to do?



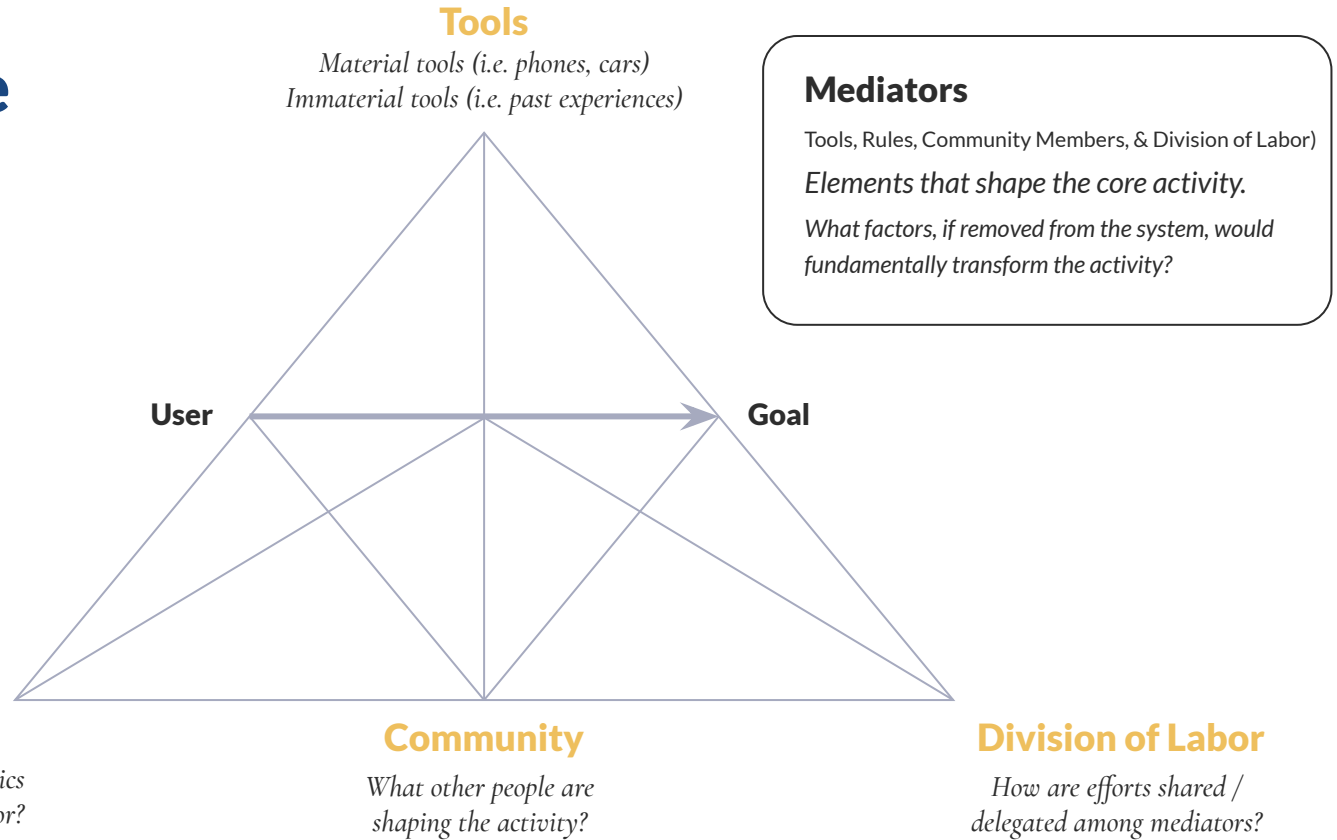
	<b>User</b>	<b>Goal</b>
○	A parent	taking a month-long family road trip
○	A driver	finding a recharge station in Virginia
○	A consumer	paying for a charging service

There's a LOT of interacting activities happening here - so which do we care about?

