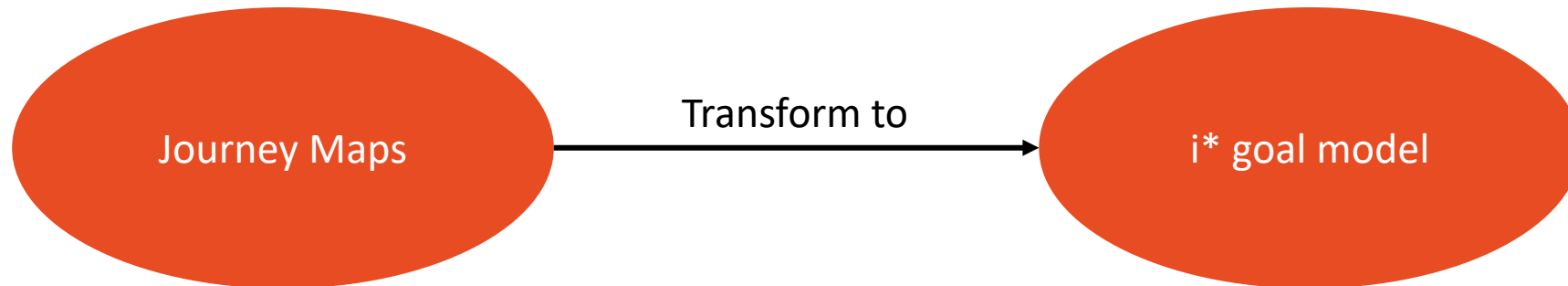# Towards an Approach for Generating iStar Goal Models from Journey Maps

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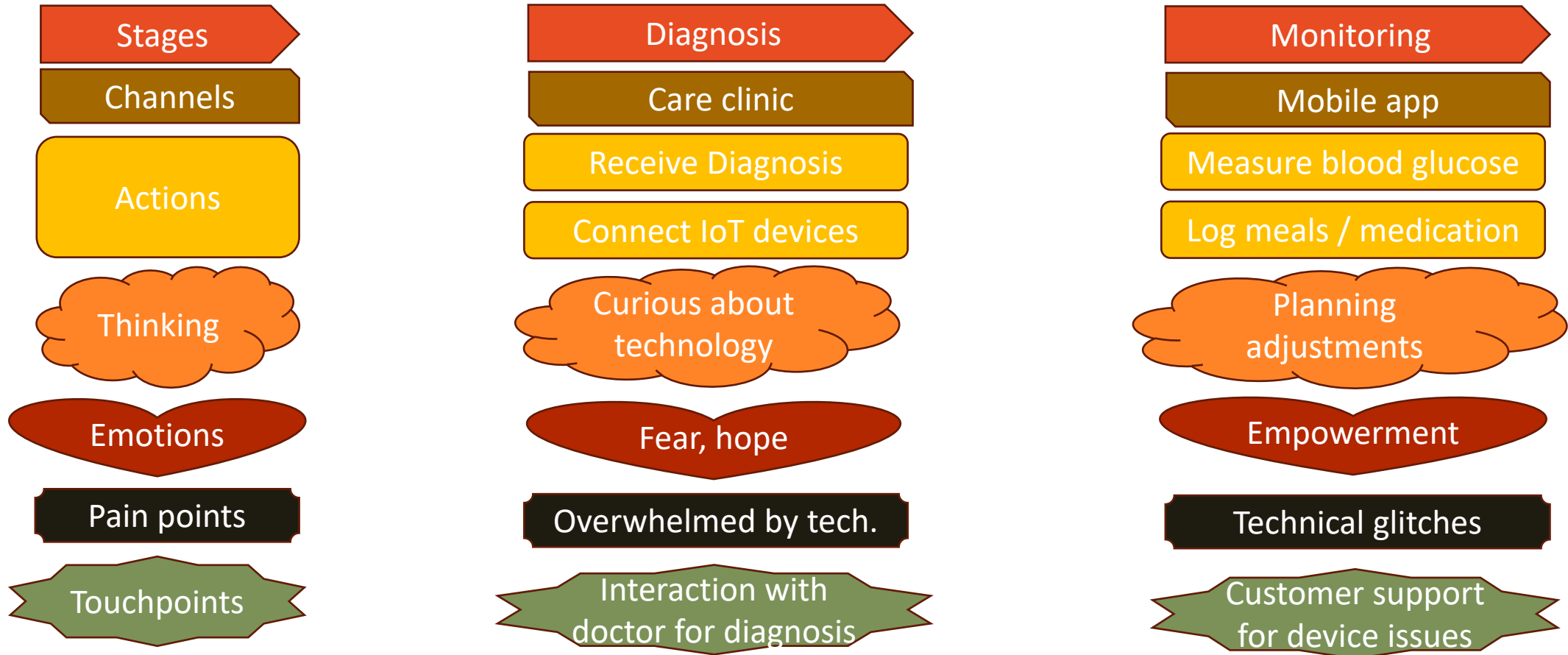
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Objective

