

# DECODING THE HIDDEN WHO™ FOR MORE EFFECTIVE PERSONALIZATION

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In the process of getting more precise at CX, UX and UI personalization, is it possible we have been overlooking one of the most important aspects...we are dealing with humans. And humans come pre-wired to every choice and experience in ways traditional CX approaches cannot decode.

Sure, we capture individual demographics and behaviors and draw inferences from them. But that is the “what” and not the “why.” To more effectively and more empathetically mirror and adapt to individuals, we need to first understand that individual’s *Hidden Who™* before we attempt to personalize their experience.

With the advent of machine learning (ML) and artificial intelligence (AI), progress has been made in inferring this “Sensemaking Genome™.” Here are a few ways this is developing now that you should consider- but be aware that technology often outruns regulation and everything you implement related to decoding an individual customer should be transparent and with the permission of each customer. In short, make sure you are acting in your customer’s best interests.

First, when we say the “Sensemaking Genome™” we mean a whole set of cognitive styles, personality traits, and identity-tied worldviews that filter, focus, or distort information coming into our brains. Let’s look at just a few.

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## 1 – PERSONALITY TRAITS

## 2 – REGULATORY FOCUS

## 3 – NEED FOR AFFECT & NEED FOR COGNITION

## 4 – UTILITARIAN VERSUS HEDONIC

## 5 – IDENTITY TRIBES & WORLD VIEWS

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## When we say Sensemaking Genome, what do we mean?

Just as every individual has a genome made up of a complete set of their DNA (23 pairs of chromosomes) that determines every aspect of their growth, development and health, each individual also has a kind of hidden hard-wiring that governs their preferences, choices, and behaviors. Scientists believe about half your personality is inherited, for example.



## PERSONALITY TRAITS

Personality traits are innate aspects that guide an individual’s sensemaking and behavior. While there has been some debate over whether they change over time, most studies claim that our personality is fairly fixed from our mid-twenties.

Companies that understand the power of matching the experience to the individual’s personality have already filed for patents to do this (Google, Spotify, Apple). Apple’s patent says it wants to match the user’s personality with a wellness coaching app. Meanwhile, the company Mattersight has filed for a patent to match a customer with a customer service or call center representative by decoding their respective personalities.

Behavioral scientists and psychologists have come to a consensus that our personalities can be deconstructed into five factors with a handy acronym of **OCEAN**: Openness to experience; Conscientiousness; Extraversion; Agreeableness; Neuroticism (or its converse called “Emotional stability”). Many facets make up each of the five factors. For example Conscientiousness is composed of: achievement striving; cautiousness; dutifulness; orderliness; self-discipline; self-efficacy. We can be measured on a sliding scale from low to high on each factor.

If you can decode someone’s personality trait profile, you can be far better at creating an experience and interface that works for them, that puts them at ease and makes more sense.

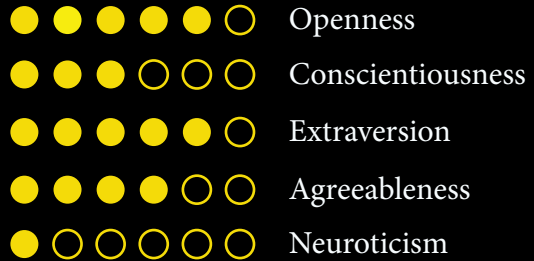
Let's imagine two different customers who appear identical in demographics but who have very different personalities.

- Bill scores high in **Openness** and craves variety and new experiences.
- George scores low in Openness. He is comforted by what he knows and routines.
- Bill scores low on **Conscientiousness**. He likes to improvise and "wing it," and is not big on structure or deadlines.
- George scores very high in Conscientiousness and lack of discipline and structure make him uncomfortable.
- Bill scores high in **Extraversion**. He seeks out the company of others whenever possible and likes to take the limelight.
- George scores very low on this factor and is an Introvert. He'd prefer quiet time alone reading, gaming or listening to music.
- Bill is high on **Agreeableness**. He is trusting, warm and makes friends quickly. He can be easily influenced by likeable others.
- George is a skeptic. You need to convince him and he does not go along with the crowd.
- Bill is low on **Neuroticism**. He's usually confident, calm, relaxed and not unnerved by stress.
- George scores high on Neuroticism. He replays conversions after the fact, wondering if he said something wrong. He finds others can be irritating.

