



Designing AI Interfaces

Raj Singh

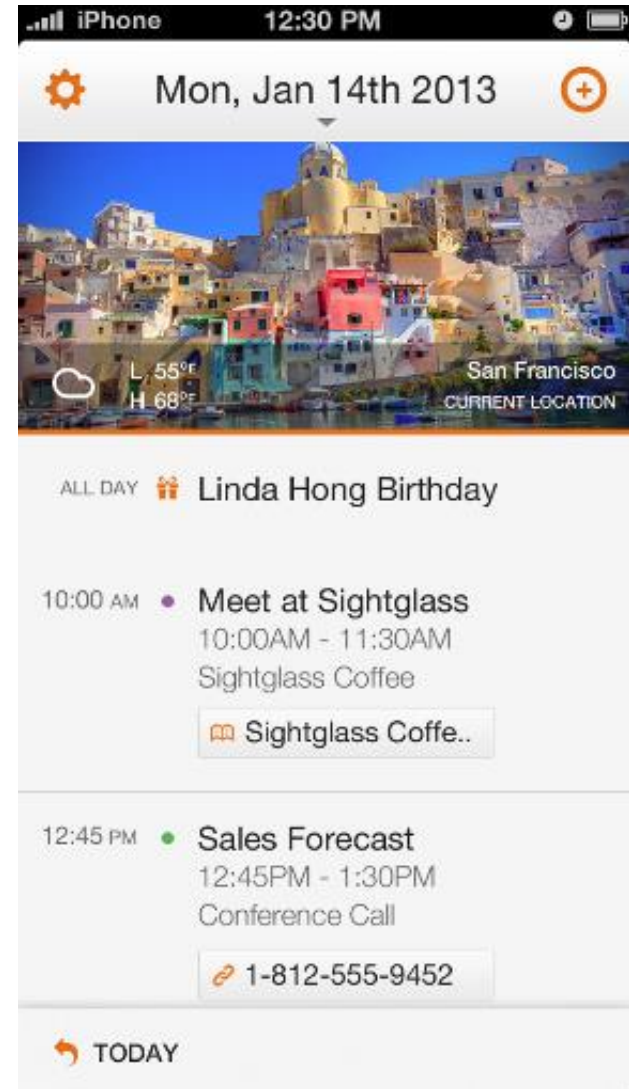
CEO

Tempo AI, Inc.

510-282-4229 (M)

raj@tempo.ai

- Tempo Smart Calendar surfaces information “believed to be” relevant to each event in your calendar and makes it actionable
- Designing 95% UI (Recommendation systems)
 - What if the suggestion was wrong?
 - How does the user train the system?
 - What if there are too many results?
 - How do you indicate intelligence?
- Anticipatory design
 - Can you predict the next action?
 - UI with endless possibilities?





