

The UX of Algorithm Transparency

Kathryn Strauss

UX Writer | Content Designer

What's on the back of every
hotel room door?

PARC 55 **EVACUA**

N CASE OF FIRE USE STAIRWAY FOR EXIT, DO NOT

PARC 55
55 Cyril Magnin Street
San Francisco
Telephone: 415-392-8000

MAXIMUM ROOM RATE:
\$2,499.00

CHECK IN: 3:00 pm
CHECK OUT: 11:00 am

LEGEND

★ YOU ARE HERE



207
207
2068
2044

What's on every can of food?

Nutrition Facts

8 servings per container

Serving size 2/3 cup (55g)

Amount per serving

Calories 230

% Daily Value*

Total Fat 8g 10%

Saturated Fat 1g 5%

Trans Fat 0g

Cholesterol 0mg 0%

Sodium 160mg 7%

Total Carbohydrate 37g 13%

Dietary Fiber 4g 14%

Total Sugars 12g

Includes 10g Added Sugars 20%

Protein 3g

Vitamin D 2mcg 10%

Calcium 260mg 20%

Iron 8mg 45%

Potassium 235mg 6%

* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

What's on every pack of
cigarettes?



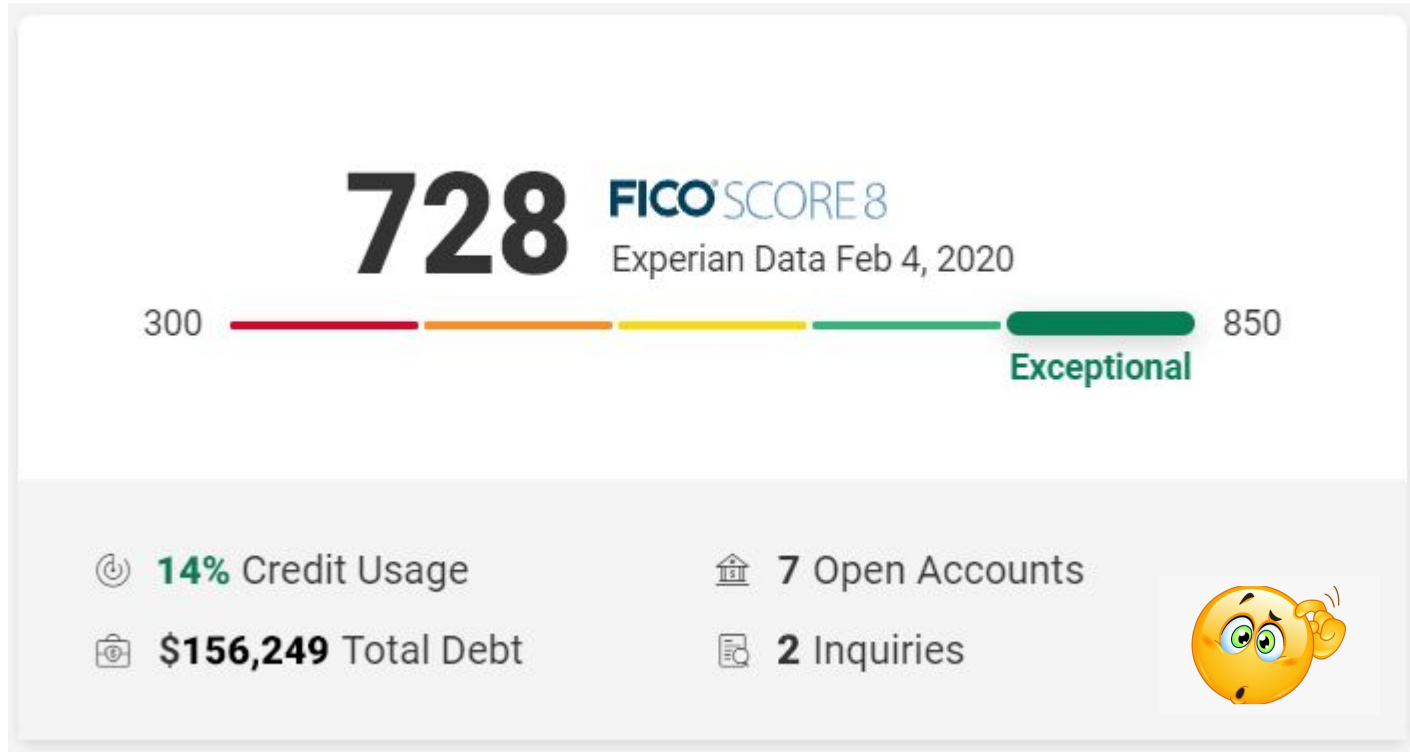
What's on the inside driver's door
of almost every automobile?



