

Compensating for the Lack of Touch in Online Retail Sites



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Outline

- Need for Touch
- How to Compensate?
- Some Preliminary Pilot Results
- Next Steps



Why Don't Some People Buy Online?

- Industry research suggests that the inability to touch and feel products is hampering online purchasing.
 - 54% of online consumers prefer to shop in a store rather than online because the store provides the ability to better understand products through sensory experience such as touch and feel (Allurent 2006).
 - 35% of online consumers say they do not purchase products online because they cannot touch or feel the products (Internet Retailer 2005; Retail Forward 2005)



Sensory Experience is Important Online

■ The increasing sophistication of video games and the emergence of new gaming genres such as social networking, virtual pet rearing and virtual world building will influence consumer desire for more “experiences” online.



Myst

Nintendogs



Sensory Experience is Important Online

33% of US consumers are video gamers (Nielsen Media Research March 2007) - that's nearly 94 million people over the age of 2.

Note that though 62% of gamers are men, 76% of "casual" gamers are female! And 75% of all gamers fall into the "advertiser-coveted" demographic of < 18 and 18-44 (Ipsos Insight May 2006).

Second Life Store



→ These experiences will influence consumers' expectations with respect to online retailing.

Touch is Important in Making Product Choices


- The ability to touch a product (a digital camera feels solidly made) can strengthen your confidence in your judgment about the product.
- The ability to touch a product (rub a soft leather coat) may increase your overall attitude/liking of the product.


Problem: people can't touch products online!



Need for Touch

Consumers differ according to their need for touch (NFT). For some consumers, touch is very important (high NFT). For others, not so much. There are two distinct dimensions to NFT:

 **Autotelic** - "touching products can be fun." This is touch for its own sake. These people just enjoy touching products. Experiential touch.

 **Instrumental** - "touching a product is the best way to be sure the product is worth buying." This is touch that provides information. Rational, analytic touch.

We can measure an individual consumer's Need for Touch.



Need for Touch Scale

THE TWO DIMENSIONS OF NEED FOR TOUCH AND THE SCALE ITEMS

1. When walking through stores, I can't help touching all kinds of products. (A)
2. Touching products can be fun. (A)
3. I place more trust in products that can be touched before purchase. (I)
4. I feel more comfortable purchasing a product after physically examining it. (I)
5. When browsing in stores, it is important for me to handle all kinds of products. (A)
6. If I can't touch a product in the store, I am reluctant to purchase the product. (I)
7. I like to touch products even if I have no intention of buying them. (A)
8. I feel more confident making a purchase after touching a product. (I)
9. When browsing in stores, I like to touch lots of products. (A)
10. The only way to make sure a product is worth buying is to actually touch it. (I)
11. There are many products that I would only buy if I could handle them before purchase. (I)
12. I find myself touching all kinds of products in stores. (A)

NOTE.—Scale descriptors ranged from -3 (strongly disagree) to $+3$ (strongly agree). A = autotelic scale item; I = instrumental scale item.



The two dimensions of NFT tend to covary together with a correlation of about .65

Source: Peck and Childers (2003 *Journal of Consumer Research*)

Need for Touch - Online Implications of NFT Segmentation

Since we can “type” consumers according to NFT, we can identify those for whom touch does and does not matter.

Low Need for Touch Segment. These consumers will be fine with a picture of a product.

High Need for Touch Segment. These consumers will be both *more frustrated* and *less confident* if they cannot touch a product while evaluating it. A picture **won't help!**






Need for Touch - Online Implications of NFT Segmentation

Question: For the High NFT segment, how can online retailers somehow *compensate* for the inability to physically touch a product online?



Some Implications from Theory

- 1) Identify high NFT consumers and use the Web to get them into physical stores with special incentives.
 - 2) Optimize the product picture so that it somehow conveys haptic information.
 - 3) Use a 3D model that the high NFT customer can manipulate with a mouse (we can call this "mouse-touch").
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-  Provide a written description that compensates for the inability to touch.
 -  Manipulate low NFT individuals with non-diagnostic touch cues.
 -  Provide opportunities for high NFT consumers to "model" touch through online product videos.



Compensating for NFT: 1) Drive high NFT consumers offline

Market segmentation approach. Identify high NFT consumers in the customer database. Target these customers with special promotions to drive them into the physical store.

