

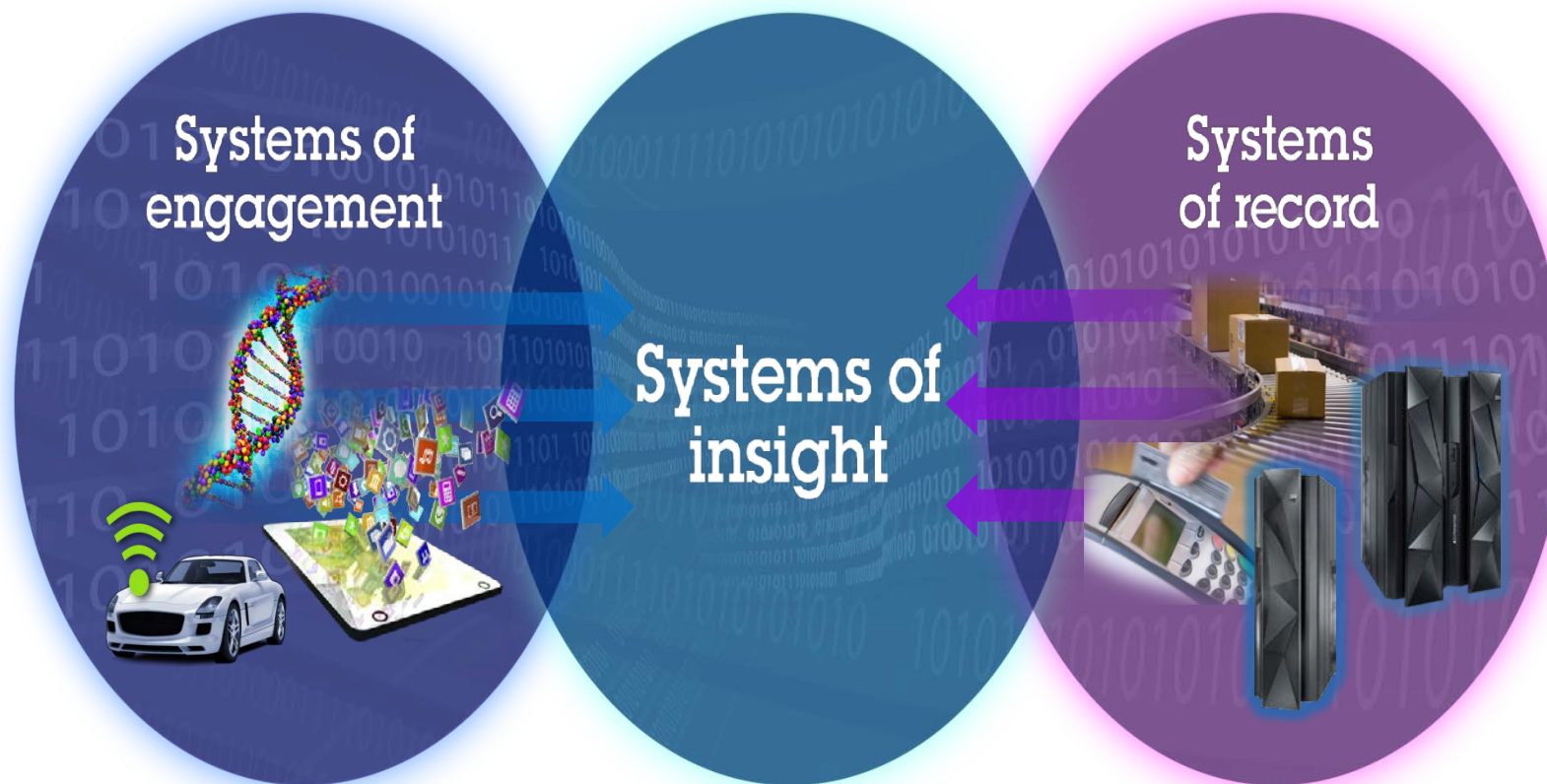
Big Data and Wellness

Brenda Dietrich, Ph.D.
IBM Fellow and VP
Emerging Technologies