Now you can see how Bill and George will likely need very different user experiences.

Humans also show up pre-wired to your experience with innate thinking (cognitive) and decision-making styles. There are many, but here are a few key cognitive styles that can affect the user experience.

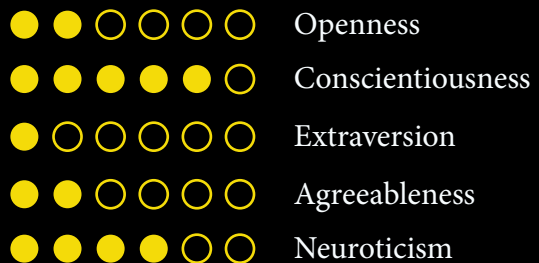
BILL



UI & UX Implications

- Prefers imaginative
- Improvisational
- Social, gregarious
- Warm, trusting
- Easy going, calm

GEORGE



UI & UX Implications

- Prefers down-to-earth
- Self-disciplined
- Quiet, reflective
- Skeptical, calculating
- Worrier, gets stressed out

# 2

## REGULATORY FOCUS

Regulatory Focus refers to how we humans go about achieving goals and making decisions. We may be wired to be more of a **Promotion** focus, which means we strive to attain new goals, and are concerned about missed opportunities, or we can be wired with a more **Prevention** focus, which means we are motivated by safety, security and what we ought to be doing. Prevention-focused individuals are more motivated by avoiding harm and loss than achieving new goals. Think of it in terms of sports. A Promotion-focused tennis player hits shots close to the lines while a Prevention-focused player pushes the ball safely back into play, over-and-over again until their opponent makes an error. Your Prevention-focused customer will need to feel safe, secure and reassured they can avoid failure and even reverse course if need be. Your Promotion-focused customer wants to experience new things and has less fear of the unknown. They worry more about a missed opportunity.

So again, imagine two customers who are identical by traditional measures, but who come to your ecommerce experience each wired with a very different Regulatory Focus.

### How will your CX adapt for each?

- Susan (Promotion) wants to level up and not miss the next great opportunity.
- But Natalie (Prevention) wants to be sure she will not make a mistake.

SUSAN

### PROMOTION FOCUS



#### UI & UX Implications

- Don't miss opportunity
- Be bold
- Be decisive

NATALIE

### PREVENTION FOCUS



#### UI & UX Implications

- Avoid harm
- Play it safe
- Take time to get it right

# 3

## NEED FOR AFFECT & NEED FOR COGNITION

Some people are pre-wired to crave emotional experiences. They have a high Need for Affect (emotion). And while they are not mutually exclusive, it is likely that those high in a Need for Affect may not also be high in a Need for Cognition. Those high in a Need for Cognition like thinking about thinking! They enjoy digging into the data and the evidence. The high Need for Affect person, meanwhile, will be more persuaded by an emotional narrative.

### How will your CX cater to each differently?

### COGNITION



#### UI & UX Implications

- Likes research
- Prefers text and facts

### AFFECT



#### UI & UX Implications

- Prefers emotional story
- Prefers visuals

OPENNESS

HEDONIC

4

EXTRAVERSION

### UTILITARIAN vs HEDONIC

Those wired with a more Hedonic personality crave sensory experiences. They shop for entertainment, often with friends. Meanwhile the more Utilitarian person is not concerned with the brand experience so much as the price, convenience and time spent. It is a functional chore.

How will your CX adapt to each?