No context

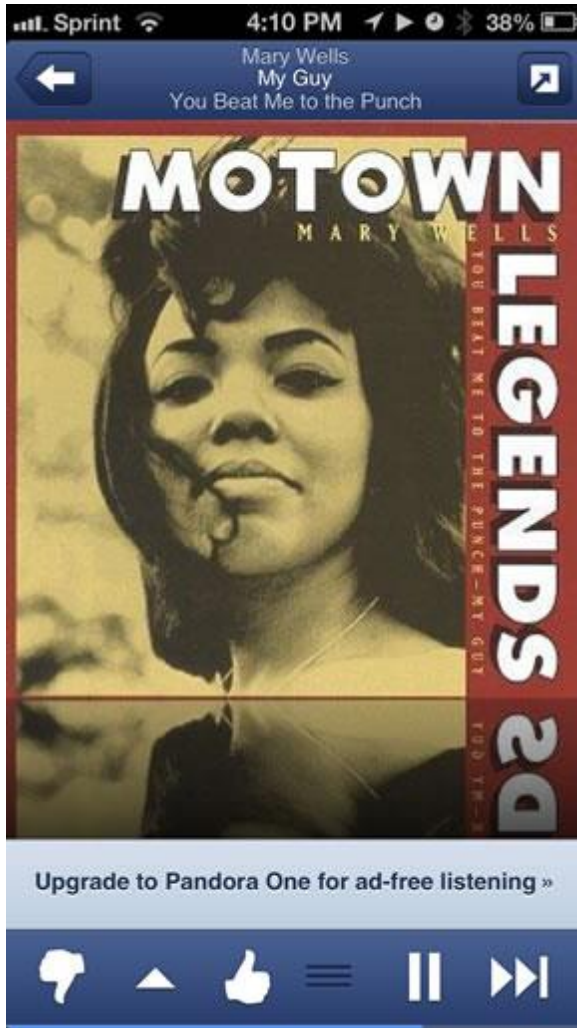


Search context

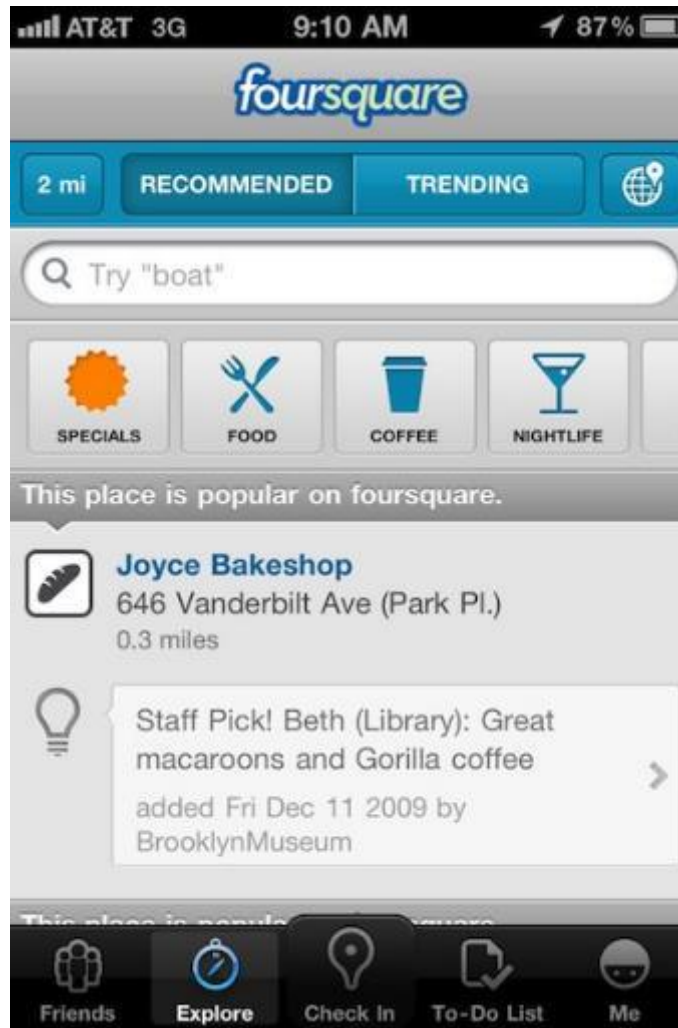


Calendar context

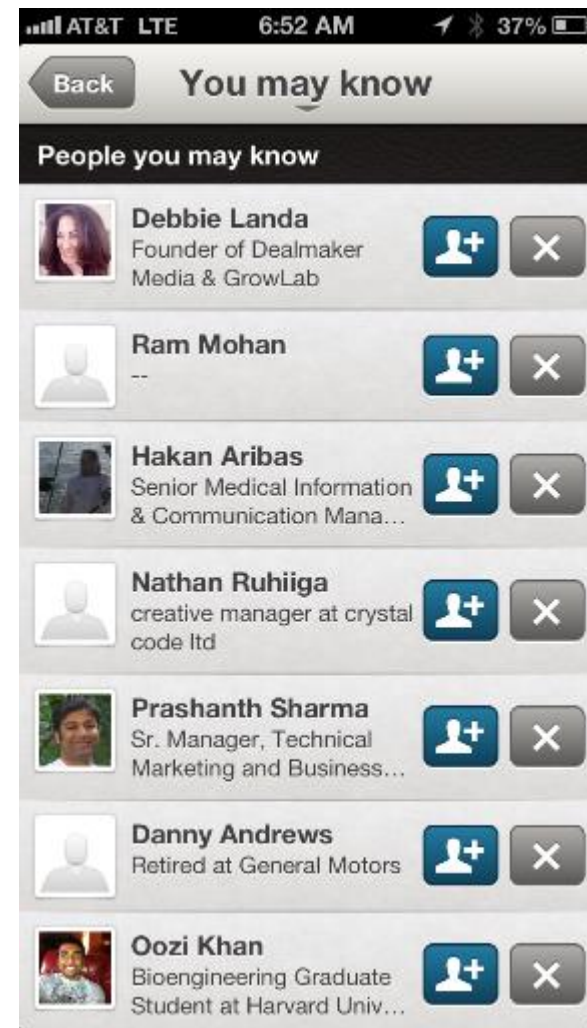
Many flavors of assistants



Pandora

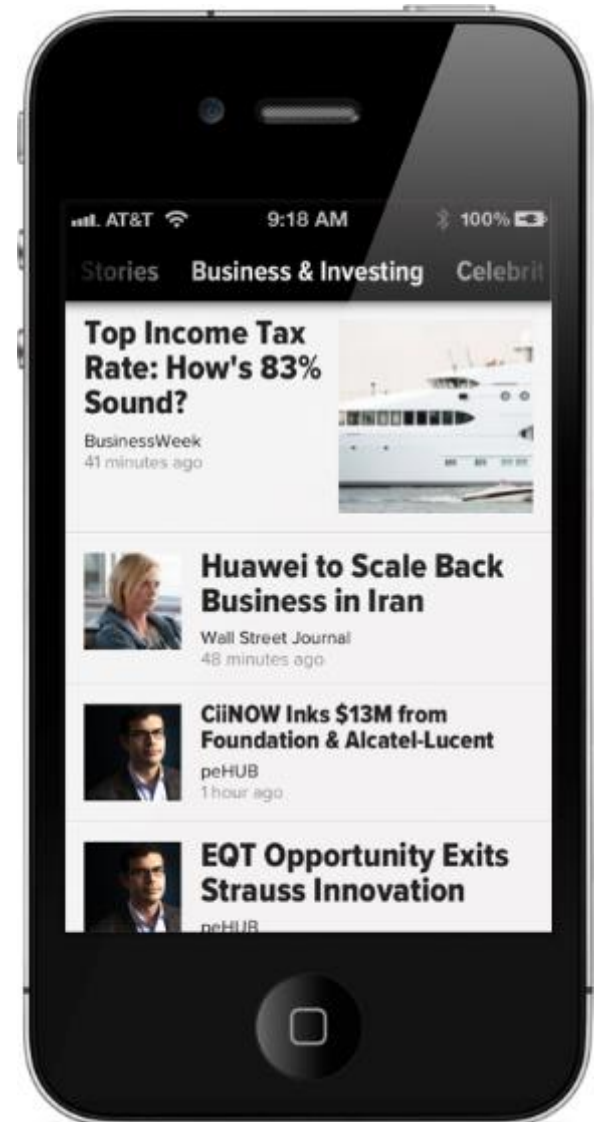


FourSquare



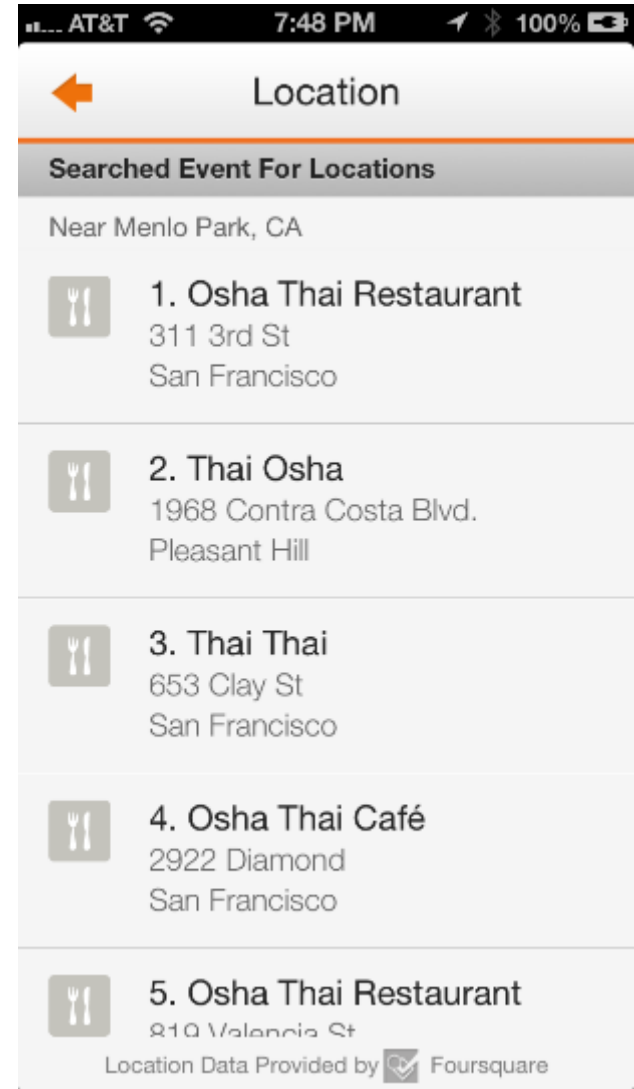
LinkedIn