How did I get this credit score?



How did I get this credit score?



Why do products have information labels?

A desire to do good in the world? ❌

Legislation & public policy mandates ✅

Algorithms & ML drive decisions like...



How much money a bank will loan you



What your borrowing rate will be



Whether a private doctor will see you

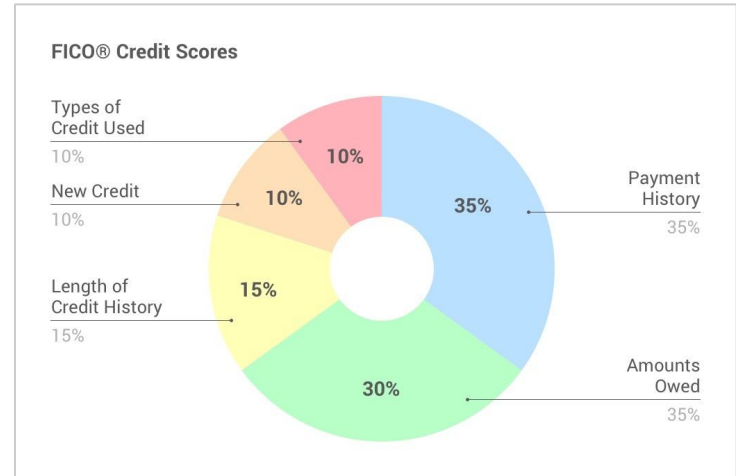
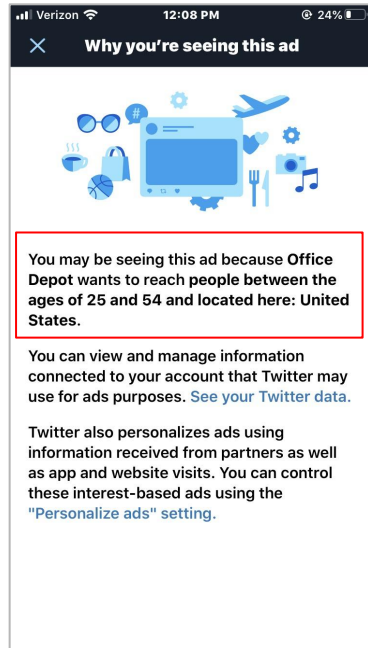


Your priority in a customer service queue



Which online products you see

Some companies are making an attempt at transparency...



Some orgs are promoting transparency



EPIC: Electronic Privacy Information Center



EFF: Electronic Frontier Foundation



Center for Humane Technology

Some objections to transparency:



“It’s **way** too complicated”



“It **gives away** business secrets & makes businesses vulnerable to gaming”



“It will just get **ignored**”

We're building this new world

If an algorithm can be interrogated & if it's possible to be transparent, **designers & writers** will be on the front line to communicate algorithmic-driven decisions to users

In fact, we might be required by **law**

Bonita's story



Applies for a small business loan



Name

ZIP code



"We're sorry. You don't meet our criteria to continue the loan application process."



What's in the box?

Marital status

Gender

Credit history

Purchases

6000 other data points



We don't loan to
anyone with a
"borrower score" of
less than 91%

Lender

What's in the box?

