

Human-Computer Interaction Research Opportunities for Aging In Place

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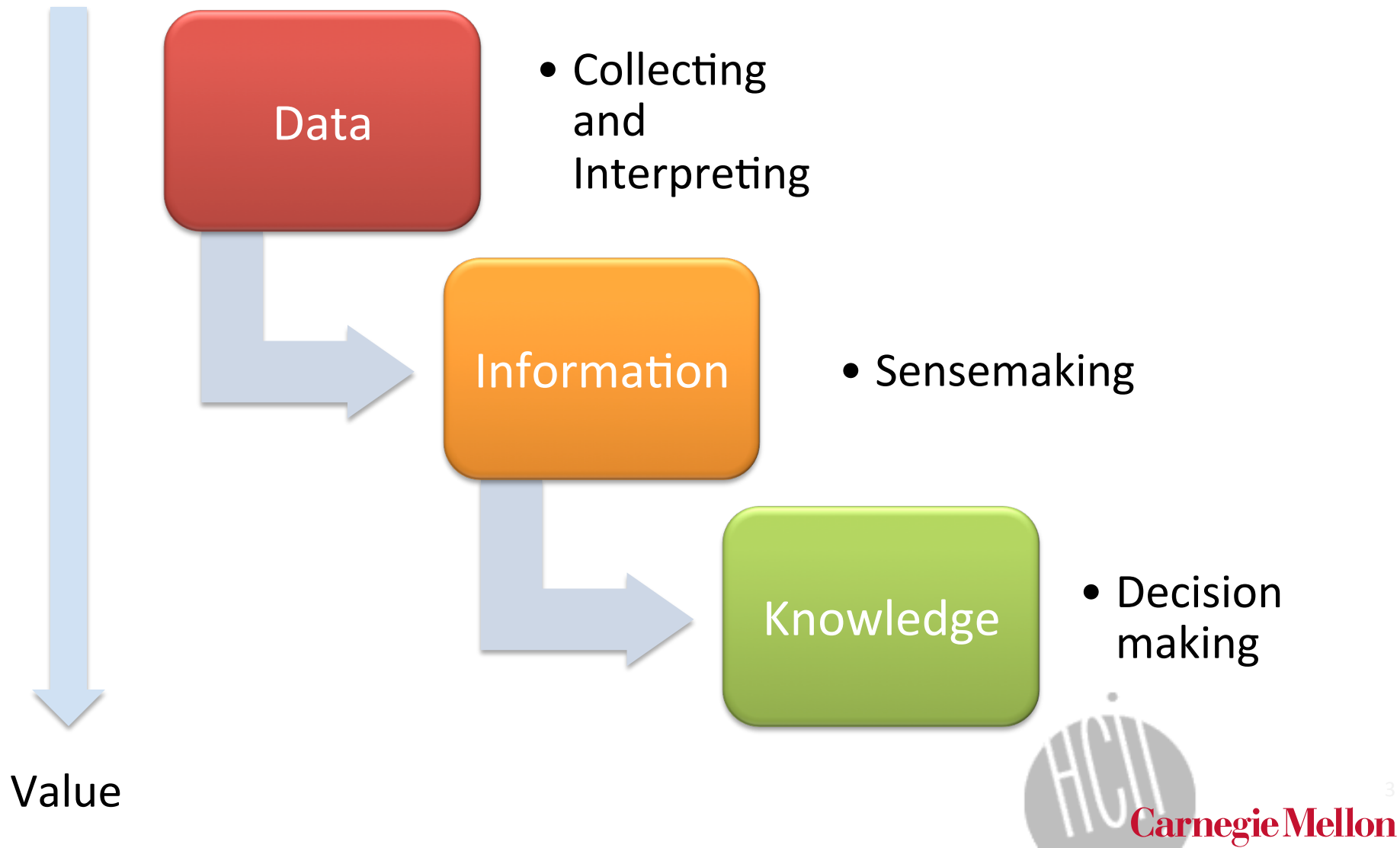
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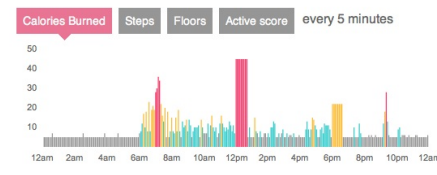
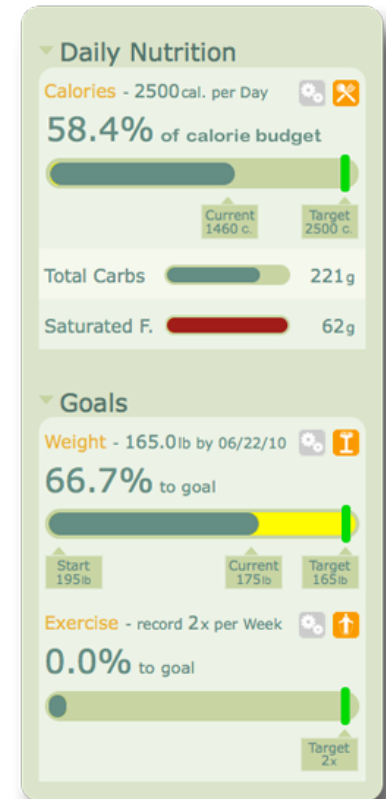
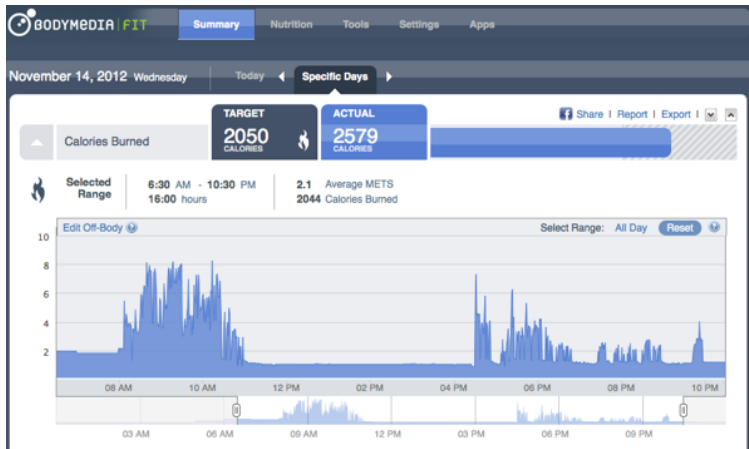
Lots of *data* collection devices