AGREEABLENESS

NEUROTICISM

#### HEDONIC



#### UI & UX Implications

Likes shopping  
Seeks experience

PREVENTION & PROMOTION

COGNITION

AFFECT

CONSCIENTIOUSNESS

#### UTILITARIAN



#### UI & UX Implications

Dislikes shopping  
Seeks convenience

UTILITARIAN

OPENNESS

EXTRAVERSION

AGREEABLENESS

# 5

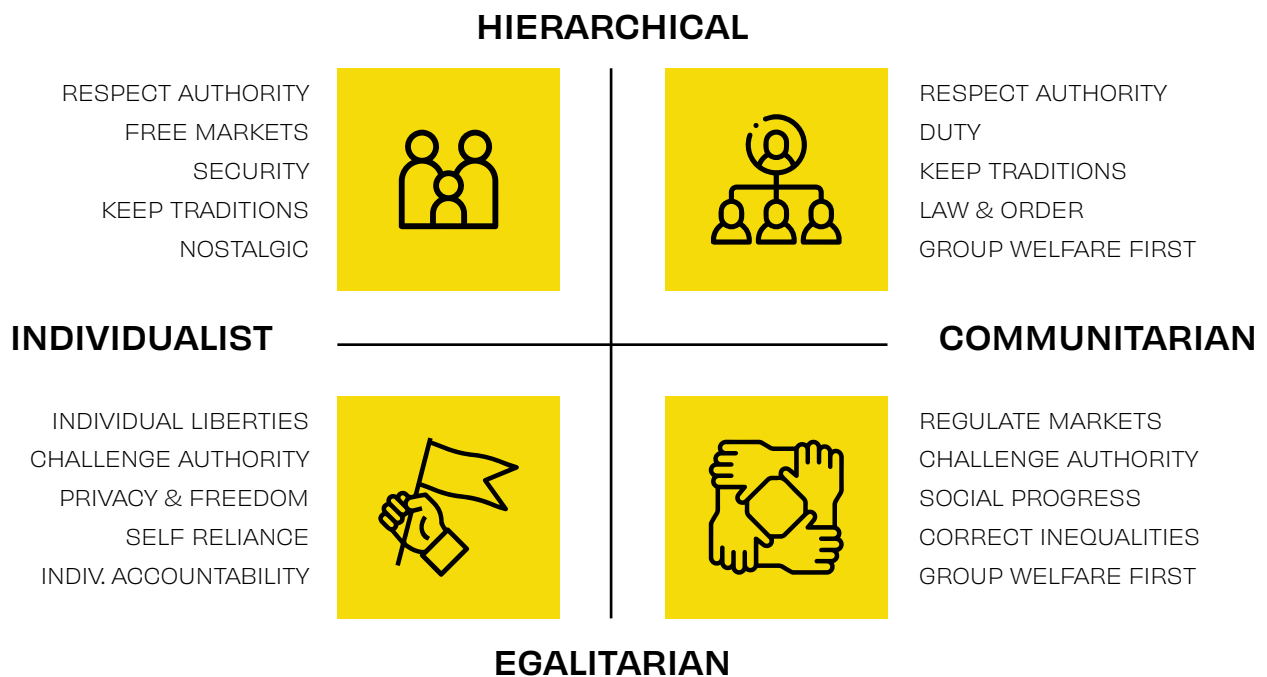
## IDENTITY TRIBES & WORLDVIEWS

Identity pulls individuals together into tight ingroups, and identity repulses us from those in outgroups who do not see the world the way we do. In person, we take clues from others as to whether they might be in our ingroup. Clearly politics is one way we figure out who is in which tribe, or our stance on issues such as climate change or gun control. But so can clues such as our taste in comedy or music.

One framework used to map individuals (and now brands) is called "Cultural Cognition."