Linens 'N Things - 20% off in-store coupon

Print the coupon in this link to save **20% off in-store purchases** at Linens 'N Things. Some online sales at **LNT** include buy 1, get 1 50% off entire stock of every window panel, valance, and hardware set, select sheets, Oxford towels and bath rugs, and Homedics TheraP and Dream Rx foam pillows and toppers. Coupon is valid through 03/25/2007.

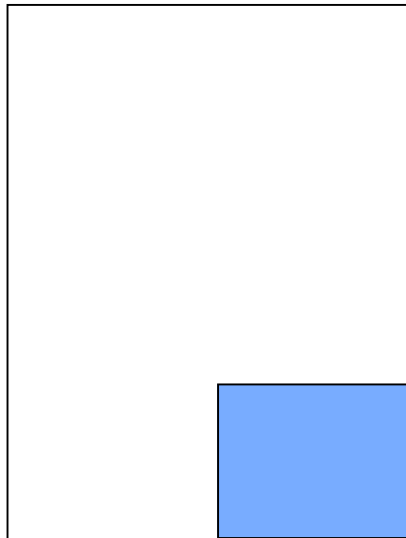


Compensating for NFT: 2) Optimize product images

- Product packaging has “heavy spots” and “light spots.”

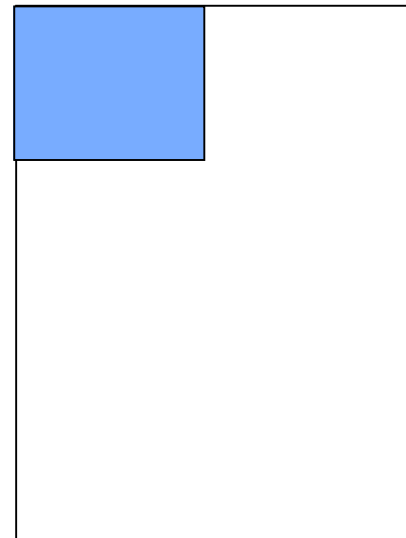
Heavy Spots:

right side of the package,
and bottom of the package



Light Spots:

left side of the package,
and top of the package



Compensating for NFT: When heaviness is preferred



Preferred because paperweight is
perceived as heavier



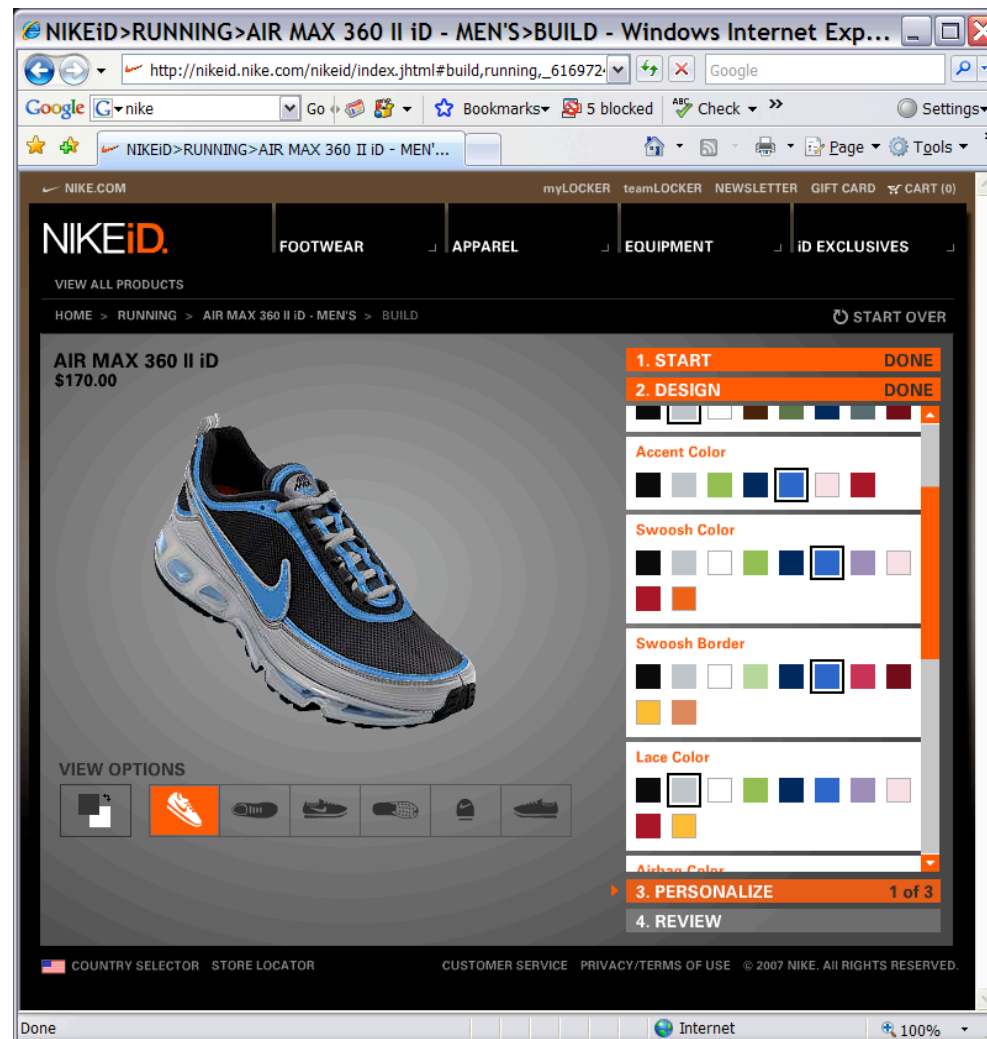
Compensating for NFT: When lightness is preferred



