## The Problem

Common shopping interfaces rely upon easily quantified filters (color, cost, height, width) that don't exactly match the shoppers goals. ("I want a belt like the one I have, but that is more professional looking.")

This leads the shopper to use the tools to find a subset of products they want to shop, but no way of comparing them as they might in the real world. ("Is this belt more professional looking than this one?")

This "last decision" problem leaves the shopper with the uneasy feeling they may have missed the best possible product in the long list they chose from, giving them two unhappy outcomes - buying a product they aren't sure is exactly what they want, or delaying the purchase and extending the hunt to other outlets.

Multi-Dimension Shopping

# Smaller, more subtle sorting gets you to a decision

## A Solution

Once the user has used the big filters to find the subcategory in which they will shop, get them over that last decision point by offering them tools that approximate the criteria they have in their head.

"I like this handbag, but it's too 'old lady'"

"I like the cut of this blouse, but it is just a bit too drab."

"This jacket is good, but too 'business.' I want something more fun!"

Multi-Dimension Shopping

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# For Example

Many of the remaining filters (Casual, Exotic) are not really yes/no filters.
How casual? How exotic?
Can I get a belt that is very casual and a little exotic? How?

Multi-Dimension Shopping

For those who are 'just looking' we keep the list model.
For those 'on the hunt' we can offer an alternative to
help them not only decide, but to be happy with their decision.

Multi-Dimension Shopping

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# A New Interface with 3 Dimensions

v0.01



Once the user has used the large filters to get a set of products,
we should offer them an ALTERNATIVE interface that lets them input
their deciding criteria and build a scatter plot of products to help them decide.

## Multi-Dimension Shopping

★macy's

# Sorted, Sorted, Sorted

In this case, the shopper is looking for price/quality
(using Customer Review as a proxy for quality)
The third criteria "Professional" determines the iconsize of the item.
The more professional, the bigger the icon.

Multi-Dimension Shopping

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# An Alternative Interface, For the Last Decision

Note this is an alternative interface to the traditional list.
It is most useful when there are a small group of items that
the user is considering and needs tools to decide.



**19 items in Belts**

List | Decider

Sort by: Featured Items ▼    Show: 40 items ▼    page **1** 2 3 4 5 ▶

☐ More Professional ▼

**Y = Price**

10 items

> Price ▼

> Customer Review ▼

3 items

**X = User Review**

**Z = Casual / Professional**

The underlying numbers don't have to be displayed as they are
relative scores. As long as the number distinguishes between products,
it is sufficient to move an icon representing an item up/down/left/right.

# Item Data



**NEW!** INC International
Concepts Metallic Stretch
Straw Belt

$42.50

Casual ← → Formal

Junior ← → Mature

● → Impressive

● → Spring

● → Autumn
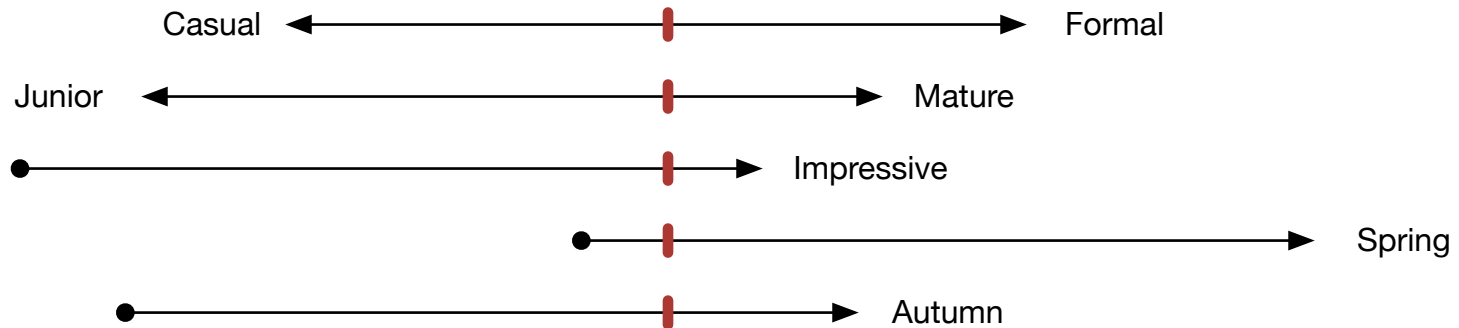
Each item would have carefully chosen criteria, criteria that
match the shopper's wants. Those criteria would be represented by a score, and
the spectrum that the score represents would be a choice exposed to the shopper
as controls for vertical sort, horizontal sort and icon size sort.