As you can see below, the key forces on the vertical axis are Hierarchical versus Egalitarian. Those who identify more with a

Hierarchical worldview believe we need a clear leader or boss and a clear ranking order below that boss. But their opposites who subscribe to more of an Egalitarian worldview feel more comfortable when there is no ranking and we are all just equals. Then, on the horizontal axis you see those who are more Individualistic at one end with their Communitarian opposites at the other. Sometimes the individualists are called independent while the communitarians are called interdependent. Those Individualists believe in self-reliance, accountability and meritocracy. They like free markets and no government regulation or intervention. They are fine with a world that sorts the winners from the losers. But the Communitarians find that abhorrent and selfish. They believe we must care for the greater good above all, and especially for those more vulnerable or discriminated against. When these forces come together in each quadrant below, they flesh out a kind of worldview persona for each.



Just looking at the divide between the Individualists (Independent) and the Communitarians (Interdependent) we can already see from studies how very differently they view brands and experiences.

### INDEPENDENT

- Focuses more on own desires
- Lower coupon usage
- Less motivated by discounts
- Interacts more with content
- Prefers partitioned pricing
- Motivated by gains
- Motivated by nostalgia
- More utilitarian
- Spending oriented
- More abstract
- Need for uniqueness
- Likes underdog brand

### INTERDEPENDENT

- Focuses more on others & norms
- Higher coupon usage
- More motivated by discounts
- Prefers bundled pricing
- Motivated by avoiding losses
- Moved by present
- More hedonic
- Saving oriented
- More concrete
- OK with fitting into norm
- Likes leader brand

# How do we decode the Sensemaking Genome in people, especially as experiences are digital and physical?

## DECODING THE SENSEMAKING GENOME™ BY INFERENCE

The behavioral science team at Ogilvy have developed over many years an award-winning research methodology to decode individuals at scale. But it is not always possible, of course, to give prospects a series of lengthy, rigorous tests in order to better understand them. That's where the new developments in ML and AI come in; recent experiments show great promise in inferring personality trait profiles and cognitive styles from what individuals already do. Here are six areas that will create such opportunities. But one big caveat: just as with many breakthrough discoveries, they can be used for good or for evil. We must ensure that when decoding people we never use that intelligence against the best interests of those individuals.

If done ethically, we can improve the individual's experience and outcome through a deeper and more empathetic understanding of what makes them tick.

## THE SCIENCE OF INFERRING PERSONALITY FROM DIGITAL FOOTPRINTS

### Social Media

Many studies have shown that an individual's personality can be inferred from aspects of their social media digital crumbs.

### Imagery

One such study demonstrated the power of matching imagery to their personality traits. When the image matched the trait, it triggered a substantial lift in click through rates.

### Text

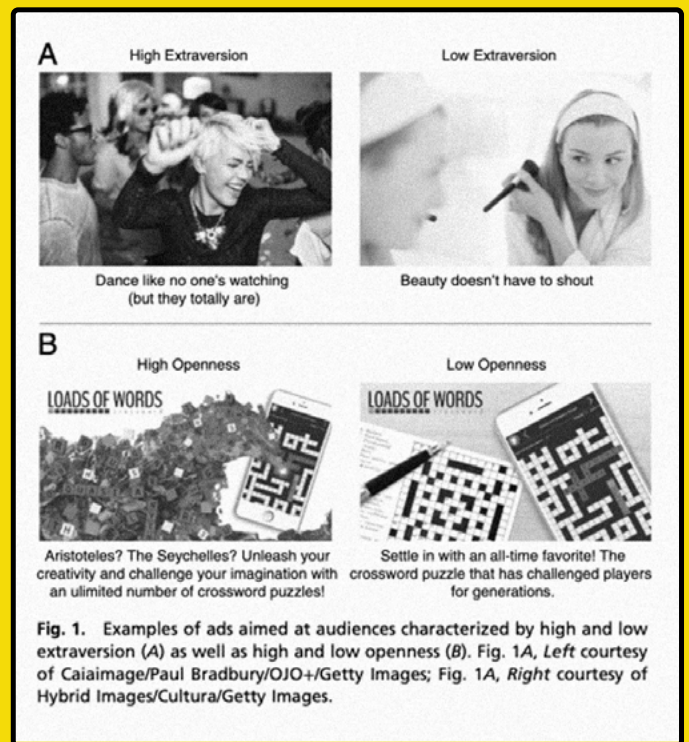
Using ML and AI to mine and parse text usage can be another valuable tool in decoding a user's personality. Beyond the obvious sentiment measures, methods such as Linguistic Inquiry and Word Count (LIWC) evaluate syntax and order of words along with ratios of pronoun usage. By feeding the LIWC engine the text, you can infer the person's personality.