Watson

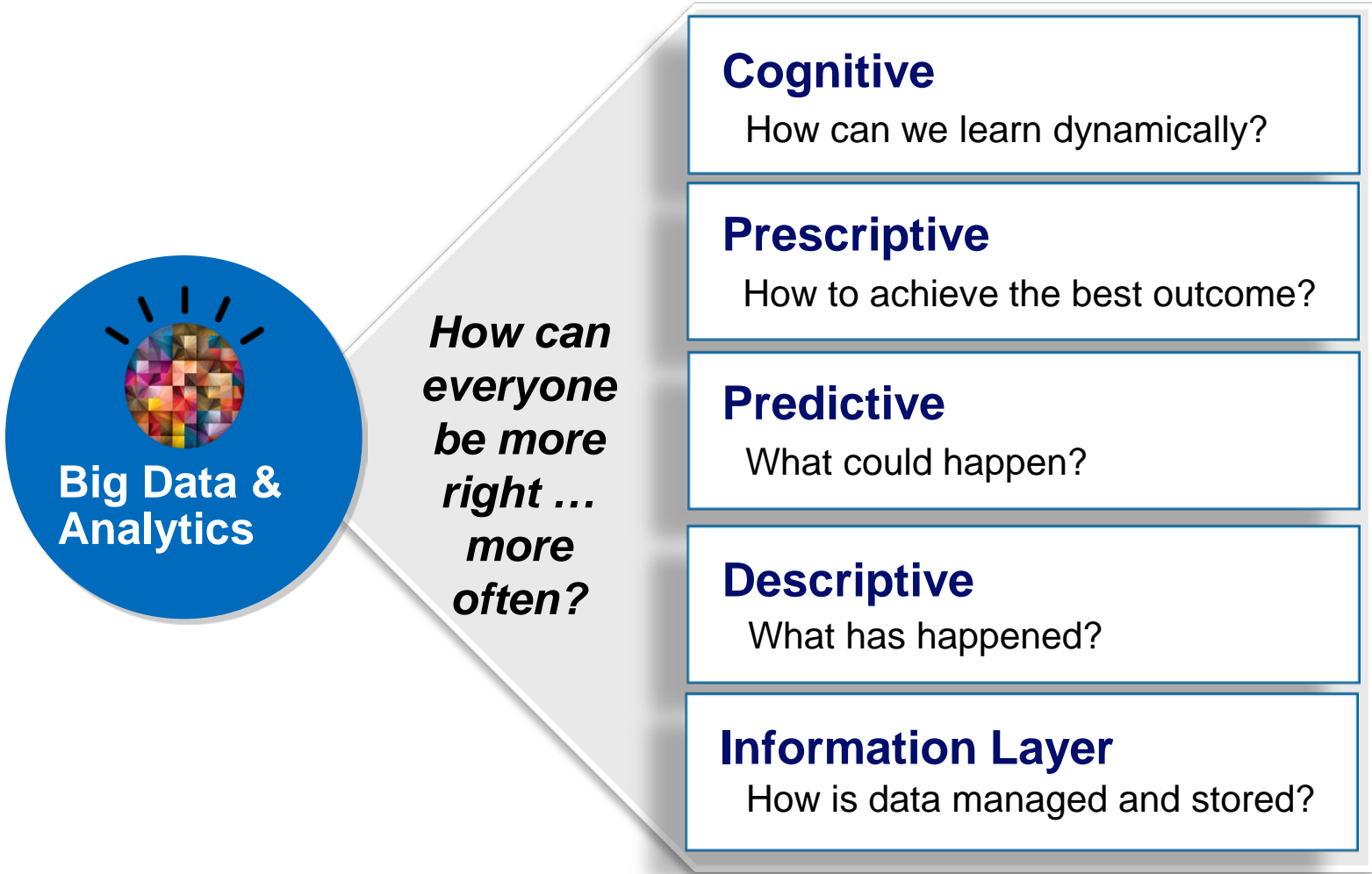
The Information Technology Mega Trends



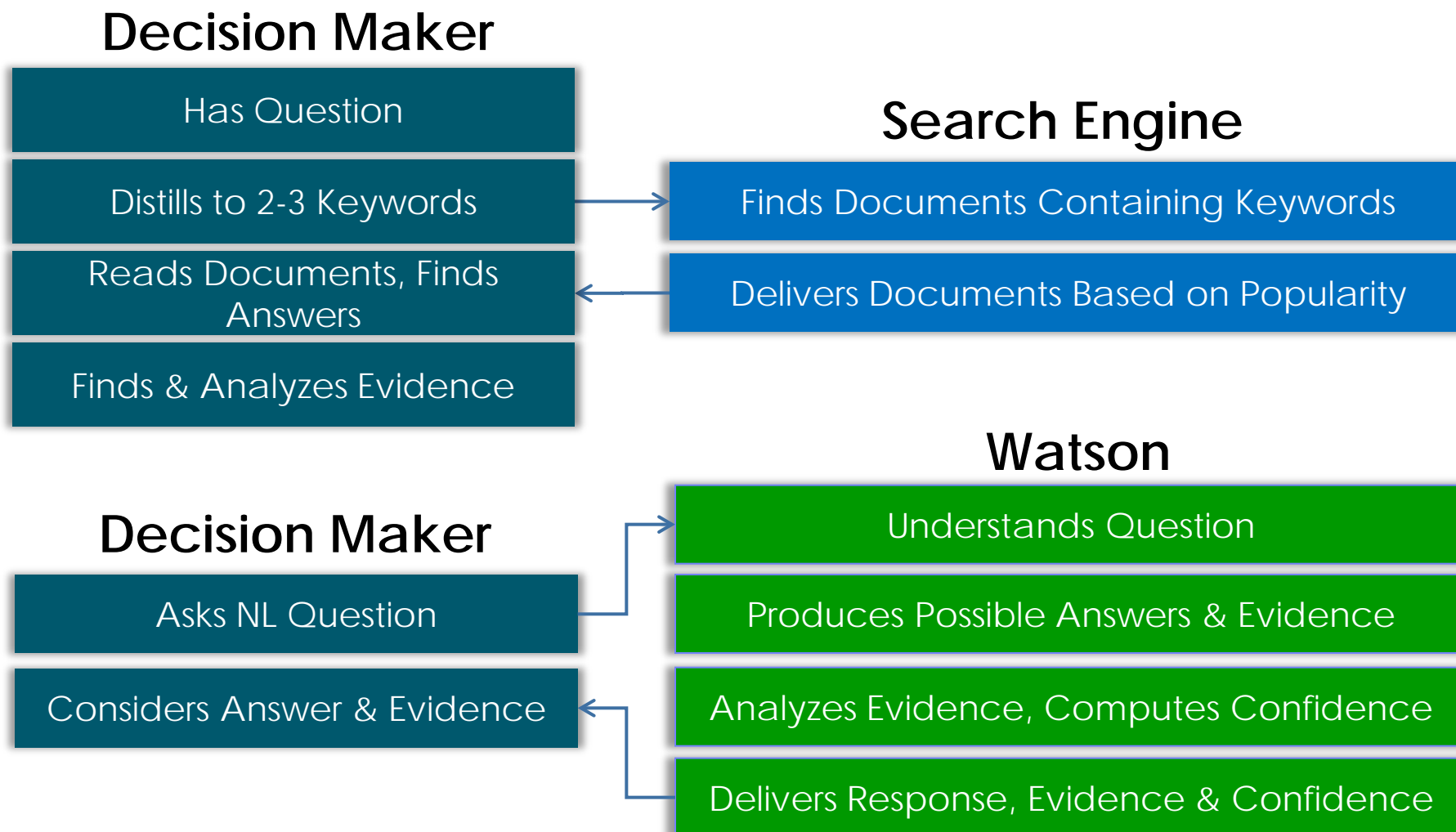