- **Netflix**
 - Suggests videos based on previous viewing patterns and broader segmentation data
- **Mint**
 - Suggests coupons and potential savings based on buying patterns
- **Zite**
 - Suggests news of interest based on article reading patterns
- **Google**
 - Arguably the biggest recommendation system of them all?



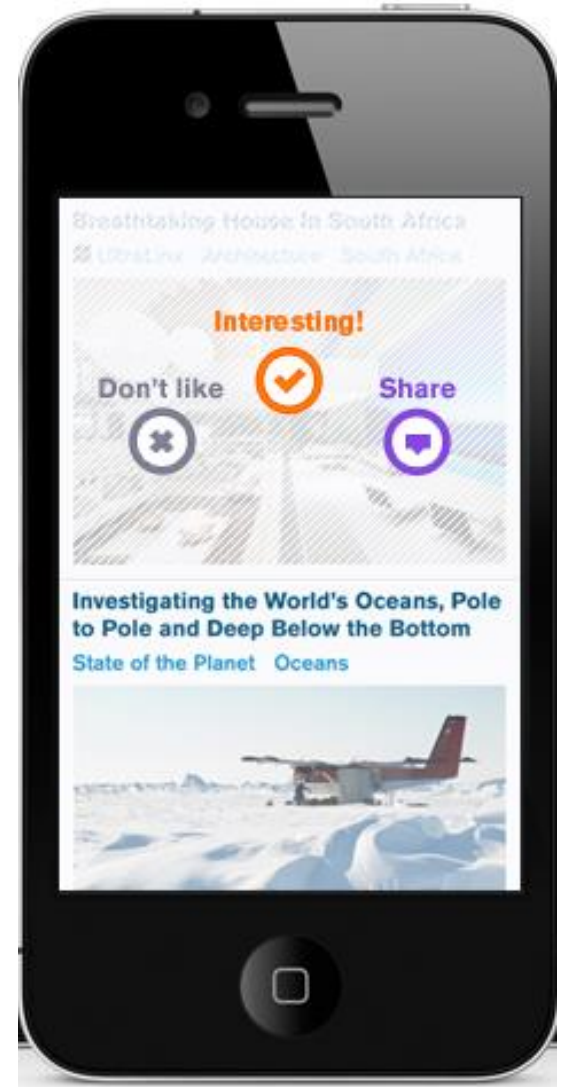
Zite Suggesting Articles

- Certain categories of apps have a higher tolerance to wrong suggestions (No right or wrong answer)
- Other categories have right answers and suggestions are used to save clicks
- User expectation to train the system and/or correct the system
- Language matters

