

**THE REAL WORLD
IS COMPLEX AND
HIGHLY INTERACTIVE:
MODELS SHOULD BE TOO**

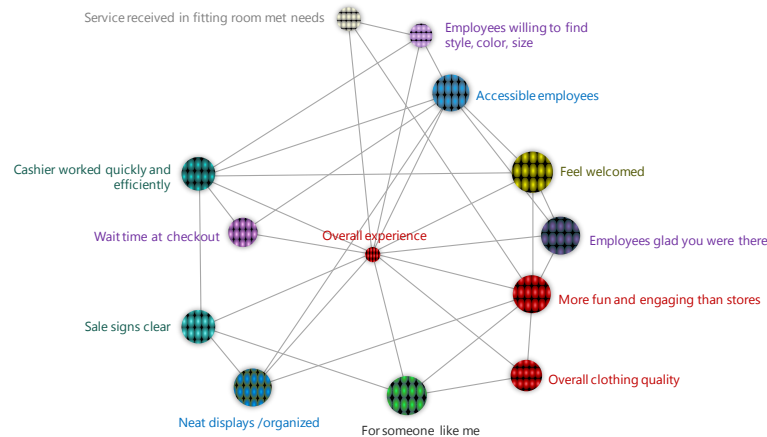


We like simple...
but consumers do complex

Two Approaches that Address Complexity & Interactivity

Bayesian Network Modeling

- A form of key drivers analysis



- Tells you which “levers” to pull & in what order to pull them



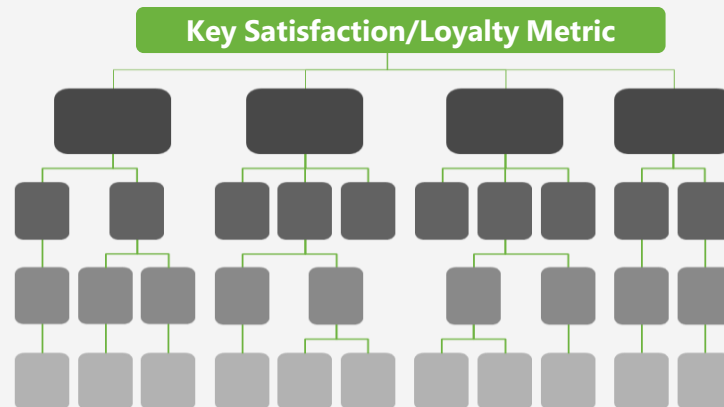
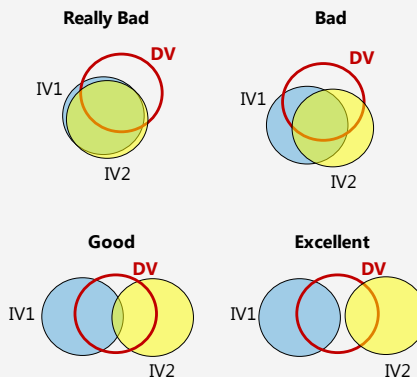
Bayesian Network Modeling