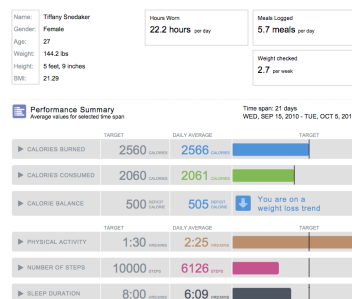
Opportunity: Make Data Actionable



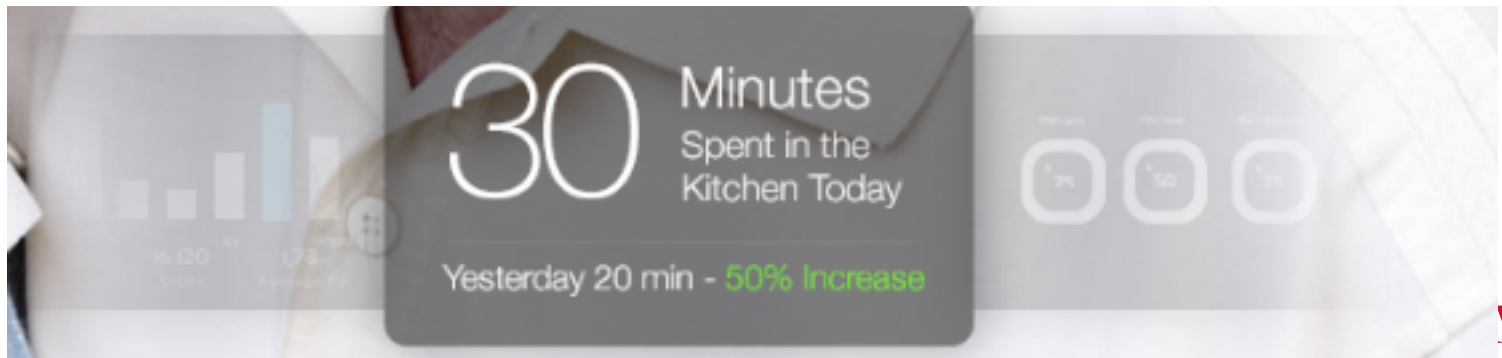
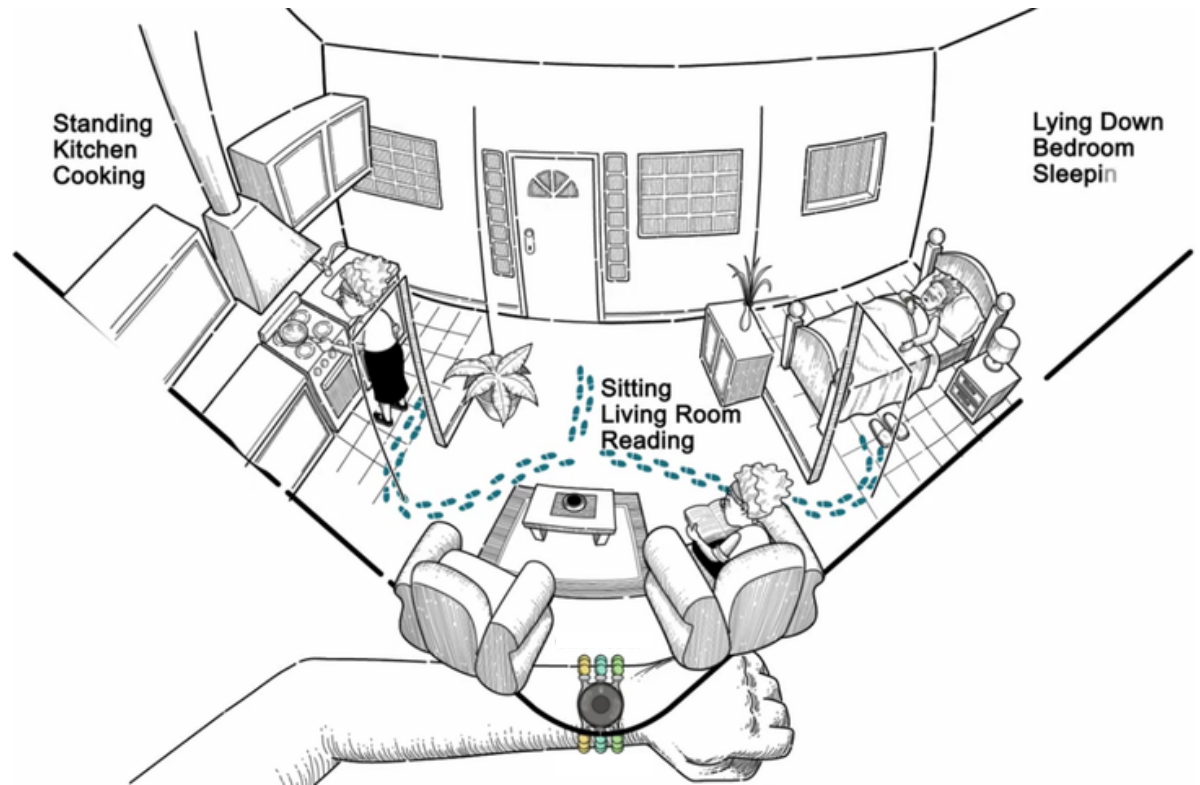
Most of what we get is data



Today's activity breakdown (excluding sleep)