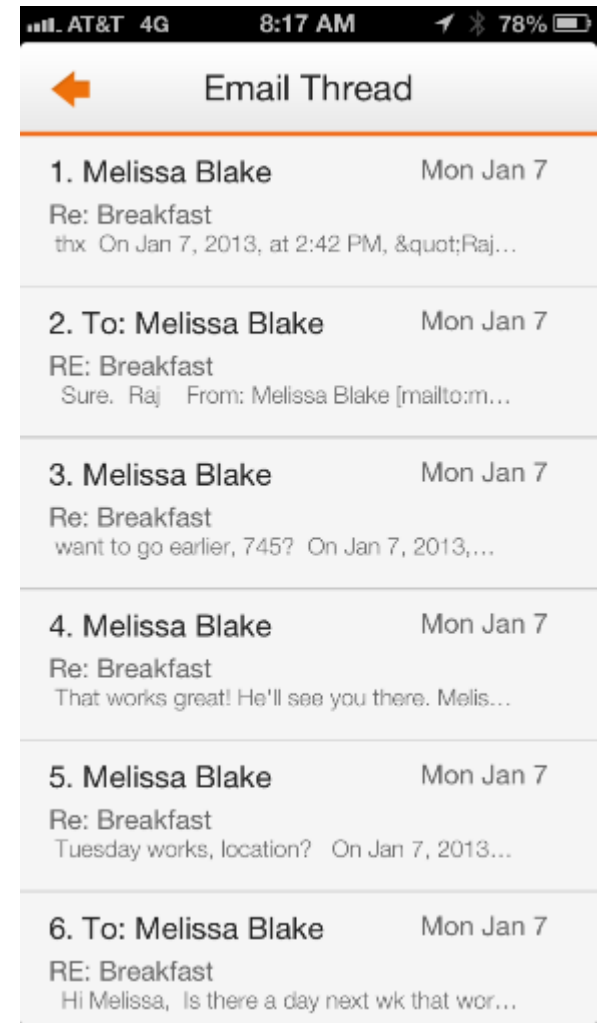


Tempo Suggested Meeting Locations

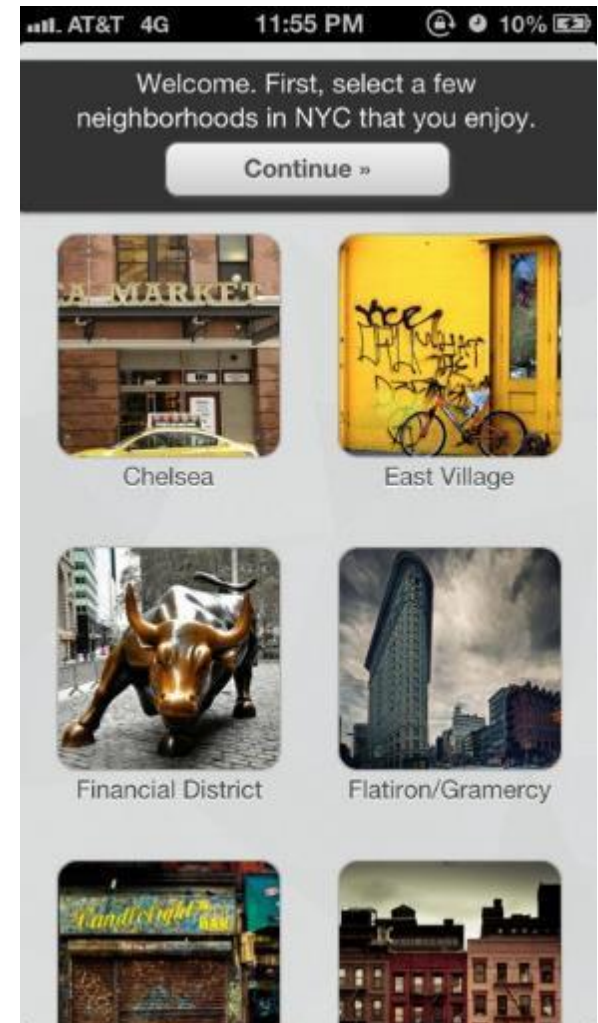
- How do you determine the balance?
 - User testing doesn't always work
- Constrain the domain
 - Segment the users via cohort analysis
 - What is the right number of segments?
- The “More” button can be your best friend
 - Infinite scroll
- Train the system
 - Tempo user testing indicated less than 3% would train
 - Thumbs up/down, ratings vs implicit learning?