Problems with Traditional Regression Analysis

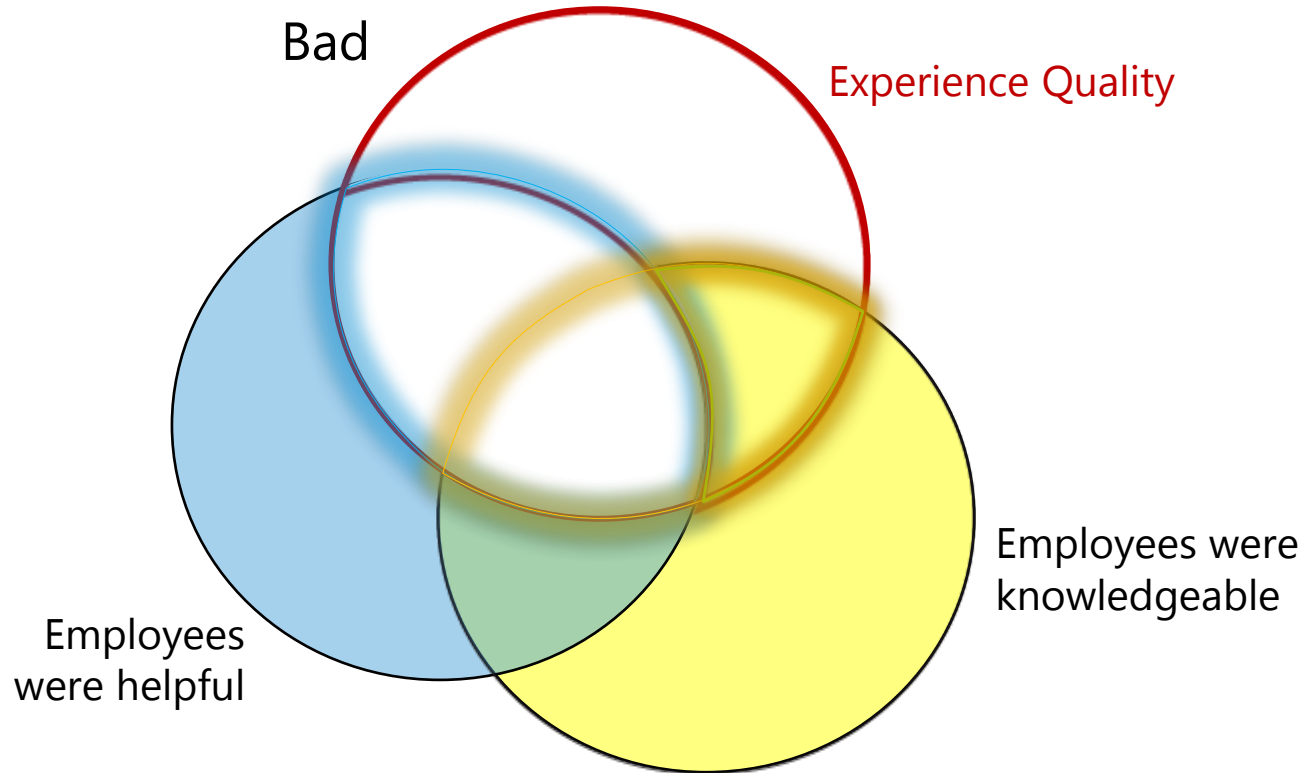
Multicollinearity

the high average correlation between independent variables

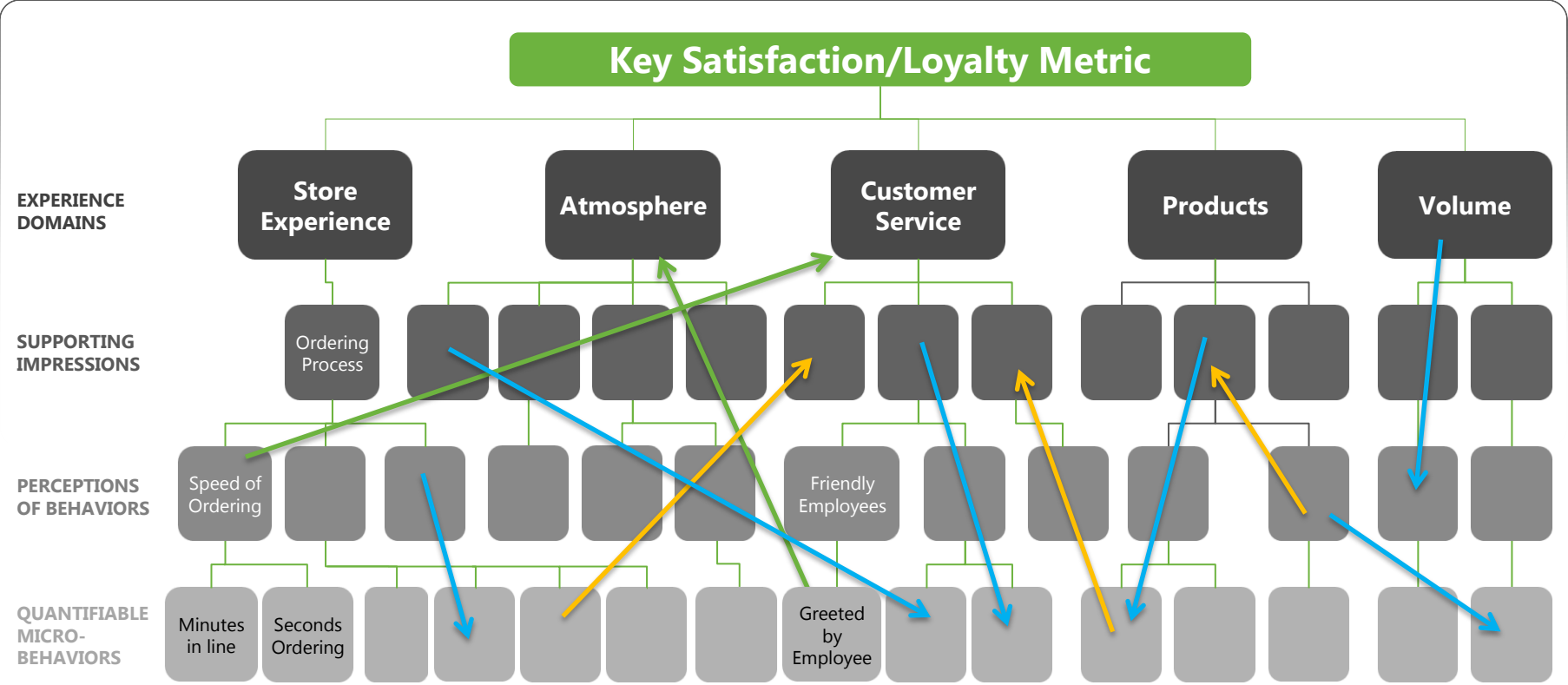
Does Not Capture
Indirect or Interactive
Effects



Multicollinearity Makes It Difficult to Understand the Impact of Individual Dimensions



Regression Models Don't Capture Indirect Effects



→ Metrics can impact other domains, not just those up the ladder in our hierarchy