High value opportunities emerge in data



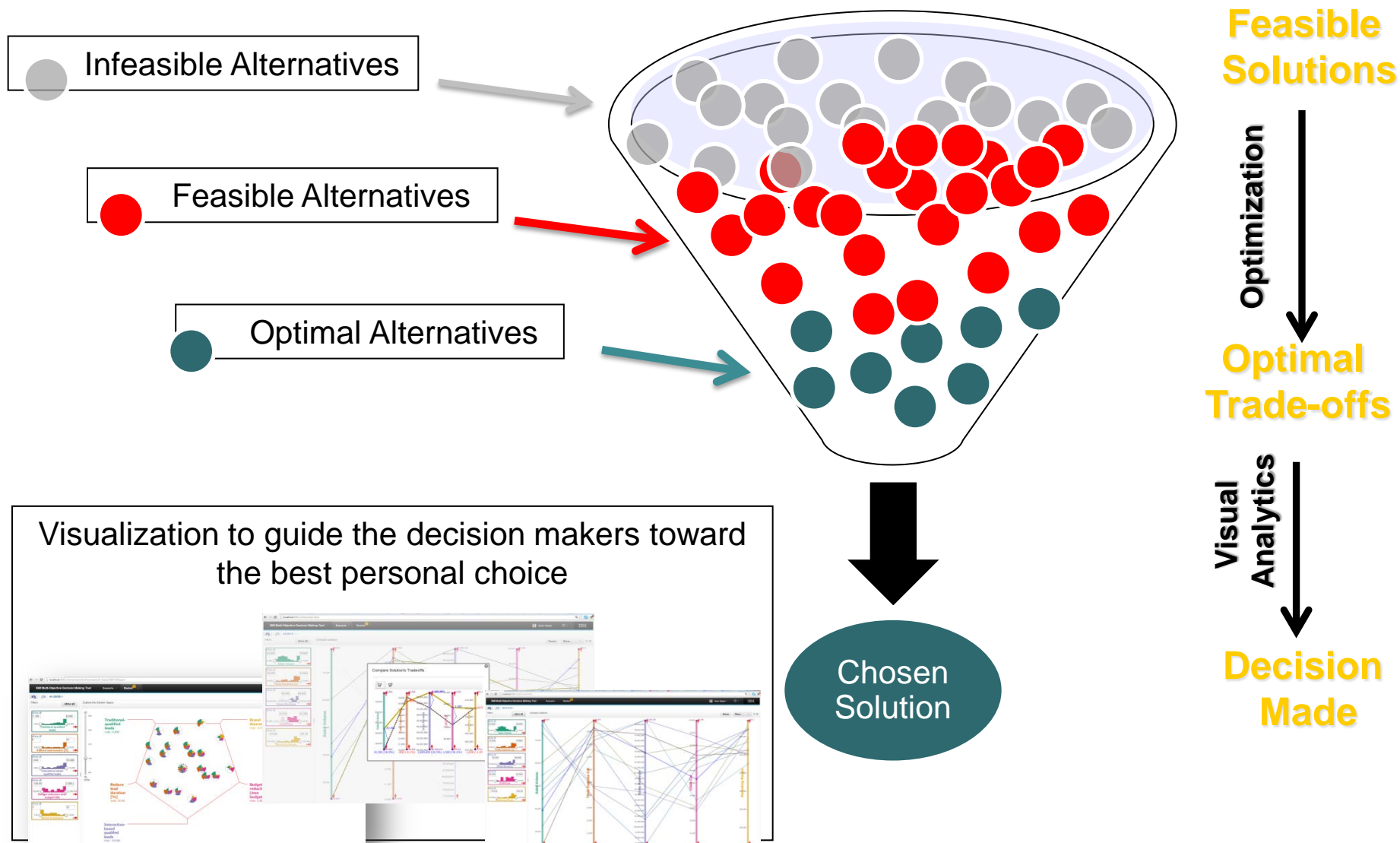
Cognitive systems extend analytics