### Portraits

Using artificial neural networks (ANN), a recent study found it could predict the personality of individuals by merely using their portraits.

### Music

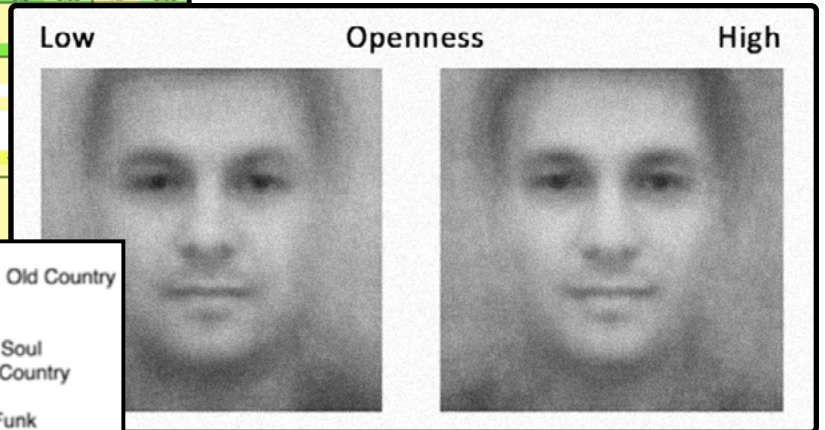
Music may be the most powerful "tell" of all. It is deeply implicit, personal, and few would use it for impression management. This study found a predictive power of linking music choices with personality traits.



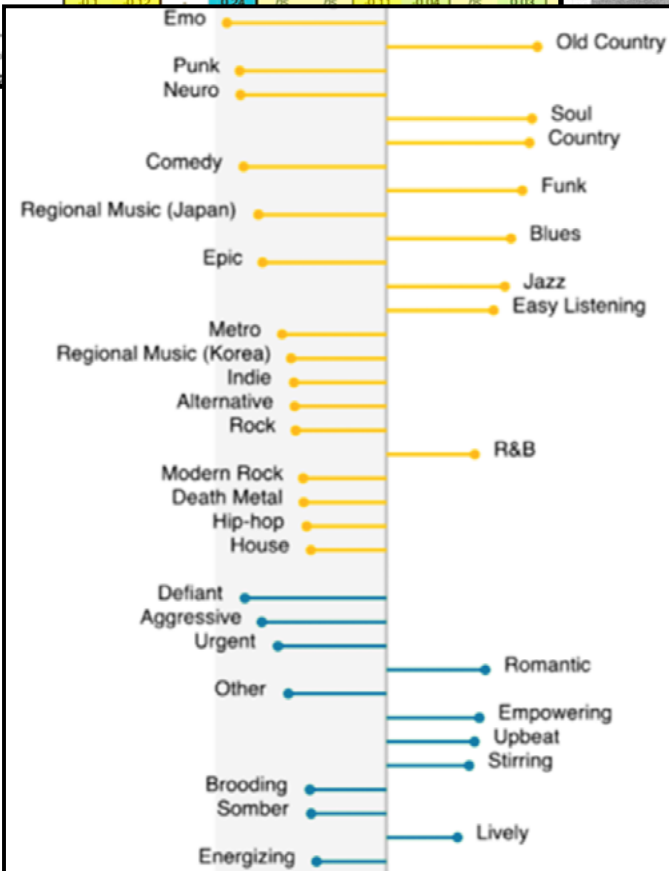
*SOURCE: "Psychological targeting as an effective approach to digital mass persuasion," Matz, et al*