Issue: Data is a proxy



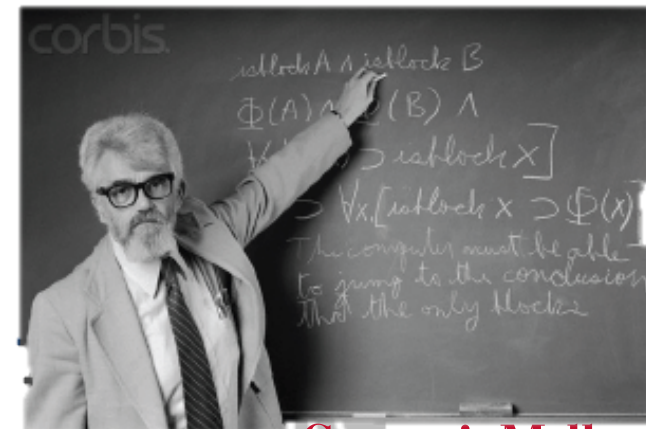
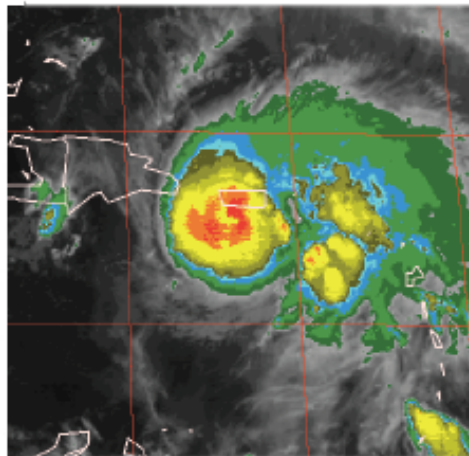
Opportunity: New interfaces



Opportunity: Trustworthy Interfaces

As algorithm or problem complexity increases, how do you develop trust in such systems?