Case Study: Retail Customer Satisfaction

N= 650,000+
Online Interviews
2013

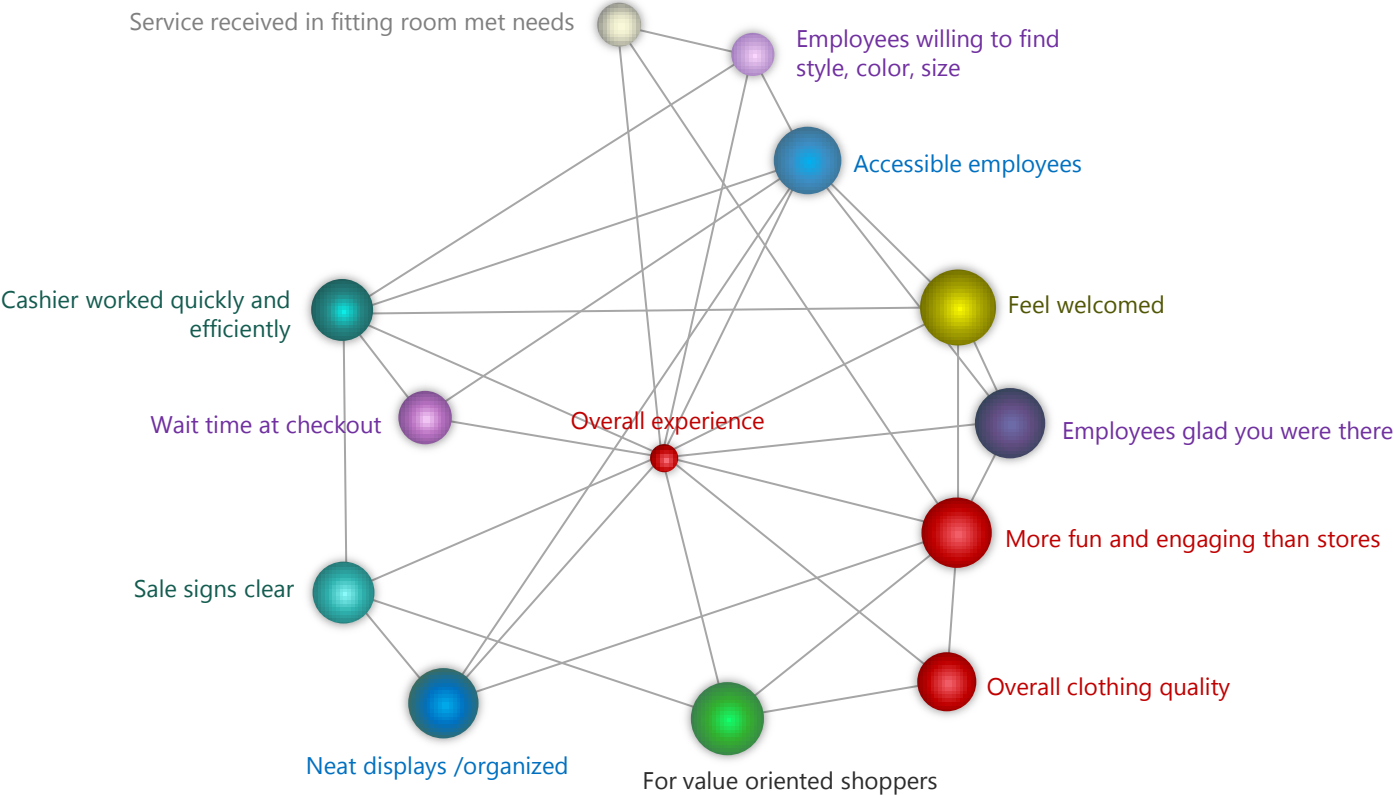


DEPENDENT VARIABLE
Overall quality of in-store
experience

Independent Variables

- ✓ A place for value oriented shoppers
- ✓ Clothing was neatly displayed and well organized
- ✓ The wait time in the checkout line was acceptable
- ✓ Service you received in the fitting room met your needs
- ✓ The cashier worked quickly and efficiently to check out all customers in line
- ✓ Your experience in the store was more fun and engaging than other stores you typically shop
- ✓ The signs clearly indicated what was on sale
- ✓ Employees were easily accessible
- ✓ Employees were willing to find style, color, size
- ✓ Employees acknowledged and made you feel welcome
- ✓ Employees seemed genuinely glad you were there
- ✓ Overall clothing quality