Preferred because cell phone is
perceived as lighter



Compensating for high NFT: 3) use interactive 3D models



Compensating for NFT: 4) written product descriptions

The **High NFT Segment** can be compensated for their inability to touch, with the **right type** of written description:

a) Instrumental information. “This sofa is made of top quality Italian leather with a 10 year warranty on materials and construction. It’s 76 inch wide dimension, combined with low back and detachable legs, allows the sofa to fit through nearly any size doorway. It is available the 17 colors, with black and red leather available as “quick-ship” options.”

b) Autotelic information. “This sofa is made of buttery soft Italian leather, handcrafted by Italian artisans. Its transitional style sets the mood in either contemporary or traditional decors. The cushions offer gentle support that comforts you as you sink into the sofa. Numerous eye catching designer colors are available to satisfy the most discriminating tastes.”



QUESTION: would “a” or “b” be more effective with the High NFT Segment?

Source: Peck and Childers (2003 *Journal of Marketing*)

Compensating for NFT: 5) nondiagnostic touch cues

Diagnostic touch cues. The touch cue is central to the core consumption experience (soft sweater, rough nail file, lightweight backpack).

Nondiagnostic touch cues. The touch cue is extraneous to the core consumption experience (flimsy vs. solid plastic cup that orange juice is served in).

High NFT individuals are influenced by **diagnostic touch cues**.

Low NFT individuals are influenced by **nondiagnostic touch cues**.

Why?



Source: Krishna and Morrin (2007)

Compensating for NFT: 5) nondiagnostic touch cues

Two-stage process:

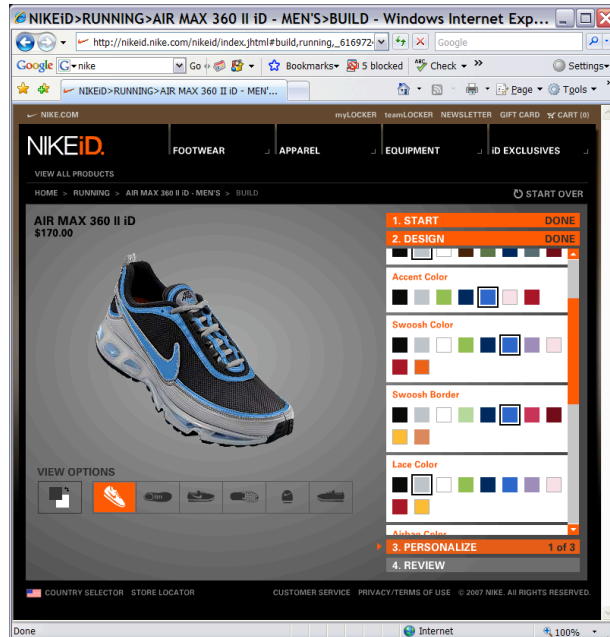
	High NFT Consumers	Low NFT Consumers
Stage 1: Automatic processing	Firmness of cup means OJ tastes better.	Firmness of cup means OJ tastes better.
Stage 2: Deliberative processing (correction stage)	High NFT consumer has greater experience with touching objects and quickly realizes that feel of the cup is irrelevant to the taste of the orange juice.	Low NFT consumer has less experience with touching objects and does not discount the feel of the cup in evaluating the taste of the orange juice.