Marital status

Gender

Most reliable predictors
of “borrower score” for
this product

Triggers a decline for
Bonita for that product
on that day

Credit history

Purchases

6000 other data points



No loans to anyone with
a “borrower score” less
than 91%

What can we know? Simple models

Marital status

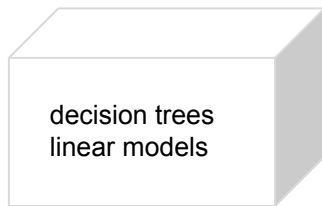
Gender

Credit history

Purchases

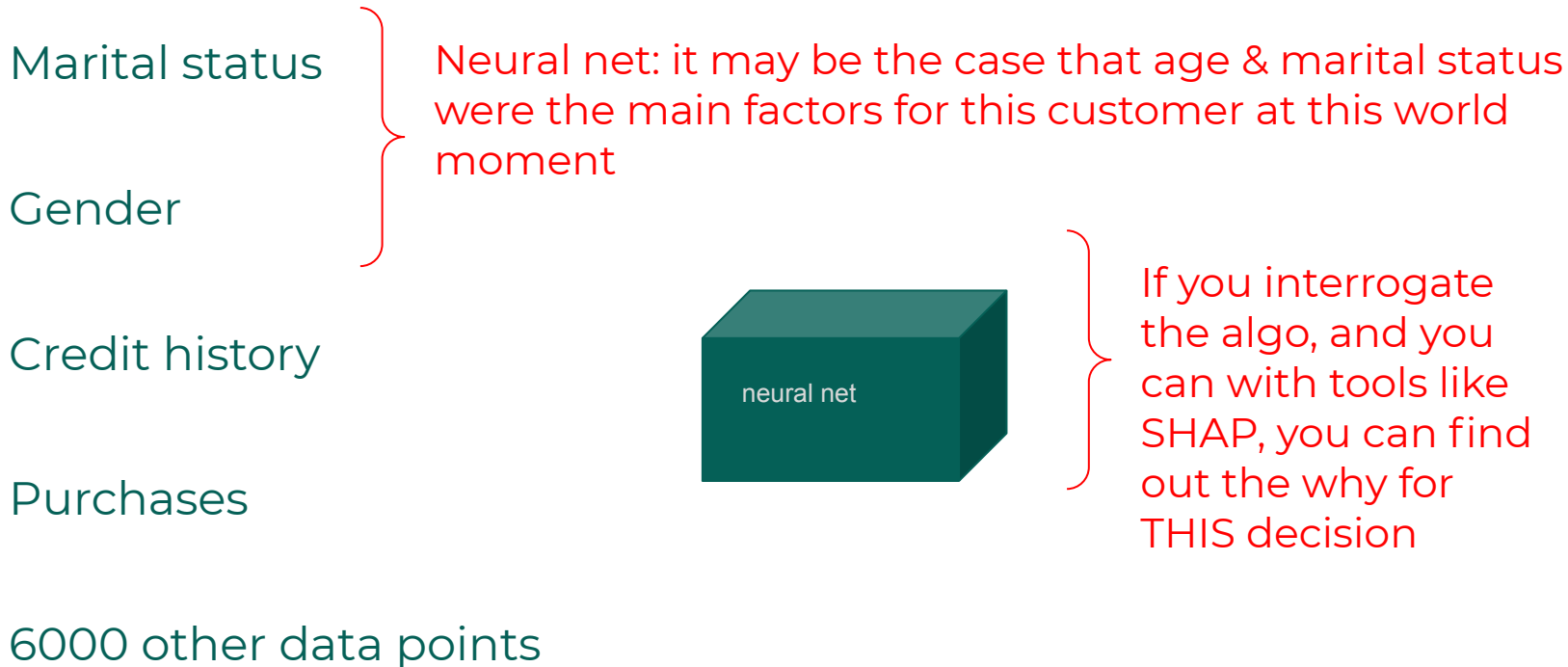
6000 other data points

Decision tree: an insurance company never insures unmarried men over 60 years old



Universal nutrition label: the algo affects everyone the same way

What can we know? complex models



Franz Kafka (a la The Trial) nutrition label: “this door was only for you...”