BayesNets Customer Satisfaction Drivers Analysis



BayesNets Customer Satisfaction Attributes

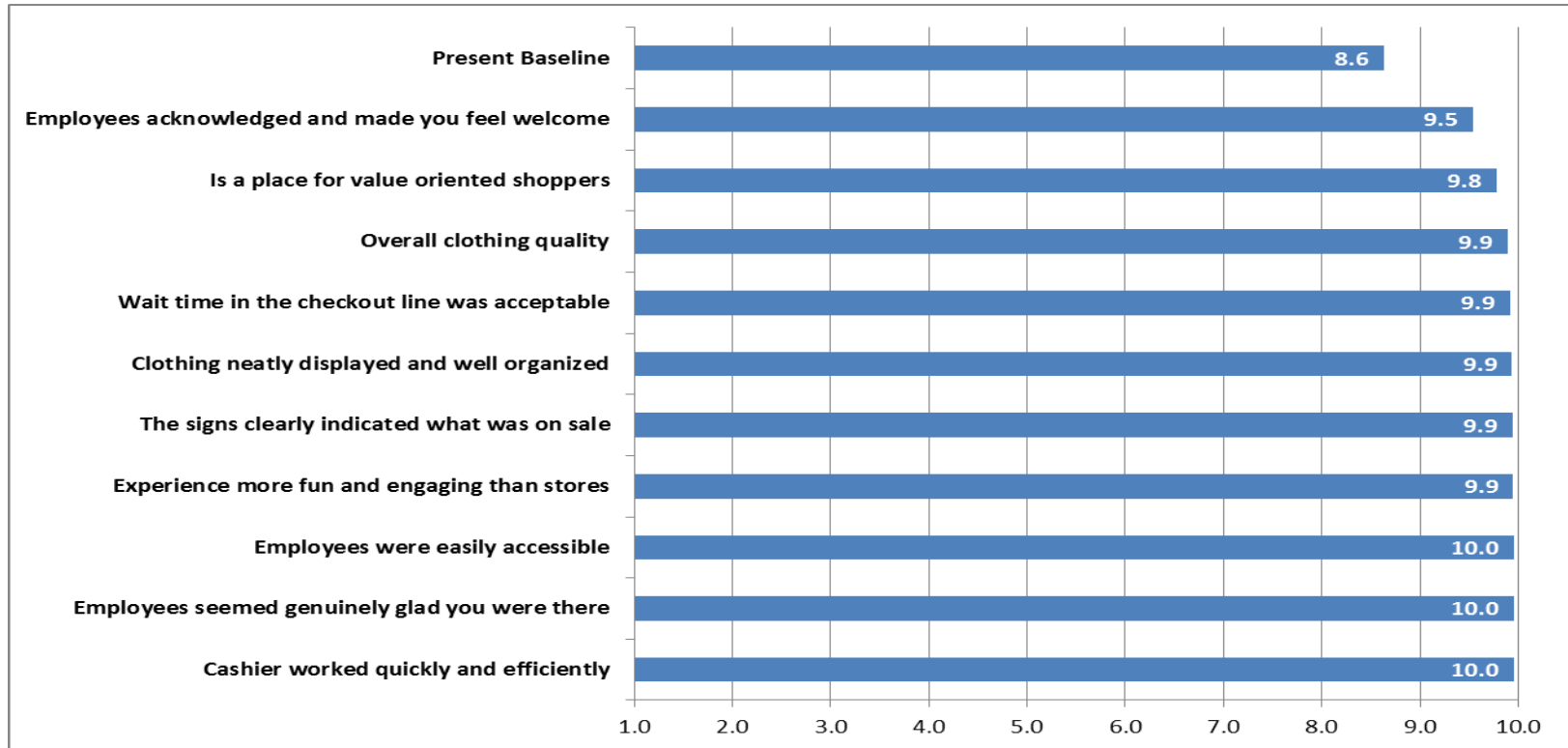
Prioritization Analysis

Attributes

Employees acknowledged and made you feel welcome
 Is a place for value oriented shoppers
 Overall clothing quality
 Wait time in the checkout line was acceptable
 Clothing neatly displayed and well organized
 The signs clearly indicated what was on sale
 Experience more fun and engaging than stores
 Employees were easily accessible
 Employees seemed genuinely glad you were there
 Cashier worked quickly and efficiently