Informed decision making: Search vs. Question Answering



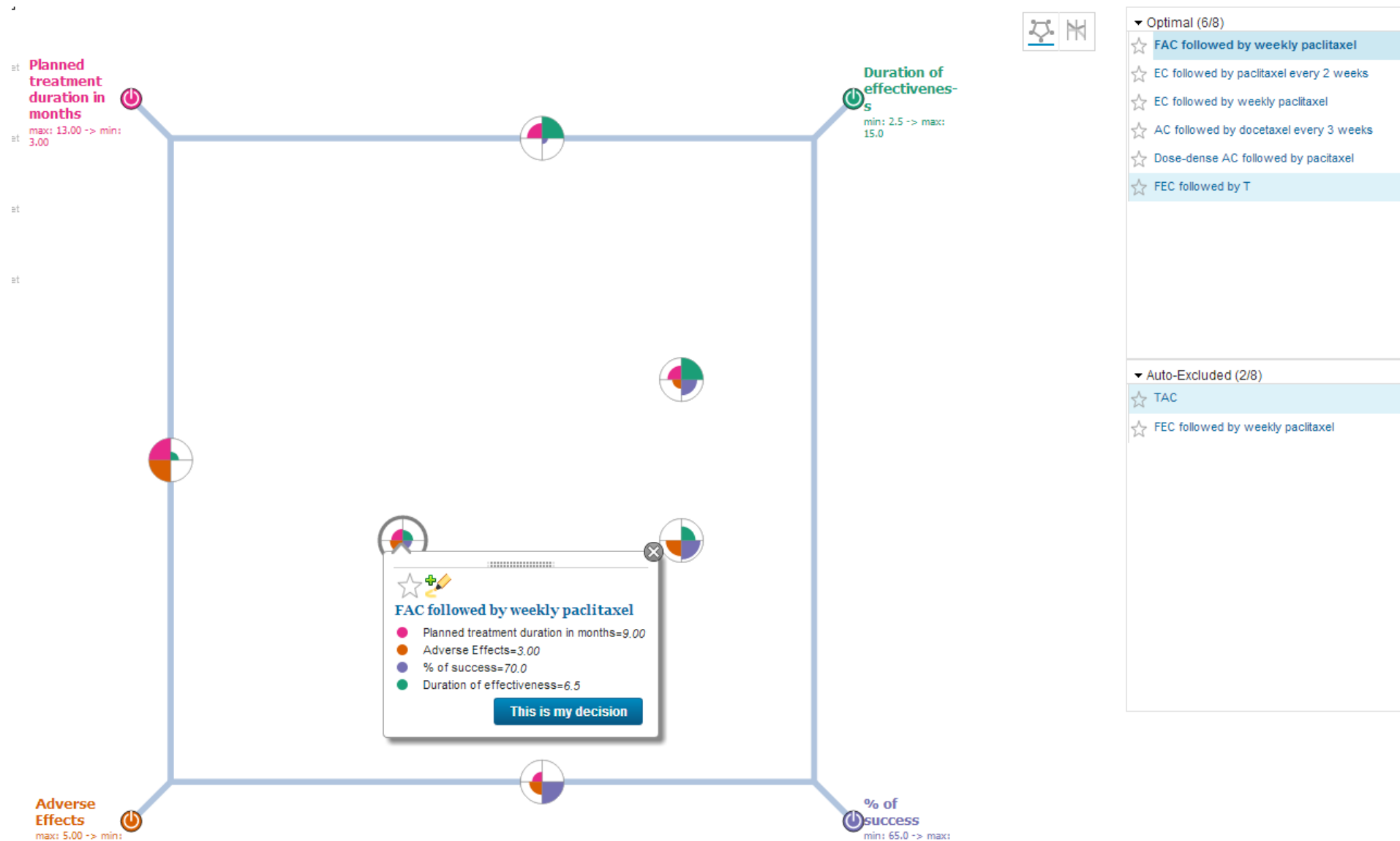
Beyond Q&A: Getting from SEARCH to CHOICE