Source: Krishna and Morrin (2007)

Compensating for NFT: 5) nondiagnostic touch cues

Implications for 3D product representations and games.

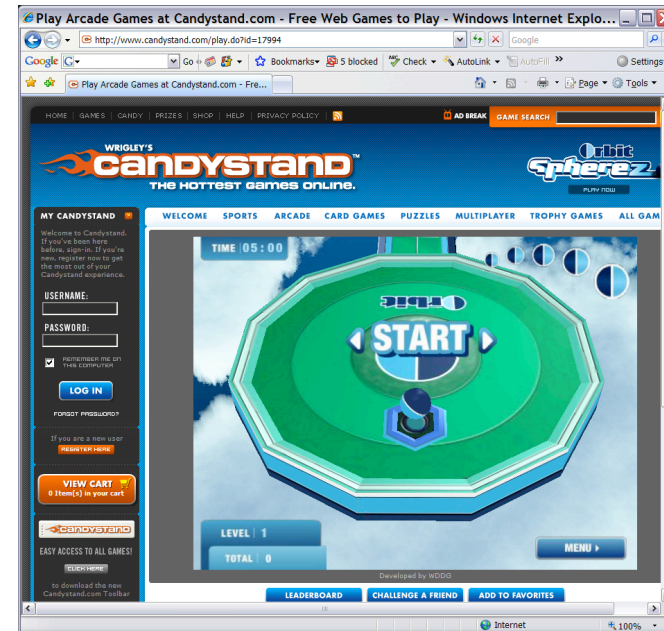


These touch cues are **diagnostic**. Mouse movements show different views of the shoe. Mouse clicks show how the shoe looks when colored.



“Mouse-Touch” impacts High NFT Consumers

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<http://sloan.ucr.edu/>



These touch cues are **nondiagnostic**. Mouse movements have nothing to do with the taste of Orbitz chewing gum.

“Mouse-Touch” impacts Low NFT Consumers

Compensating for NFT: 6) learn from observed behavior

Apply principles from social learning theory (Bandura 1997) to enable high NFT consumers to "model" the behavior of consumers in online videos.

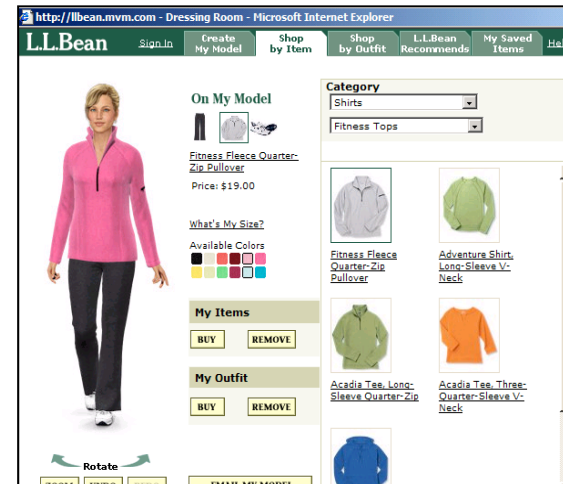
The screenshot shows the Expo Television website. The top navigation bar includes links for EXPO HOME, CREATE VIDEOPINIONS, ABOUT EXPO, MY EXPO, and FORUMS. A search bar is located in the top right. The left sidebar lists various product categories under 'PRODUCT VIDEOS' and 'SEEN ON EXPO ON DEMAND'. The main content area features a large video player with a green background and the text '\$5 SAYS YOU CAN MAKE A GREAT REVIEW!'. Below the player are sections for 'EDITOR'S PICKS' and 'MEMBER OF THE WEEK'. The right sidebar contains a 'BECOME A MEMBER' form, 'VIDEOPIINION PROMOTIONS', and a list of 'MOST VIEWED VIDEOPIINIONS'.



Will video demonstrations compensate for lack of touch for high NFT individuals?