LWC Category	Gender		Age		Extraversion		Agreeableness		Conscientiousness		Neuroticism		Openness	
	[34] d	our β	[30] β	our β	[27] p	our β	[27] p	our β	[27] p	our β	[27] p	our β	[27] p	our β
Total function words	-0.04	-	0.16	-	-0.04	-	0.02	-	0.02	-	0.03	-	0.09	-
Total pronouns	0.36	0.07	-0.02	ns	-	ns	0.11	ns	ns	-0.03	ns	0.04	-0.21	0.07
Personal pronouns	0.14	-	-0.08	-	-	ns	-	ns	-	-0.04	-	0.04	-	0.05
1st pers singular	0.17	0.13	-0.14	-0.22	ns	ns	-	-0.03	ns	-0.06	0.12	0.05	-0.16	0.05
1st pers plural	ns	ns	-0.13	0.21	0.11	0.03	0.18	0.05	ns	0.05	ns	-0.04	-0.1	ns
2nd person	-0.06	0.05	-	0.04	0.16	ns	ns	0.02	ns	ns	-0.15	ns	-0.12	0.02
3rd pers singular	-	0.09	-	0.15	-	ns	-	ns	-	ns	-	0.02	-	ns
3rd pers plural	-	-0.05	-	0.26	-	-0.06	-	-0.04	-	ns	-	0.02	-	0.03
3rd pers overall	0.2	-	-	-	ns	-	ns	-	ns	-	ns	-	ns	-
Impersonal pronouns	-	-0.09	-	0.11	-	-0.05	-	ns	-	ns	-	0.02	-	0.03
Articles	-0.24	-0.24	-	0.28	ns	-0.05	ns	ns	0.09	0.02	-0.11	-0.02	0.2	0.13
Common verbs	0.04	-	0.02	-	-0.03	-	ns	-	ns	-	0.04	-	0.03	-
Auxiliary verbs	0.02	-	0.08	-	-0.06	-	ns	-	ns	-	0.05	-	0.07	-
Past tense	0.12	-0.03	-0.16	ns	ns	-0.04	0.1	0.02	ns	-0.02	ns	ns	-0.16	ns
Present tense	0.18	0.08	0.04	ns	ns	ns	ns	ns	ns	ns	ns	0.04	-0.16	0.03
Future tense	ns	-0.07	0.14	0.09	ns	-0.05	ns	ns	ns	ns	ns	0.03	ns	0.05
Adverbs	-	0.05	-	-0.07	-	-0.04	-	ns	-	ns	-	0.05	-	0.04
Prepositions	-0.17	-0.13	-	0.27	ns	-0.04	ns	0.03	ns	0.06	ns	ns	0.17	0.06
Conjunctions	-	0.03	-	0.12	-	-0.02	-	0.02	-	0.02	-	0.02	-	0.06
Negations	0.11	ns	-	-0.12	ns	-0.06	ns	-0.05	0.17	-0.03	0.11	0.07	-0.13	0.02
Quantifiers	-	-0.09	-	0.24	-	-0.02	-	0.03	-	0.05	-	ns	-	0.05
Numbers	-0.15	-0.13	-	0.05	-0.12	-0.06	0.11	0.02	ns	0.02	ns	ns	-0.08	0.06
Number words	-0.22	-0.21	-	-0.17	ns	ns	-0.21	-0.15	-0.14	-0.09	0.11	0.06	-	ns
Social processes	-	0.08	-0.13	0.21	0.15	0.04	0.13	0.02	ns	ns	ns	ns	-0.14	ns