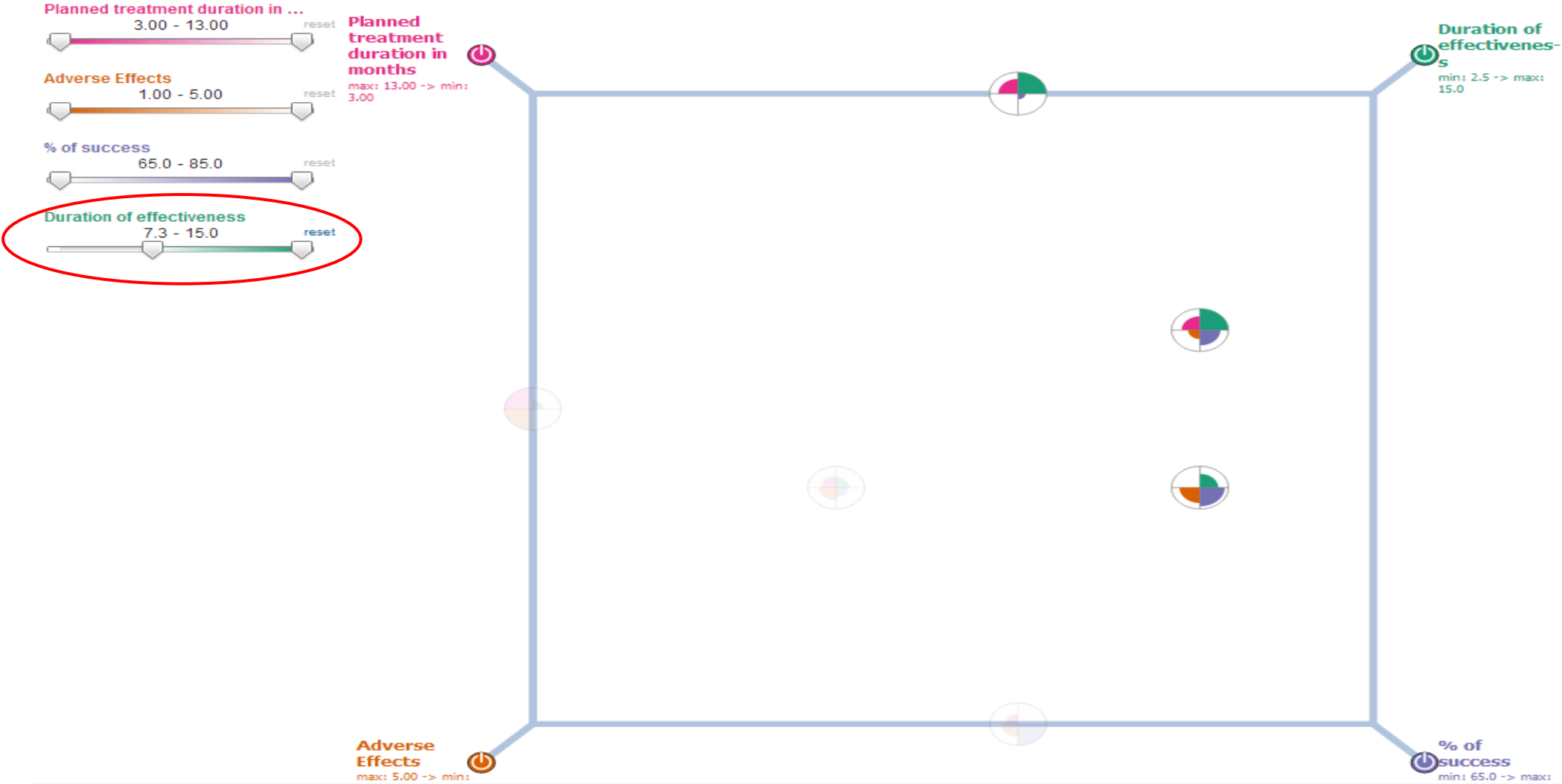
Example: Communicating and comparing treatment alternatives

- A physician can compare, together with the patient, the alternatives according to several attributes such as:
 - Percentage of success (maximize)
 - Duration of effectiveness (maximize)
 - Planned treatment duration (minimize)
 - Level of adverse effects (minimize)

