Example 3 - Dentist

May 2025

Dentist

1. Job Composition

- Thinking: 25% (diagnosis, treatment planning, medical knowledge)
- Physical: 30% (precise hand movements, tool manipulation)
- Social: 15% (patient communication, anxiety management)
- Perception: 20% (visual examination, tactile feedback)
- Adaptation: 10% (responding to patient movement, unexpected findings)

The job composition model can be altered or extended. The narrower the scope of a component is, the easier it is to estimate Human Advantage for it.

2. Human Advantage Score

- Thinking: 5/10 (AI can assist with diagnosis but struggles with comprehensive treatment planning)
- Physical: 9/10 (extremely difficult to replicate precise hand movements in small, sensitive spaces)
- Social: 7/10 (difficult to replicate bedside manner and real-time emotional reassurance)
- Perception: 8/10 (complex integration of visual and tactile feedback in variable environments)
- Adaptation: 9/10 (significant challenges adapting to unexpected patient movements and oral conditions)

Components may overlap, as Human Advantage Scores are estimated for each individually, which cancels out overlaps.

3. Job Resilience Score

- Total: 7.5/10
- Beginner: 6.5 (7.5-1)
- Advanced: 7.5
- Master: 8.5 (7.5+1)

4. Result:

- Beginner: Low Risk (10+ years)
- Advanced: Low Risk (10+ years)
- Master: Very Low Risk (15+ years or indefinite human advantage)

Documenting the reasoning process helps in reassessing later.

5. Adoption Factors Check: High salaries might justify automation investment (risk up), but implementation costs for robotic dentistry would be extremely high, and many patients are likely to prefer humans (risk down). These factors cancel each other out, keeping dentistry in the Low to Very Low Risk category.