Can We Compensate for the Lack of Touch Online? Pilot Study

- N= 67 U.S. females
- One experimental factor (between-subjects)
 - Simulated online shopping experience for a fleece jacket using either a static photo or a 3D “virtual model”



My Virtual Model

Landsend.com

Welcome to the My Virtual Model™ experience.

With the My Virtual Model™ feature, you can try Lands'End clothing on a model that's practically a mirror image of yourself. Business suits to bathrobes, let your model try it on before you buy. All without even setting foot in a dressing room.

First visit?

Click here to use our host model

Try model for Women

Try model for Men


Already registered?

[Log in for Men](#) [Log in for Women](#)



My Virtual Model

My Room My Virtual Entertainment Room Items: 25 Subtotal: \$5474.31



Undo Change View Clear Items Sign In Save Room Print History

Select An Item

Select Your Entertainment Room Type

Save Options

Welcome to
Sears' Virtual Decorator SM
For Entertainment Room

Getting Started...

- **MY ROOM**
Click to see details on all selected items and change options.
- **SELECT AN ITEM**
To change your product selections. Click an item to add it to your room.
- **SELECT YOUR ROOM TYPE**
Select wall colors, a floor plan and other options for your room.
- **SAVE OPTIONS**
Create a user profile.



Measures

One individual differences factor:

NFT - Need for Touch (median split)

Key DVs

1. Website was helpful in **learning** about the product
2. If I bought this, **confident** I would get what I saw
3. Website gave me a **good sense of the product**
4. **Enjoy** this type of online shopping experience
5. **Like to explore** other products through this depiction
6. Would be **less likely to return** if product displayed like this
7. Would be **more likely to buy** from websites that display products like this



Main Effects

Static vs. Virtual Model	P-value
Learning	.000
Confident	.002
Good Sense of Product	.000
Enjoy	.000
Like to Explore	.000
Less Likely to Return	.146
More Likely to Buy	.101
Low vs. High NFT	P-value
Learning	.112
Confident	.087
Good Sense of Product	.007
Enjoy	.008
Like to Explore	.039
Less Likely to Return	.158
More Likely to Buy	.055