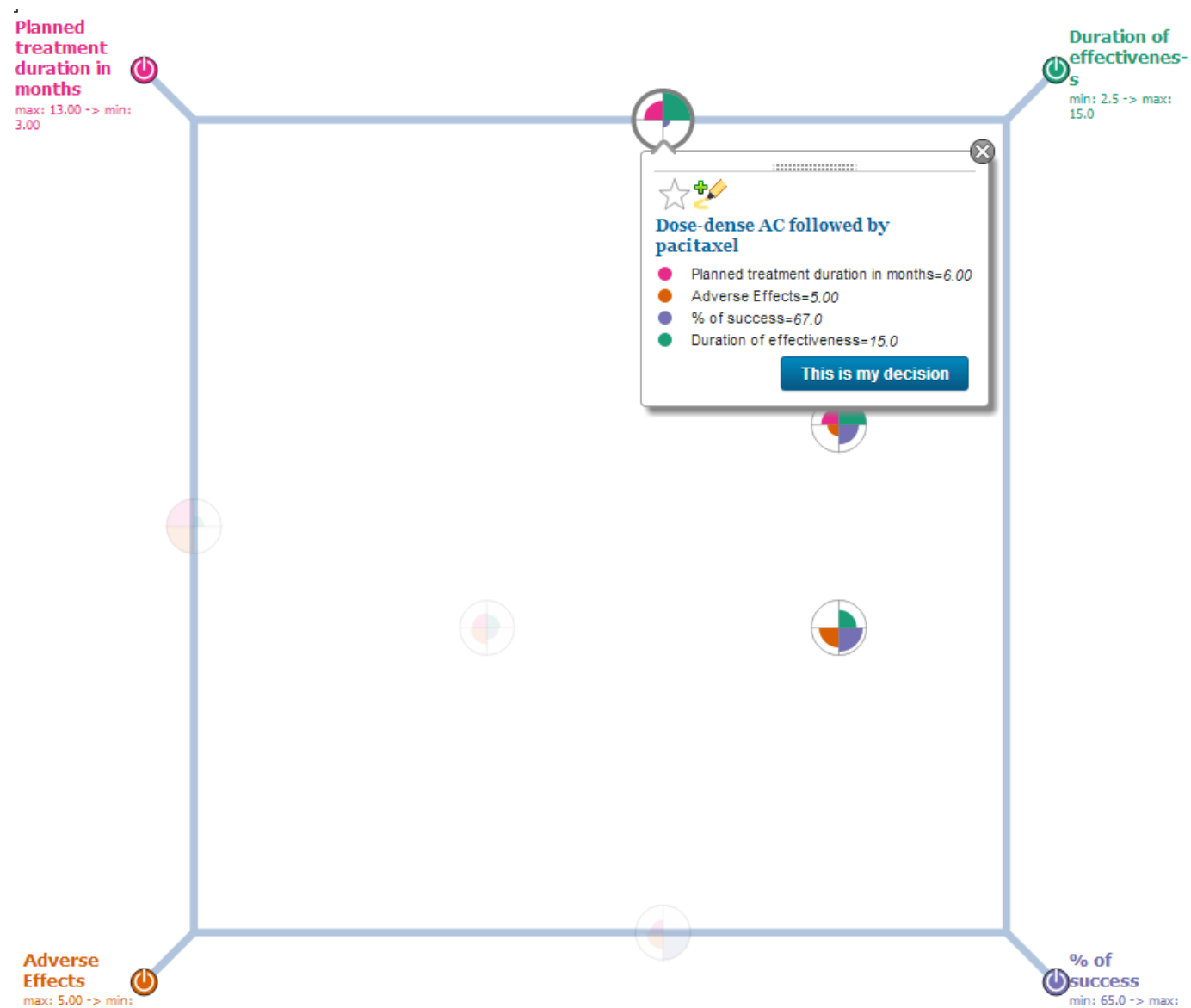
Visualize the treatment alternatives



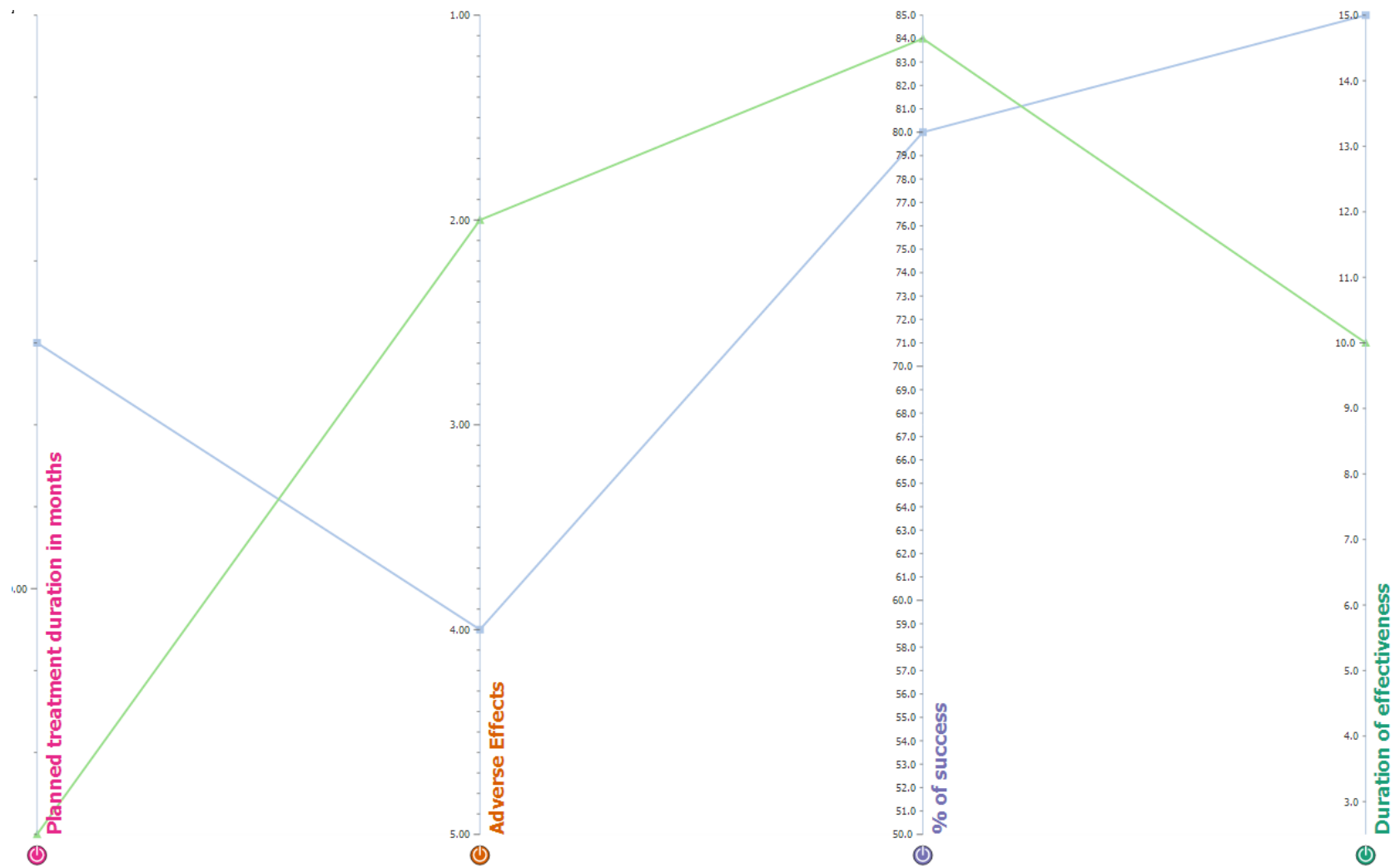
Filter according to availability or patient preferences