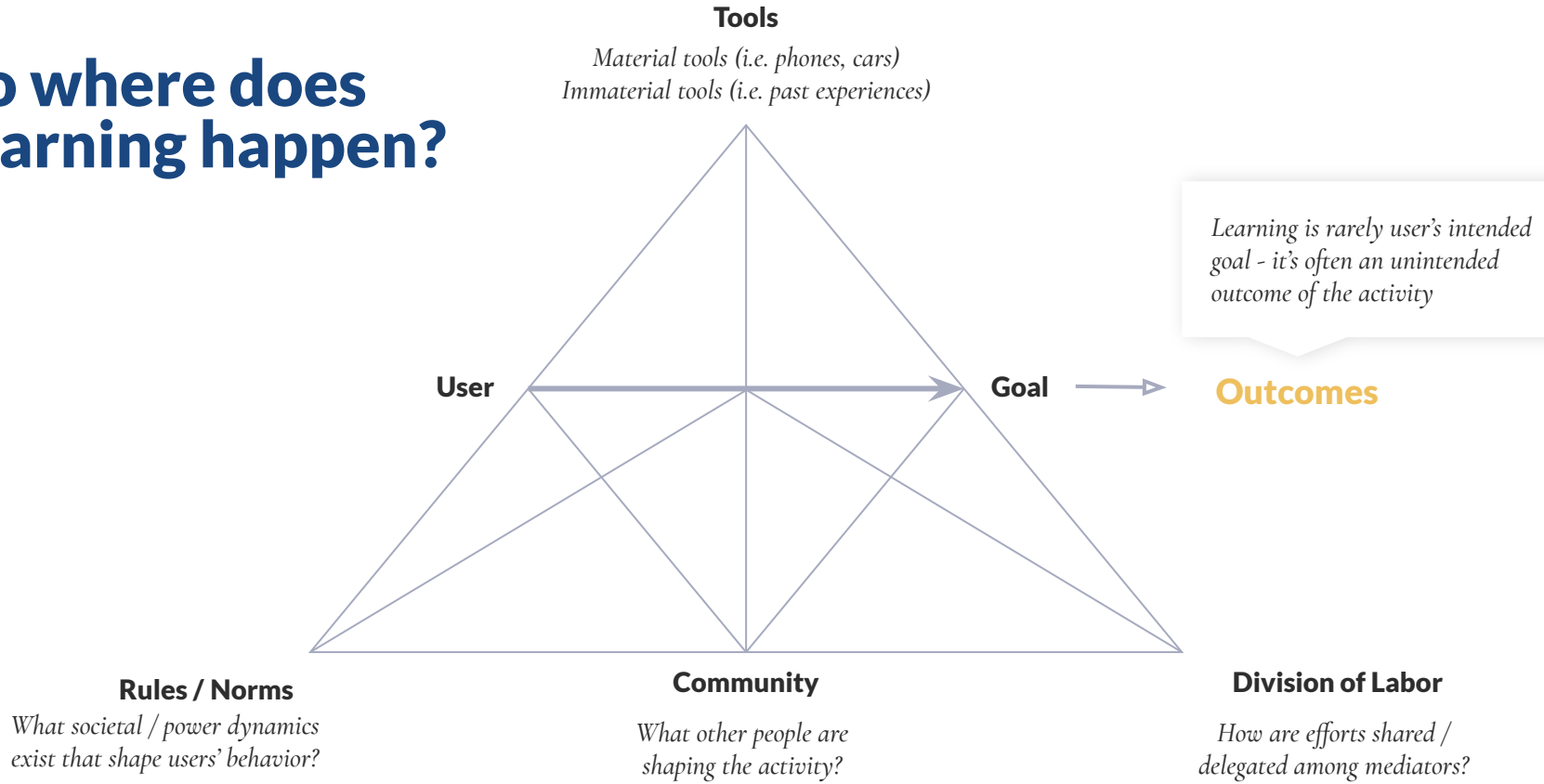
Which activity is **appropriate** and **possible** for us to **support / transform**?