How do we break the news to Bonita?

*“Oh no! Based on the data we collected about you **from multiple sources**, it appears you don’t meet **the minimum borrower score** for a loan from us. If you think there’s been a mistake, let us know.”*

Bring in the designers!

Data Transparency Facts	
Data Distributor Name: Data Company Data Distributor Contact: DataSolutionTeam@data.com Data Provider Name: Leasing Company Data Provider Contact: DataAccounts@leasingco.com	
Audience Snapshot	
Branded Name	Auto Intenders – Six Months
Standard Name	Auto Intenders
Audience Description Households likely in the market to purchase a new vehicle in the next six months	
Geographies	USA
Audience Construction	
Audience Count	6,500,000
Precision Level	Households
Activation ID(s)	Cookies
Audience Expansion	Yes
Cross-Device Expansion	Yes
Last Refresh Date	02-Jan-2018
Event Lookback Window	60 Days
Data Source	
Source ID Description Dealer-reported names and postal codes of individuals who requested test drives	
Source ID Contribution	1,130,000
Precision Level	Individual
ID Key	Name and Postal
Source Event	Transactions
Inclusion Method	Observed
Seed Size (if modeled)	-
Source Refresh Frequency	Quarterly
Event Lookback Window	180 Days
This Data Transparency Label has been developed by members of ANA's Council for Data Integrity and IAB Tech Lab's Data Transparency Working Group, with the support of CIMA, The ARF and IAB's Data Center of Excellence. For more information, please visit datalabel.org .	

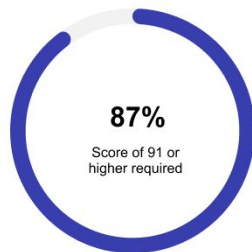


Based on your borrower score, we can't offer you a loan at this time.

Here's how we made this decision

Looks like your borrower score doesn't meet our minimum for a loan

Your estimated borrower score



Factors that help us decide your borrower score

**Marital status**

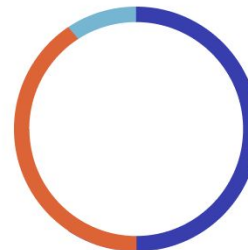
Our data tells us that you're currently separated

**Gender**

Our data tells us that you're female

**Other**

Our data includes your neighborhood and age



Data sources: Acxiom, Experian, Cambridge Analytica

Here's what you can do next

Try again later

Planning a move?

**Add a joint borrower**

It's easier with friends or relatives

**Try our partner lender**

Lenders to fit all needs

**Submit an appeal**

See something wrong?



Be clear about the decision



Show target vs actual



Break down decision factors




Reveal data sources



Provide some options

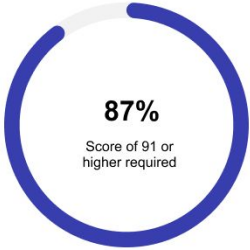


Bonita ▾




Based on your borrower score, we can't offer you a loan at this time.

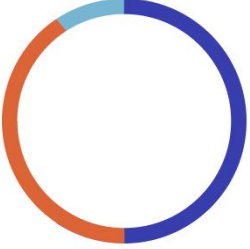
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Our data tells us that you're currently separated
-  **Gender**
Our data tells us that you're female
-  **Other**
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See something wrong?



You can work with designers to provide clarity around an opaque algorithmic-driven decision.

Help designers create the nutrition labels and cigarette warnings of our times.

After all, you're a consumer too.

Thank you!

UX Writer, Square

Founder & Organizer:

- San Francisco UX Writers Meetup
- Portland UX Writers Meetup
- LA UX Writers Meetup
- UX Writing International Leadership Guild
- Progressive Disclosure, LLC

Twitter: [@ux_writers](https://twitter.com/ux_writers)