- Intelligible systems
- Reputable systems
- Predictable systems



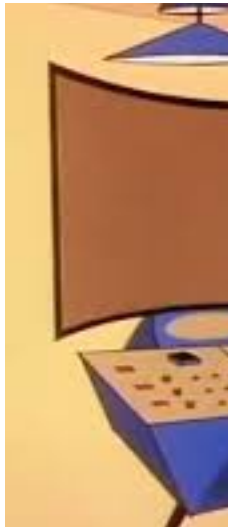
Opportunity: Intention-Aware Interfaces

Need new user interfaces
- for control/actuation



Opportunity: Intention-Aware Interfaces

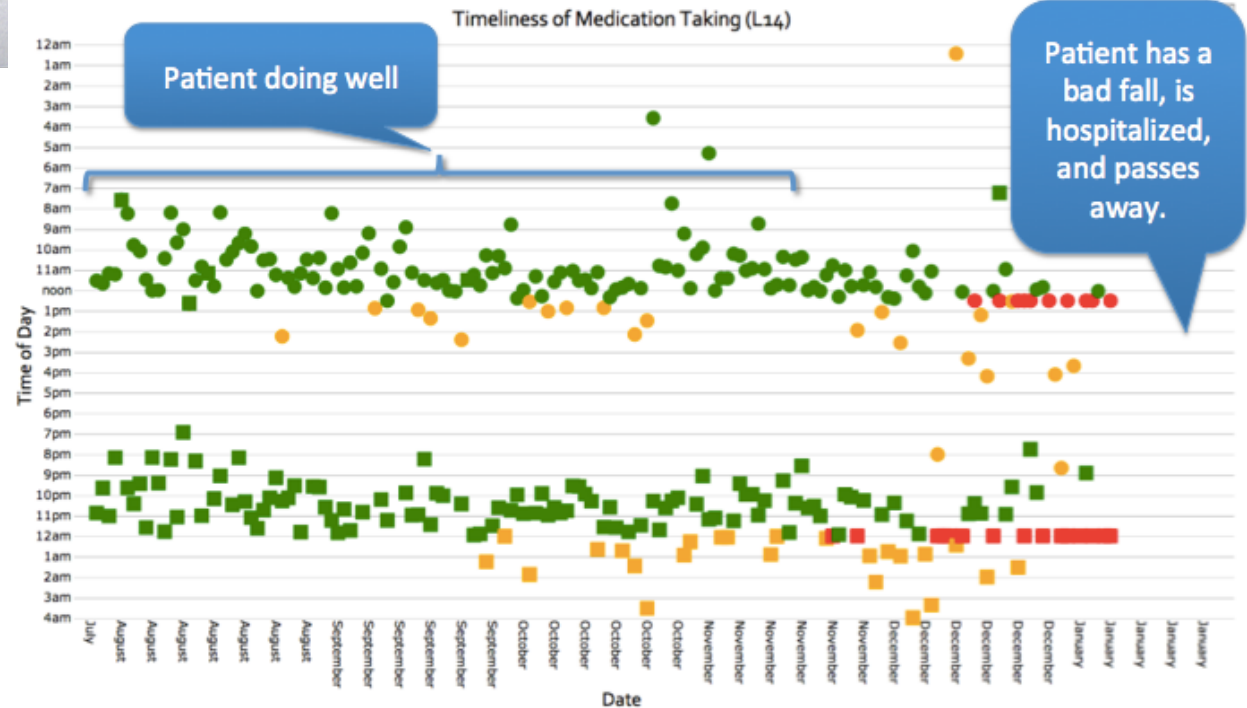
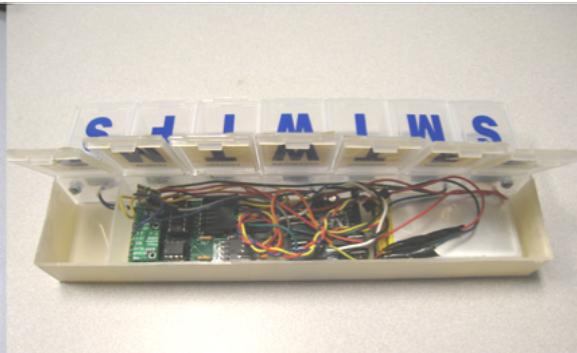
Need new user interfaces
- for control/actuation



Opportunity: Detection → Prediction



Opportunity: Detection $\rightarrow$ Prediction



Opportunity/Challenge: Value Proposition

Compelling apps really need data from a time when people are not compelled by these apps

- algorithms need an understanding of what is “baseline behavior” for an individual and that this is dynamic



Opportunities: Roles

Technology often disrupts social balance

- Priv

- Mai



- Maintain reverse independence

- Maintain identity