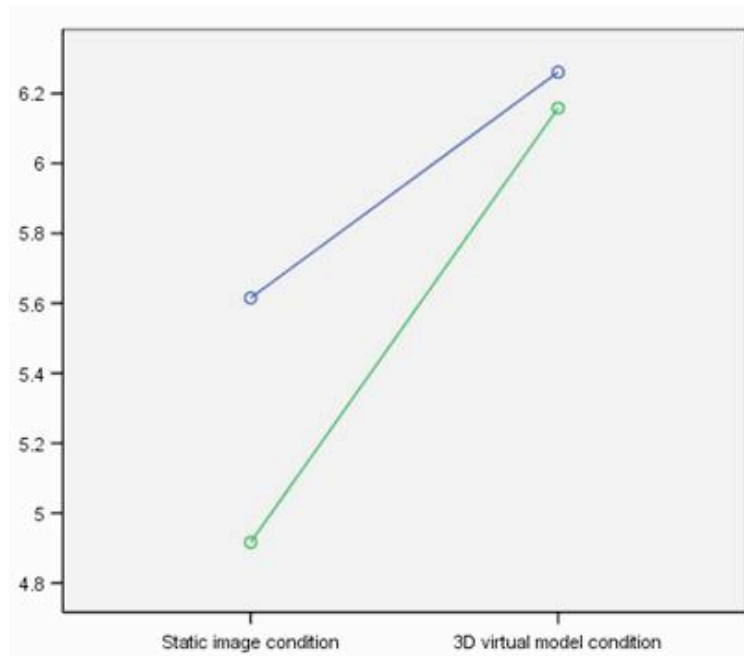


Main Effects

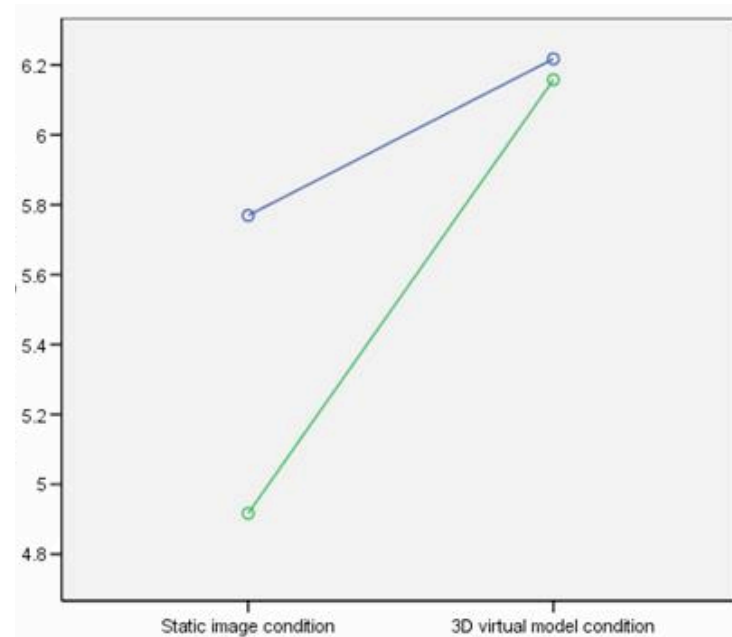
Low NFT

High NFT

Helps Learning



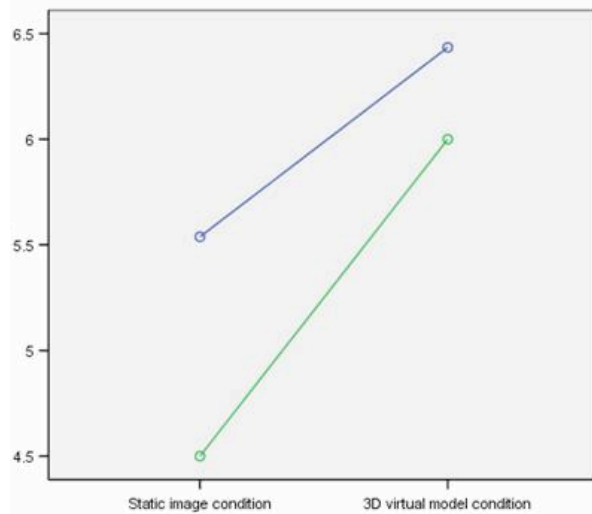
Confident What You See is What You Get



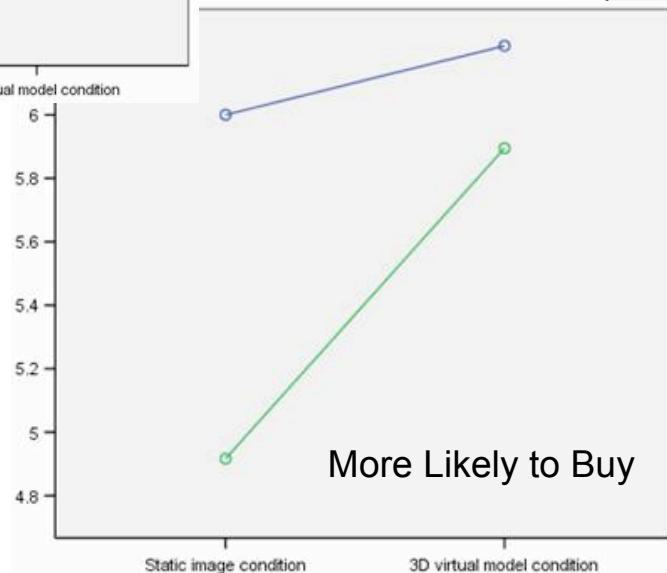
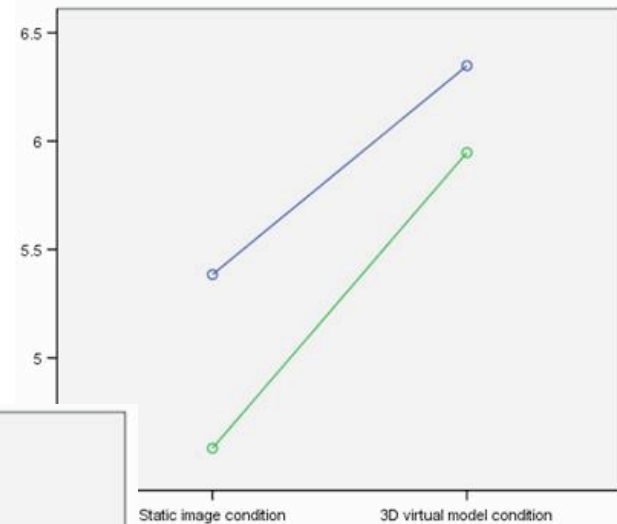
Main Effects