- Animations work most effectively
 - But if it takes too long, it hinders the UX
- Speed of application directly correlated to retention rate
 - 15 search results vs 10 search results (Google Search Results)
- In Tempo, we numbered the results



- False starts are very common
 - Introduce recommendations and anticipatory actions through use
- Keep on-boarding as light-weight as possible
 - Too much time between on-boarding and first-use will cause problems
 - Can you collect data as you go along
- First 3-Day usage will be heavy experimentation to see what the system does
 - Siri users experiment by asking a lot of Qs
 - Tempo users create 10s of mtgs in the first few days



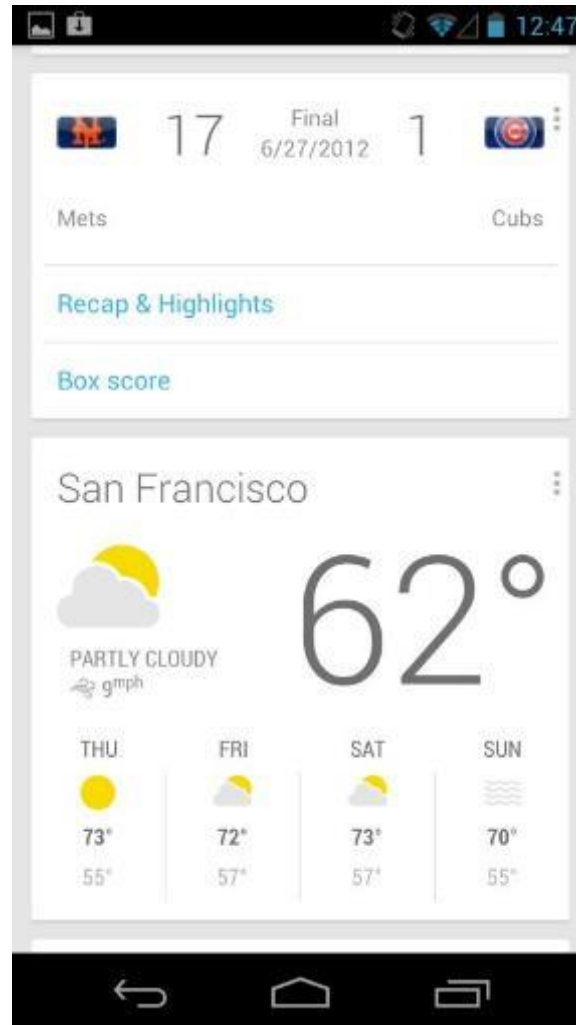
Sosh Setup

- Anticipate without the noise
 - Push notifications drive repeat usage but if noisy result in bounced users
- Notifying you when to leave in Tempo
 - We wanted to be very anticipatory but we're not 95% yet
 - False notifications result in angst and a lost user





EasilyDo



Google Now



Grokr