Using AI and Machine Learning to Deliver Customer Experience at Scale
AI in Business
Next Best Offer, Cross-Sell and Up-Sell

Marketing campaigns optimised for individual customer characteristics.
Next Best Action

Engaging communication with customers and leads, individualised for both content and timing.
Smart Customer Dashboard

Know your customer:

Churn probability
Next best offer
Net promoter score
Lifetime customer value
Duplicate Customer Records

Flag customer records that may be duplicates of each other e.g. slightly different spelling or address.
What to Automate
What Computers Are Best At

- Repetitive Tasks
- Mathematics
- Data Manipulation
- Parallel Processing
What Humans Are Best At

Communication and Engagement
Context and General Knowledge
Creativity
Empathy
When Customers Want a Human...

“humans are inherently social creatures who get emotional value from seeing and interacting with one another”

Source: https://hbr.org/2018/02/the-parts-of-customer-service-that-should-never-be-automated
Lessons From Banking

Research has shown that “when banking customers used the ATM more and the teller less, their overall level of satisfaction with the bank went down”

What to Automate

and what to NOT automate
Use AI For Transactions and Processing

Let the AI do work that is mundane, with predictable outcomes, and high volume.
Use AI To Triage Problems to Human Staff

AI can refer difficult judgement calls to humans.

For mainstream day-to-day processes, leave it to AI to give speedy solutions.
Facilitate Human Interactions
(particularly for emotional issues)

Don’t push customers away. No more “Select 1 to update your password, Select 2 for a payment...”

Give customers the option to contact a human up-front. Then empower that human with AI driven knowledge e.g. smart customer dashboard
Where to Start
Data assets are the biggest competitive advantage (not algorithms), since most algorithms are now open source and available to all.

~ Andrew Ng, Stanford -> Google -> Baidu

Moving forward, companies will be valued not just on their big data, but on the algorithms that turn that data into actions and impact for customers.

~ Peter Sondergaard, SVP | Gartner Research

Three competitive advantages from Enterprise Data Science:

1. The ability to spot opportunities to apply automation
2. The ability to execute on these opportunities
3. Higher quality machine learning than your competitors
How to Spot Opportunities

1. What do I wish I knew? (be specific)

2. What would I do if I did? (be specific)
Rules to Live By

1. Bring business and technical together
2. Don’t pass the buck; take ownership of driving data science
3. Pick low-hanging fruit first; **MOMENTUM**
4. Be clear about what you want and why
5. Think about implementation early
Requirements for Useful Data

1. Snapshot-ability
2. Accessibility
3. Historical
4. Consistency
Summary
The Human Touch

Free up your humans to:

- Use soft skills with customers
- Apply common sense
- Create new solutions
- Evangelise new ideas
- Generate sales and profit

Your staff will be more valuable and productive when you free them from the mundane, to do what they are best at.
Empower Your AI

Use AI:

- For Transactions and Processing
  - To Triage Problems to Human Staff
- To Enhance Workflows That Involve Humans

Give your AI the power to make decisions quickly.
Questions?

Colin Priest
Senior Director of Product Marketing
DataRobot
colin@datarobot.com