# Defining the mediators



# So where does learning happen?

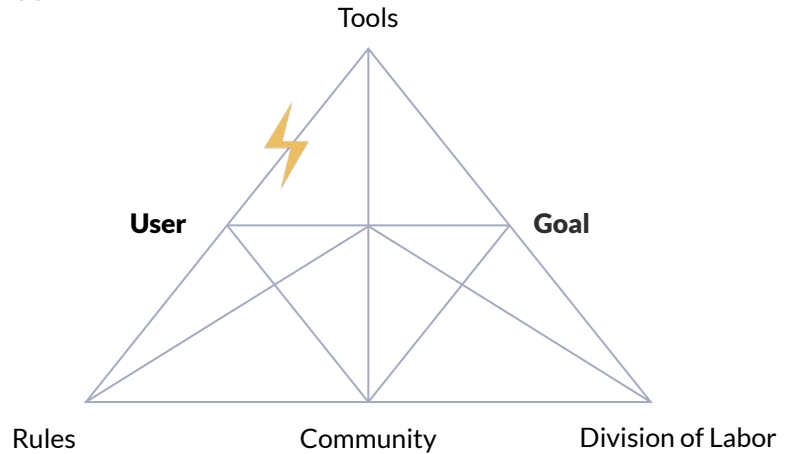


# Identifying areas for improvement

## Gaps, barriers, & work-arounds

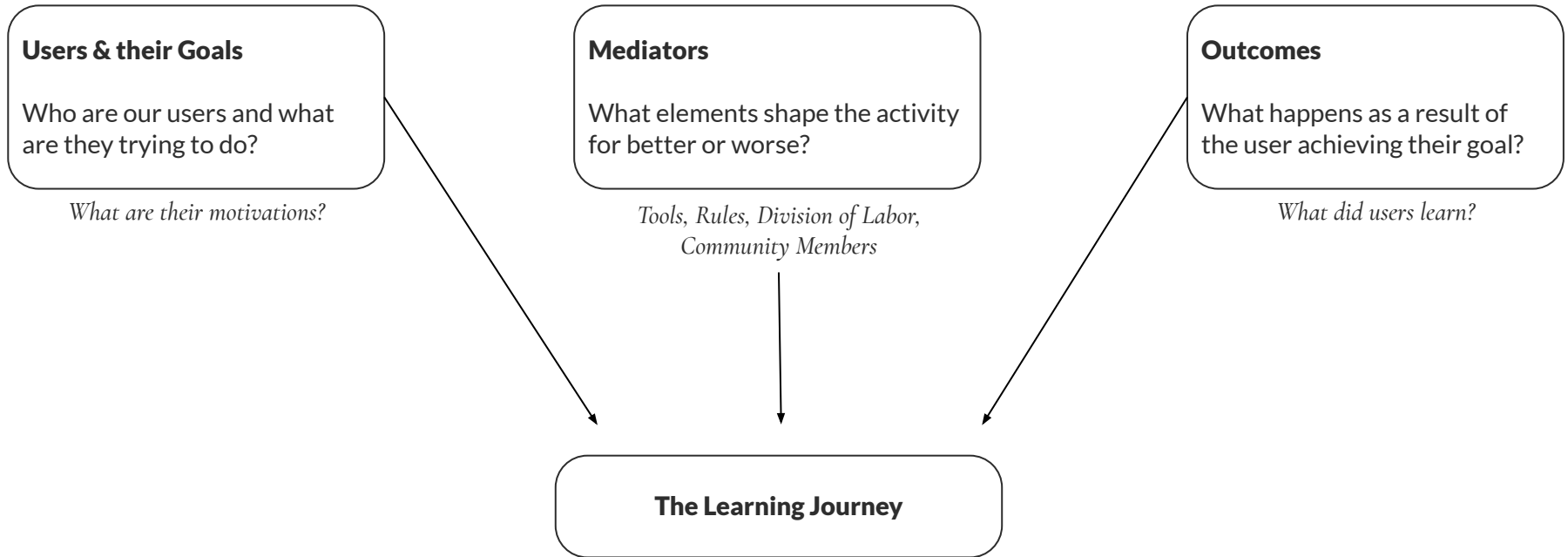
The relationships between mediators reveal opportunities for **remediation**

- What gaps in knowledge are there?
- What mediators are preventing users from reaching their goal? (Barriers)
- Which mediators indicate users work-arounds / adapting to challenges?



# Bridging Activity Theory with User Experience.

## PRACTICAL IMPLICATIONS



## Quick Pause 2:

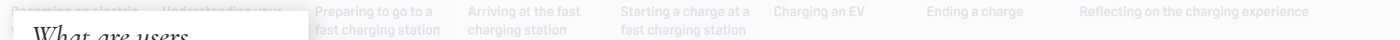
# QUESTIONS?

# APPLYING ACTIVITY THEORY.

# Learning Journey



# Integrate an AT Lens into Our UX Approach.



*What are users consciously trying to do?*



*What elements are transformative to the activity?*

*Learning happens here (often unintentionally / accidentally)*

*What relationships exist that help or hinder users that we can influence?*



Stage

Goals

Motivation

Resources

Other resources

Outcomes

Sentiment


Opportunities and Considerations



# An AT x UX Methodological Guide.

## STEP ONE: ALIGN ON TERMINOLOGY AND MEANING

Find language for AT terms that works for you; Add concepts as needed

- 
- What are your client/project goals?
  - What terms and concepts are already familiar to you, your client, and team?
  - Ensure you've discussed how AT concepts translate and document in your code book

Examples:

- **Mediators** = Tools, Resources
- **Perceived Authority** (High, Medium, Low) = Users' assessment of how reliable mediators and other information sources are (explicit and implicit)

# An AT x UX Methodological Guide.

## STEP ONE: ALIGN ON TERMINOLOGY AND MEANING

### What do you think?

An EV driver pulls up to a charger, parks, and tries to plug in. They find that they were supposed to back in instead of pull forward. The driver remarked after, “I don’t want to look silly trying to charge my car.”

