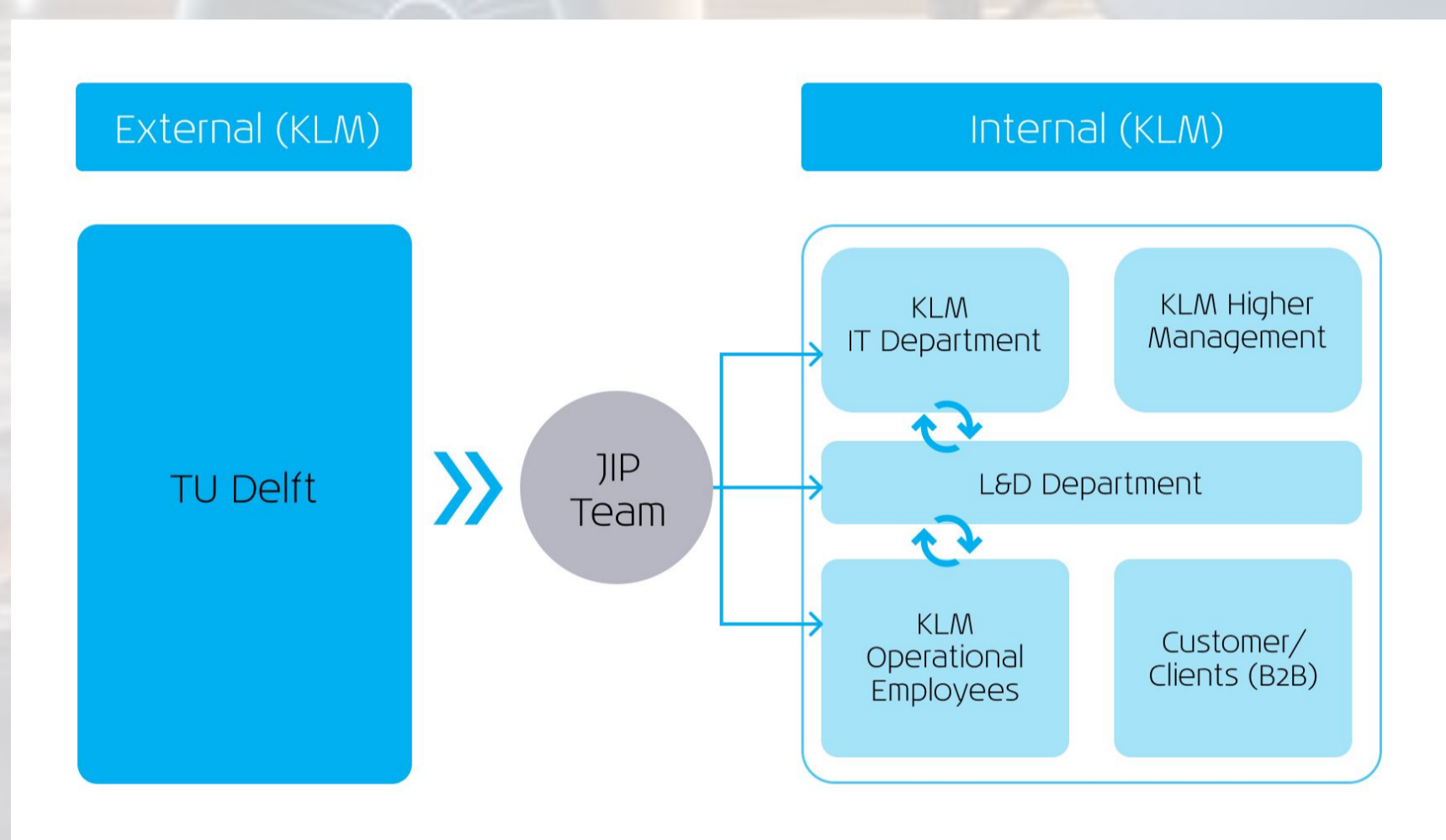# 1.4.1 KLM: Adaptive AI for Enhanced Employee Training

Henk Jekel, Ehsan Sadegh, Ujjayan Dhar, Ramon Mozaffarian, Deepak Sogasu & Kshitij Sreenivasa Roopa

Start

External (KLM) — Internal (KLM)

TU Delft — JIP Team — KLM IT Department — KLM Higher Management — L&D Department — KLM Operational Employees — Customer/Clients (B2B)

Deployment Phase

- Start (Deployment)
- 1. Load Customer Database
- 2. Application Initialization
- End (Deployment)

Operational Phase

- Incoming Call
- Start (Operational)
- 2.1. Call Commencement
- 2.2. Welcome Message Playback
- 2.3. Audio Input Reception
- 2.4. Speech-to-Text Conversion
- 2.5. Response Generation
- 2.6. Text-to-Speech Conversion
- 2.7. Call Termination
- End (Operational)