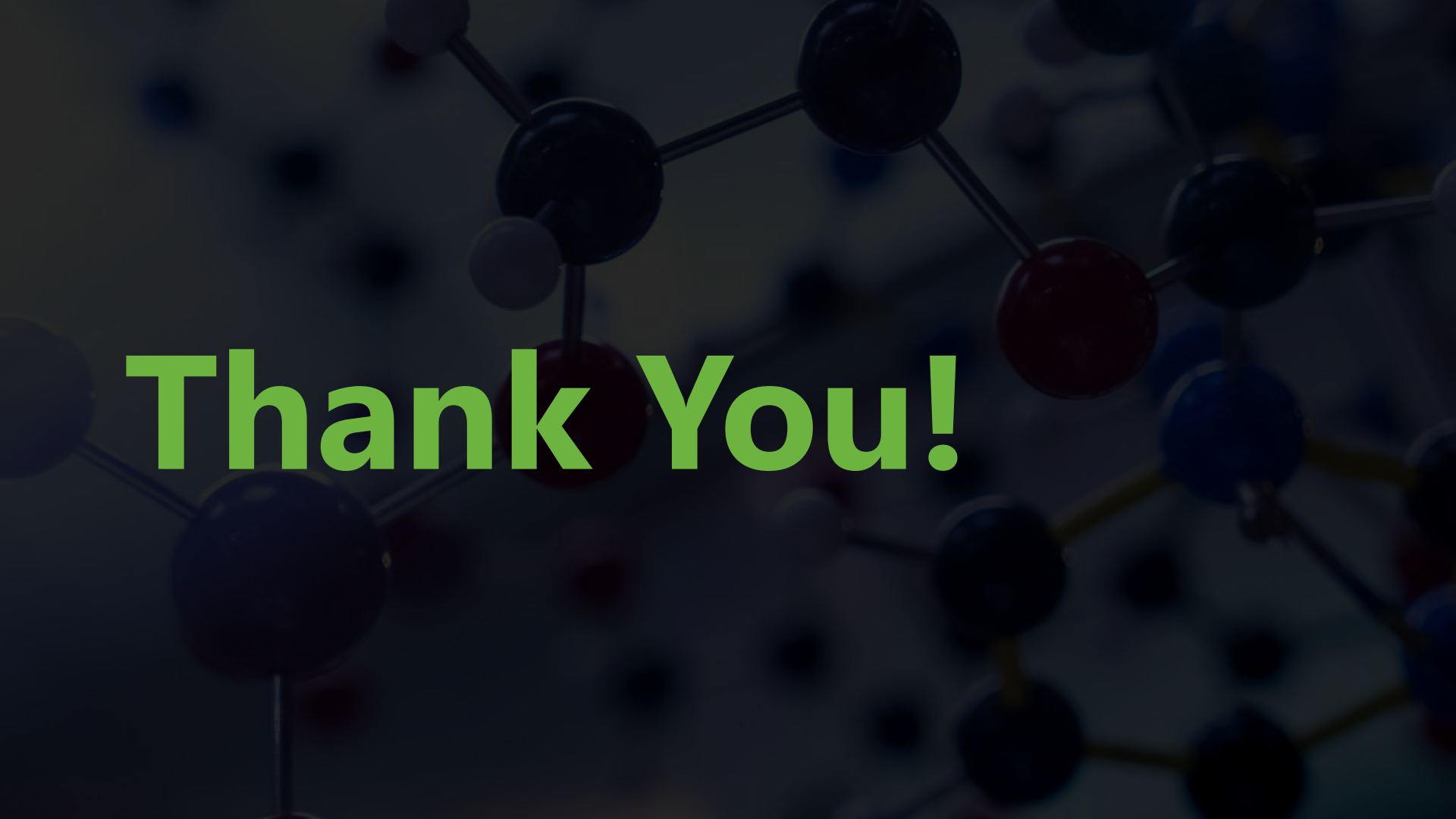
Initial Mean	Mean at T	Final Mean	Target Mean
			8.6324
8.3379	8.3379	9.2903	9.5421
8.5473	9.4612	9.5601	9.777
8.2085	9.3073	9.6832	9.8913
8.5263	9.2989	9.4638	9.9189
8.3987	9.3081	9.6183	9.9344
8.5816	9.3478	9.6167	9.9413
7.8108	9.4509	9.6016	9.9473
8.2912	9.3479	9.4867	9.9503
8.3157	9.4701	9.7193	9.9522
8.9202	9.4862	9.7815	9.9532

BayesNets Customer Satisfaction Attributes Prioritization Analysis



**BayesNets can derive more
effective prioritization in
planning to optimize
marketplace results**

so what[®] 



Thank You!