5 Principles for using data science to create great customer experiences

Begin with humans and their needs

All good experience design begins with a solid understanding of who you're designing for, their goals, motivations, and pain points.

- Discover natural personas using clustering *(unsupervised machine learning)*
- Use natural language processing to analyze online reviews
- Uncover drivers of behavior using multivariate techniques *(multiple regression)*

Context is critical

Journey maps and service blueprints are great tools for understanding the contexts of human behavior; and can be leveled-up with data science.

- Quantify sentiment and frequency of touchpoints with surveys and existing analytics
- Use natural language processing to analyze online reviews, call center scripts, and customer service messages

Make the experience more personal, easy, and enjoyable

Customer insight combined with machine learning algorithms allow you to create more personalized experiences – at scale.

- Score customers into segments using a predictive model
- Use machine learning recommender systems to suggest new products, services, content, and help

Don't leave customer value on the table

Customer experiences don't end at the point of the initial transaction. Leverage data science to turn an experience into a long-term relationship.

- Use attrition propensity models to identify customers on the edge of leaving
- Use "look alike" clustering to identify currently low-value customers whose characteristics mimic high-value customers
- Use machine learning recommender systems to suggest new products, services, content, and help

You can't analyze your way into the future

Data science is awesome! But it doesn't tell you how to design the future. That's your job.

- Use insight from data to form hypotheses and start tryin' stuff!
- Utilize test & learn cards to track your experiments and inform iterations
- Set and track KPI's and other data elements to evaluate the success of each iterative test & monitor for unforeseen circumstances