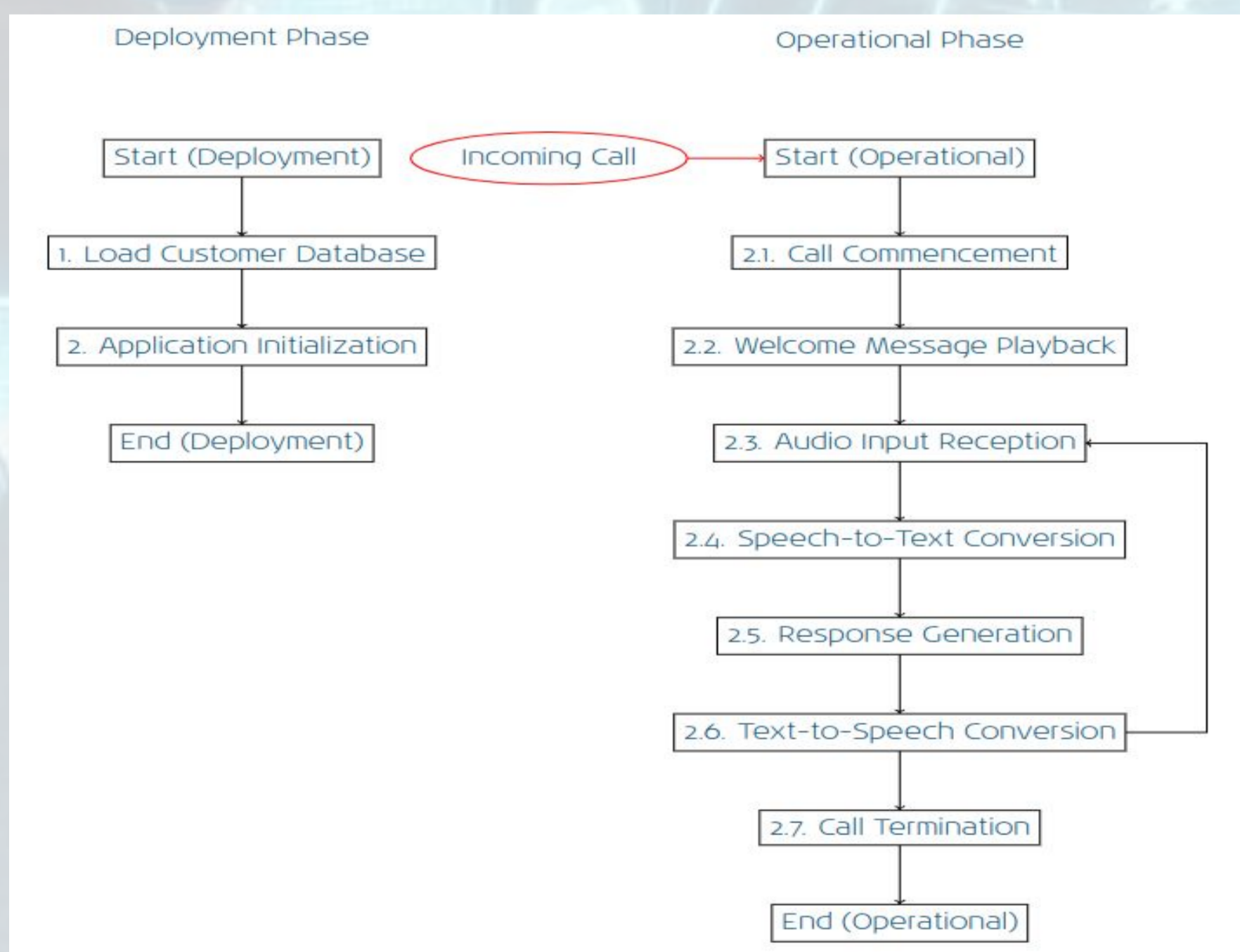|	Rating Current Training	Rating New AI Training
Overall quality	4,3	7,1
Intuitiveness	4,9	7,6
Unpredictability	2,0	6,5
Difficulty	4,2	3,9
Believability	3,2	7,1

TRY IT OUT CALL: +3197010205878

Design

Designed a Framework and while doing SWOT and PESTEL Analysis and fulfilled the gaps using Literature review.

Stakeholders analysis showed the dynamics of the entire organization and JIP.

Develop

We implemented a systems engineering approach, starting with an abstract user scenario presented in the short film, which is accessible upon request immediately following this poster section. We then progressed to create a detailed activity diagram shown on the left. Leveraging this activity diagram, we effectively integrated all the features showcased in the short film. After reviewing the poster, you can directly experience our innovation by using our phone application. We take pride in being the pioneers in developing such phone application, positioning us at the forefront of state-of-the-art technology as the true inventors.

Test

The AI training program scored higher overall quality, intuitiveness, unpredictability, and believability (Paired sampled T-test) as show in the table on the left.
The analysis proved that the phone application improved confidence, motivation, and cross-cultural communication skills (wilcoxon signed rank test).