Journey Maps **Transform to** → i* goal model

Journey Maps

- Visual representations of a user's experience with a system, product, or service.

- Reflect the user's point of view.

- Widely used in UX design, customer experience, and interaction design.

Journey Maps

|		
Stages	Diagnosis	Monitoring
Channels	Care clinic	Mobile app
Actions	Receive Diagnosis	Measure blood glucose
	Connect IoT devices	Log meals / medication
Thinking	Curious about technology	Planning adjustments
Emotions	Fear, hope	Empowerment
Pain points	Overwhelmed by tech.	Technical glitches
Touchpoints	Interaction with doctor for diagnosis	Customer support for device issues

i* framework

- Framework for modeling social, intentional, and strategic aspects of software systems.

- Components : **Actors**, Goals, Tasks, Resources, Softgoals.

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Motivation for Transformation

Challenges with Journey Maps:

Informal descriptions make direct use in requirements analysis difficult.
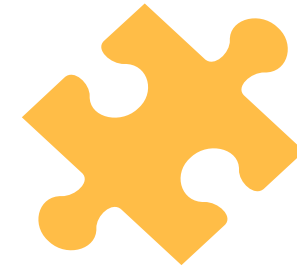
Benefits of iStar Models:

- Systematic approach to user requirements.
- Analyzes goals for consistency and correctness.
- Identifies requirements trade-offs and satisfaction levels.

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Proposed Mapping Approach

- **User journey** ⟺ **i Star**

- Stages ⟺ High-Level Goals (not systematic)

- Channels ⟺ Actors (acts independently) or Resources

- Actions to ⟺ Tasks

- Goals to ⟺ Goals

- Thinking to ⟺ Beliefs (Removed from iStar 2.0)

Proposed Mapping Approach

- **User journey** ⟺ **i Star**

- Emotions ⟺ Softgoals (or extended versions)

- Pain Points ⟺ Obstacles (new elements linked negatively to a task)

- Touchpoints :
  - Stimuli ⟺ Goal
  - Interface ⟺ Resource

« Engagement with **app's online community** (resource) for **support and advice** (goal) »

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Challenges in Transformation

User-Centric Perspective:

- May neglect roles of other actors.

Complexity:

- Detailed journeys and multiple interactions increase mapping difficulty.

Iterative Approach:

- Start with simple examples and progressively handle more complex cases.

Validation Strategy

Expert Review:

Involvement of domain experts to refine mapping rules.

User Feedback:

Evaluate usability and effectiveness.

Iterative Refinement:

Incorporate feedback and empirical findings for continuous improvement.

Conclusion

Summary:

- Presented an approach to generate iStar goal models from journey maps.
- Highlighted challenges and proposed solutions.

Future Work:

- Further refinement of mapping rules.
- Enhanced validation with real-world applications.

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