Multi-Dimension Shopping

# Where does this data come from?

The Data can come from many sources

**Custom CAPTCHA**

Sort the following jewelry in order of age appropriateness
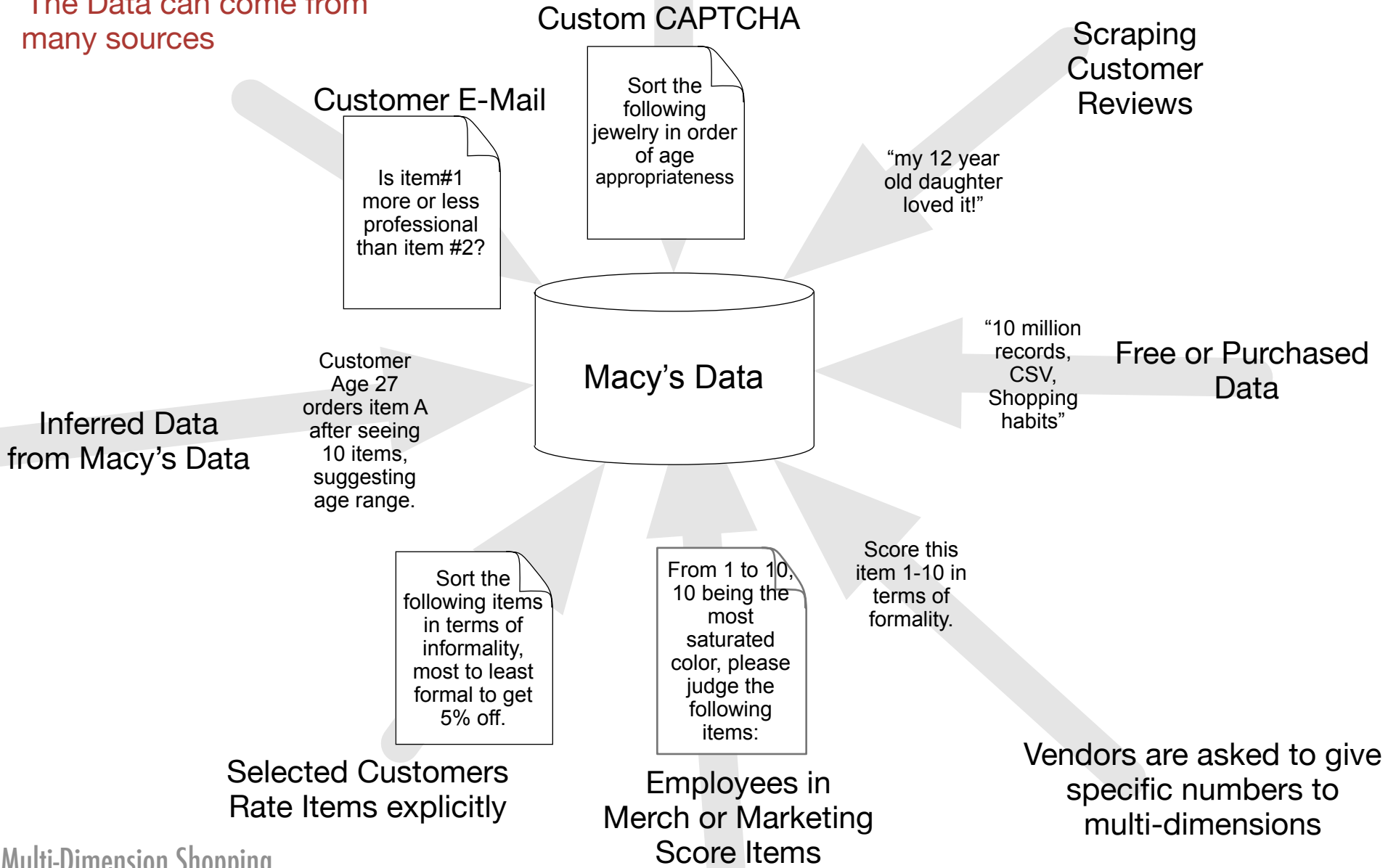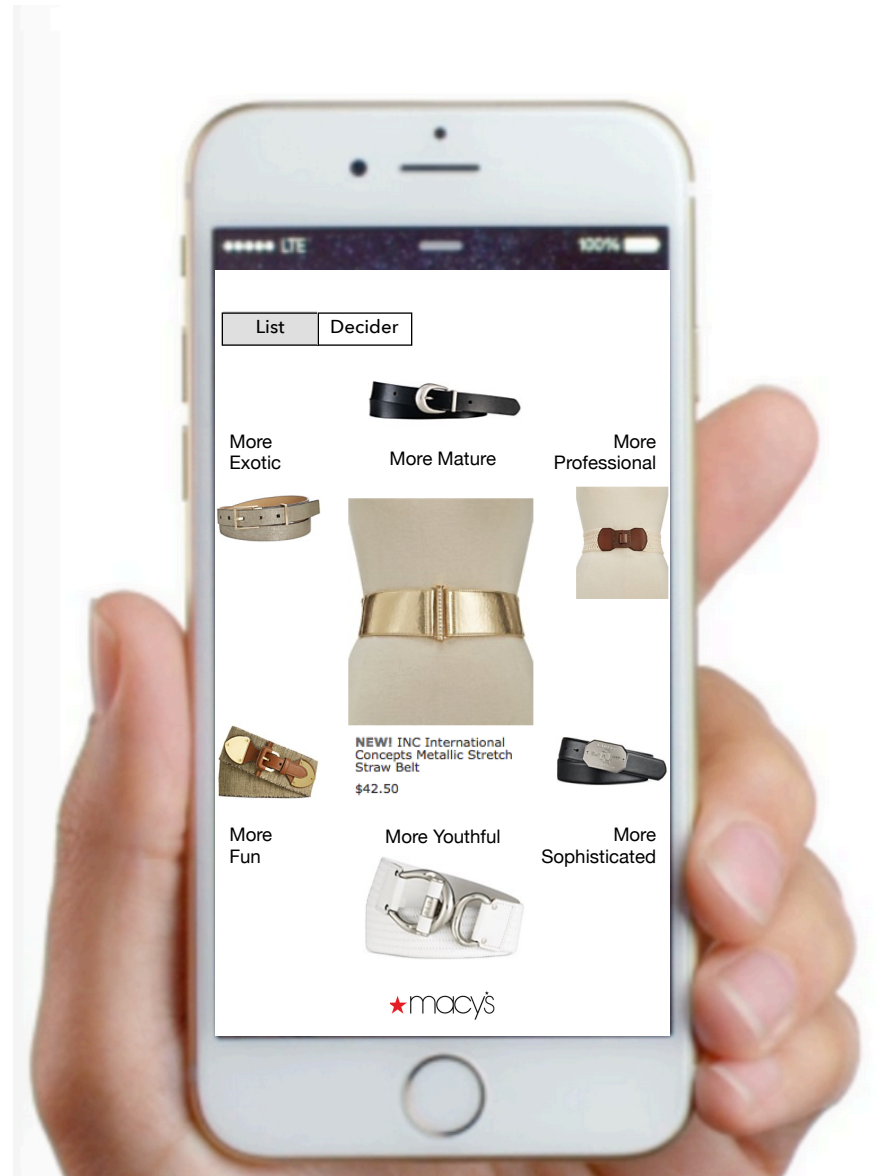
**Customer E-Mail**

Is item#1 more or less professional than item #2?

**Scraping Customer Reviews**

"my 12 year old daughter loved it!"

**Macy's Data**

Customer Age 27 orders item A after seeing 10 items, suggesting age range.

**Inferred Data from Macy's Data**

"10 million records, CSV, Shopping habits"

**Free or Purchased Data**

Sort the following items in terms of informality, most to least formal to get 5% off.

**Selected Customers Rate Items explicitly**

From 1 to 10, 10 being the most saturated color, please judge the following items:

**Employees in Merch or Marketing Score Items**

Score this item 1-10 in terms of formality.

**Vendors are asked to give specific numbers to multi-dimensions**

Multi-Dimension Shopping

# Multi-Dimensional MOBILE Shopping

## Multi-Dimensional shopping really comes into it's own on mobile!



Multi-Dimension Shopping