*Is ‘not looking silly’ a Goal, Outcome, User motivation, or Mediator?*

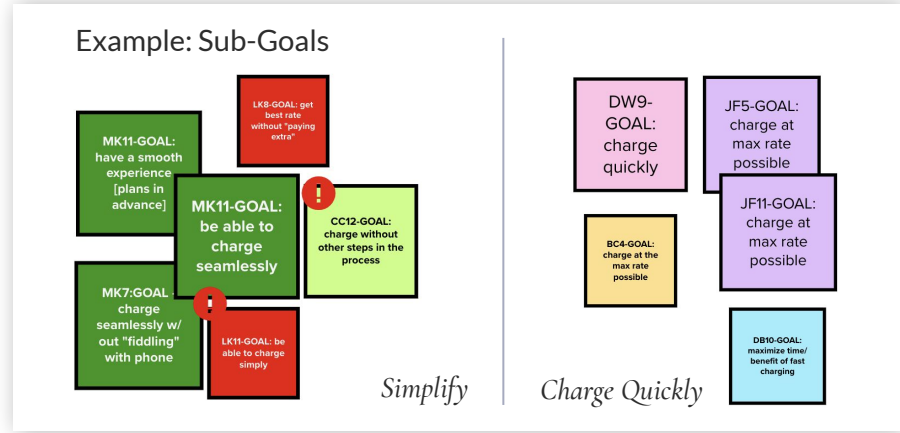
### Tips:

- Discuss these issues as a team and document the rationale to ensure consistent coding.
- Ground decisions in evidence - What are users telling us with words and actions?
- Don't get too hung up on mapping perfectly to the AT framework. Prioritize the spirit of AT vs. the details.

# An AT x UX Methodological Guide.

## STEP TWO: CODE YOUR DATA AND IDENTIFY THEMES

- Use your modified AT codes to group data
- Within these groupings, identify sub-themes



# An AT x UX Methodological Guide.

## STEP THREE: ANALYZE RELATIONSHIPS FOR OPPORTUNITIES



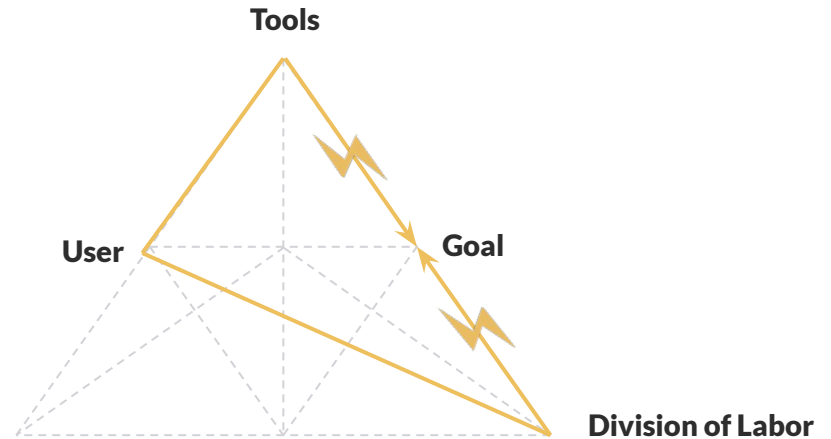
Consider areas of tension and ease

Opportunities exist in these connection points

**Gaps:** What knowledge are users missing?

**Barriers:** What elements are preventing users from achieving their goal?

**Outcomes:** What's the end result for users and is this at odds with user/client expectations?



# Pitfalls, Traps, & FAQs.

There are so many activities! So many triangles!

Consider:

- Which activities are appropriate and possible to transform?
- Which activities are users telling us are important?
- Which activities do we have data to support?

**What kind of mediator is this? There are so many types!**

The specific buckets don't matter as much as acknowledging:

- the mediator exists
- how it shapes the activity

**Whenever you get bogged down, just remember**

You are advocating on behalf of your users, their lives, and their unique contexts.

Where are users in their journey? What do they have? What do they need? What are we neglecting to consider?


# QUESTIONS?

*additional resources at*  
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# CONTACT US



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