Embracing Analytics in a Century-Old Manufacturing Company

Steelcase
Agenda

Steelcase Overview

Data & Analytics Overview

Sample Projects

- Predictive Leads

- Specials Pricing
Data & Analytics Overview

Our Data & Analytics strategy and roadmap focuses on the people, processes and technology that will improve our ability to extract meaningful insights from our data assets.
Analytics Teams

founded in 2013

grown from 4 to 14 FTE (+ 3 interns)

consultant group providing predictive + prescriptive analytics

support organization end-to-end

innovation + emerging trends
Where We Play
The collection of products offered by our analytics teams contains internal and customer facing offerings. These products include foundational infrastructure, predictive, and prescriptive analytics.

*customer facing products
Success Factors

• Data Investments
• Senior Leader Involvement
• Agile Development
• Culture of Innovation
Jorge Lozano
APPLIED DATA SCIENCE
Predictive Leads

WE PREDICT THE PROBABILITY OF A FUTURE PROJECT BASED ON THE CHARACTERISTICS OF A CUSTOMER’S SITE

Customer site inputs
(from 4 sources: SAP, CRM, PCM, CIDB which capture wins and losses)

Probability of a future project over time

Parametric Survival Analysis
• Form of machine learning commonly used in Actuarial Science or Reliability Theory

Time since Last Purchase
Predictive Leads

Direct impact

- ALIgNMENT
  - Business Understanding
  - Engaged Executive Leadership

- DEVELOPMENT
  - Solid foundation for new models
  - From prior data investments for pricing analytics

Indirect impact

- Executive Leadership engagement
- Accelerated desire for Digital Transformation
- Stimulated innovation of our sales models
- Generated organization-wide awareness of the power of Analytics

PLAN TO SCALE
- Clear vision of the broader system.
- Maximize results by focusing on the user experience

DEPLOYMENT
- Integration with CRM Systems
- Training, Storytelling & Visualization

SUSTAINMENT
- Self-learning Analytical Model
- Transition to Sales Program Manager
- Share best practices & success stories
Predictive Leads

Considerations when performing Survival Analysis for Business Problems:

1. Do you need a Parametric/Non-Parametric or Semi-Parametric model?
2. What are your assumptions about the shape of your hazard rate function?
3. How are you thinking about censoring rules?
Specials Pricing
Steelcase Digital Transformation

- Design
- Business Model
- Operations

Customer Understanding
- Digital Accessibility
- Refined Business

Operational Process
- Digital Globalization

Business Model
- Operations Monitoring
- Customer Satisfaction

Customer Experience
- Elevated ROI

Digitized
Can we predict the price of a special?

- Yes/No
- What is the minimum amount of information required?
- What data is there available?
- What stages of the process?
- What products can we predict?

Developing a MVP → Pilot → Learnings → Go-Forward Strategy

Sprints 1, 2, 3 → Launch
Preliminary assessments suggest that our models can help us accurately predict the price of our Specials within less than ___ dollars.

... but some key learnings emerge

_What should we predict?_

- Actual Price
- Suggested Price
- Negative GP
- Cost

_**Key Learning**_

Our ability to predict one metric vs another depends on the timing of our prediction.

_Examples:_
- Predict **BEFORE** any Quote Rep intervention
- Predict **AFTER** Quote Rep intervention
Setting-up a modern and scalable Data Science environment is essential to support our Digital Transformation.
Questions?