

Encyclopedia of Human-Computer Interaction (John M. Carroll)

Deep Summary

- **HCI origins:** Emerged in the 1980s from cognitive science, human factors, and software engineering.
- **Shift in focus:** From “ease of use” to broader experiences:
 - Fun, aesthetics
 - Well-being
 - Collective work
 - Creativity
- **Task-artifact cycle:** Tech and human activities shape each other in co-evolving loops.
- **Beyond the desktop:**
 - Mobile, ubiquitous computing
 - Social computing
 - Context-aware interactions
- **HCI today:**
 - Interdisciplinary (psychology, design, engineering)
 - Rich theoretical landscape:
 - GOMS models (task analysis)
 - Mental models
 - Activity theory
 - Distributed cognition

Key Takeaways

- ✓ Usability is not static—it evolves as user expectations grow.
- ✓ HCI is about **supporting human goals** rather than just system functions.
- ✓ Successful interfaces embed human cognition and context into the design.
- ✓ Collaboration and community are part of modern HCI — software doesn’t exist in isolation.

Application to ClinicTrends AI

- **Task-artifact cycle:** Your users’ tasks (analyzing NPS feedback) should guide every interface decision. For example:
 - Graphs should highlight trends users care about (e.g. sudden drops in NPS).

- Avoid unnecessary complexity—users should “think about insights,” not how to operate the tool.
- **Beyond desktop:**
 - Consider mobile access for managers checking dashboards on the go.
- **Mental models:**
 - Think about how clinic managers understand their data:
 - Are they used to Excel?
 - Do they expect familiar filter layouts?
 - Do they think in terms of months, weeks, or daily trends?

By grounding your UI in users’ mental models, you make insights easier to find.