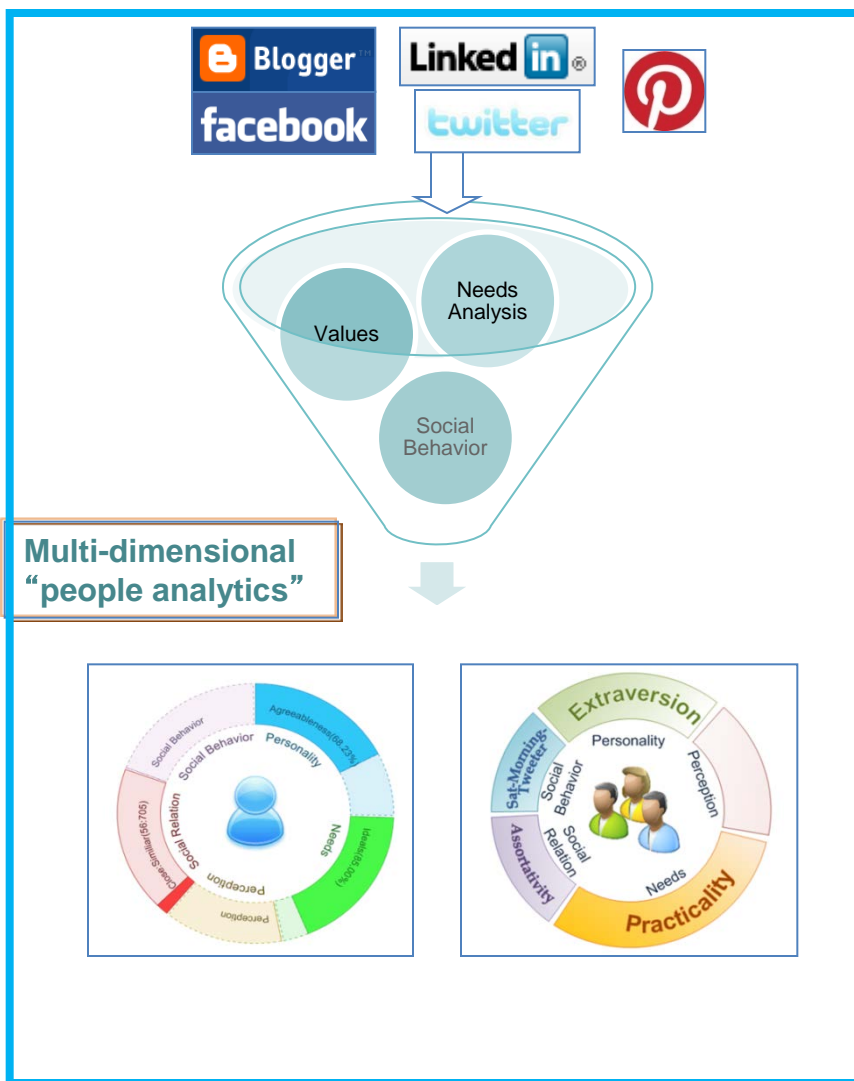
Exploring the treatment options



Show tradeoffs between preferred options



Beyond Q&A: Individual Modeling through word choice

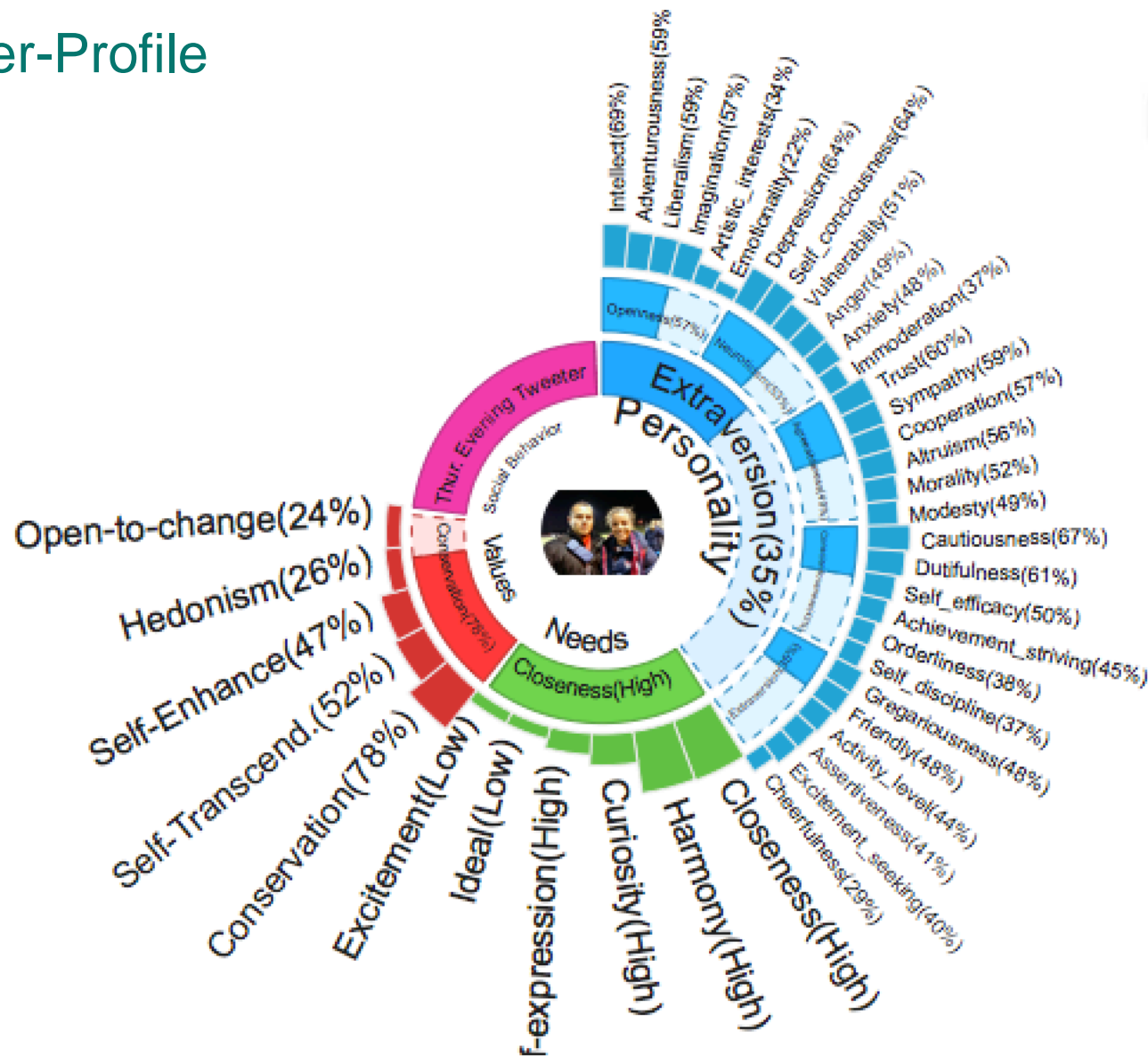


Hypothesis: linguistic profiles matter in extended interpersonal interactions

Is there evidence that some profile pairings of patient and caregiver result in better patient compliance?