Low NFT
High NFT

Enjoy This Online Experience



Explore Other Products This Way



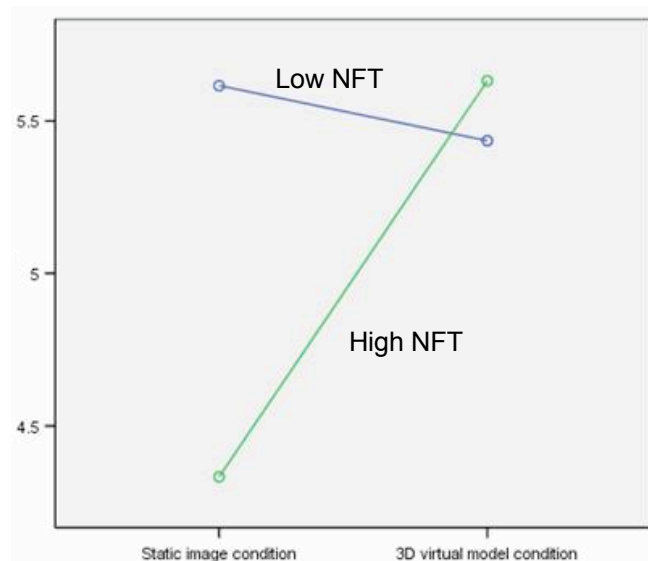
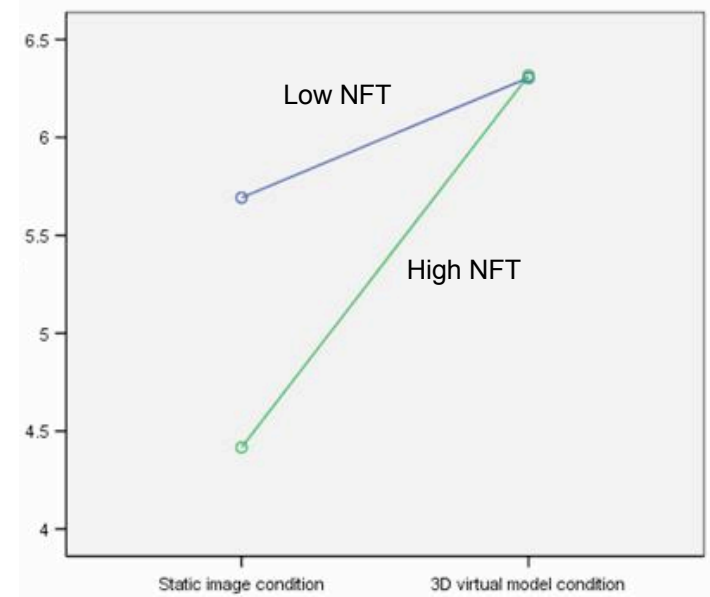
More Likely to Buy



Interactions

Display X NFT	P-value
Learning	.236
Confident	.136
Good Sense of Product	.006
Enjoy	.262
Like to Explore	.485
Less Likely to Return	.056
More Likely to Buy	.293

Good Sense of Product



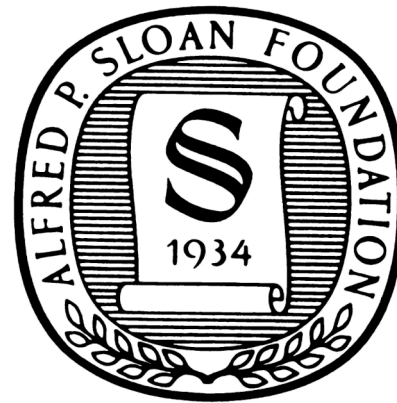
Less Likely to Return



Next Steps

- Replicate study with other :
 - virtual model formats, e.g. directly manipulate a single object vs. design an entire room and move things around
 - product categories
 - Consumer experience with the product category
- Explore in more detail the difference between the autotelic vs. instrumental dimensions of NFT:
 - Is it easier to compensate for the autotelic or the instrumental dimension?
- Suppose we define a construct, "Need for manipulation." Is that the same or different than NFT?





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