Nutrition
 Rehabilitation
 Eldercare

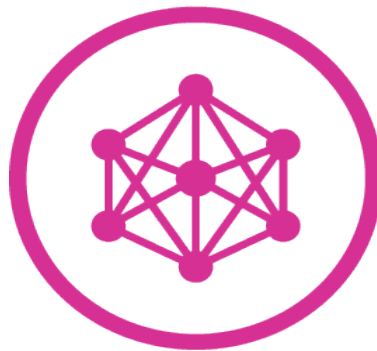
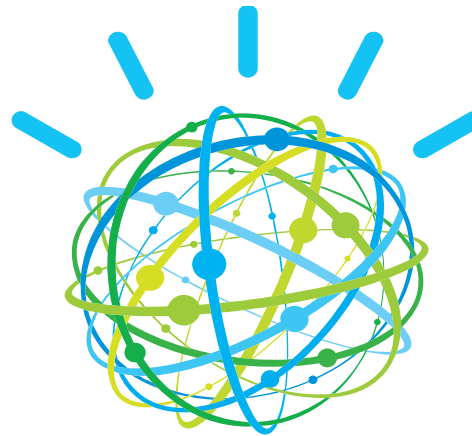
Example of a User-Profile



Cognitive Computing



Understands
natural language

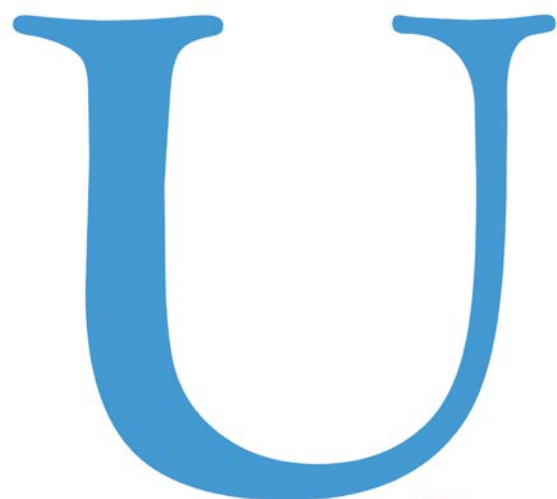


Adapts
and learns



Generates and
evaluates
hypotheses

Thank You



ultramatics 

Welltok®