Family	0.12	0.22	-	0.28	0.09	0.03	0.19	0.03	ns	0.03	ns	ns	-0.17	-0.12
Friends	0.09	0.08	-	0.26	0.15	0.05	0.11	0.04	ns	0.02	-0.08	ns	ns	-0.04
Humans	ns	0.04	-	0.06	0.13	0.06	ns	-0.05	0.12	ns	ns	ns	0.09	ns
Affective processes	0.11	0.11	-	-0.05	0.09	0.07	ns	0.02	ns	ns	ns	ns	-0.12	-0.04
Positive emotion	ns	0.21	0.12	0.14	0.1	0.13	0.18	0.13	ns	0.1	ns	ns	-0.15	-0.07
Negative emotion	0.1	-0.12	-0.05	-0.31	ns	-0.07	-0.15	-0.17	-0.18	-0.13	0.16	0.15	ns	0.03
Anxiety	0.16	0.08	-	-0.13	ns	-0.04	ns	-0.02	ns	-0.02	0.17	0.06	ns	0.07
Anger	ns	-0.22	-	-0.25	ns	-0.05	-0.23	-0.19	-0.19	-0.12	0.13	0.11	ns	0.02
Sadness	0.1	0.08	-	-0.15	ns	-0.04	ns	-0.02	-0.11	-0.04	0.1	0.09	ns	ns
Cognitive processes	0.07	-0.03	0.07	0.1	ns	-0.05	ns	0.02	-0.11	ns	0.13	0.04	-0.09	0.1
Sight	0.09	-0.05	0.11	0.04	ns	-0.09	ns	ns	-0.02	ns	0.05	ns	0.13	ns
Causation	ns	-0.05	ns	-0.01	-0.09	-0.06	-0.11	-0.02	-0.12	ns	0.11	0.02	ns	0.08
Discrepancy	0.07	ns	-	0.02	ns	-0.05	ns	-0.02	-0.13	-0.03	0.13	0.07	-0.12	0.02
Tentative	ns	-0.12	-	0.07	-0.11	-0.08	ns	ns	-0.1	-0.03	0.12	0.06	ns	0.07
Certainty	0.14	ns	-	0.09	0.1	ns	ns	0.03	-0.1	0.04	0.13	ns	ns	0.06
Inhibition	-	0.03	-	0.09	-0.13	ns	ns	ns	0.04	ns	0.09	ns	ns	ns
Inclusive	ns	0.04	-	0.23	0.09	0.04	0.18	0.05	ns	0.05	ns	-0.02	0.11	0.06
Exclusive	ns	-0.05	ns	ns	ns	-0.07	ns	ns	-0.16	-0.03	0.1	0.05	ns	0.05
Perceptual Processes	0.12	ns	-	-0.06	0.09	-0.04	ns	ns	-0.1	-0.07	-	-	-	-
See	ns	ns	-	ns	ns	-0.02	0.09	ns	ns	-0.04	ns	ns	-	-
Near	0.1	-0.07	-	-0.1	0.12	-0.04	ns	ns	-0.12	-0.06	-	-	-	-
Feel	0.17	0.04	-	-0.07	ns	-0.02	0.1	ns	ns	-0.04	-	-	-	-
Biological processes	ns	0.05	-	-0.06	0.14	0.04	0.09	-0.06	ns	-0.06	-	-	-	-
Body	-	-0.02	-	-0.14	0.1	ns	0.09	-0.09	ns	-0.09	-	-	-	-
Health	-	0.05	-	0.07	-	ns	-	ns	-	ns	-	-	-	-
Sexual	ns	0.05	-	-0.14	0.17	0.1	0.08	-0.04	ns	-0.04	-	-	-	-
Ingestion	-	0.02	-	0.12	-	ns	-	-0.03	-	-0.03	-	-	-	-
Relativity	-	-0.06	-	0.16	-	ns	-	-0.05	-	-0.08	-	-	-	-
Motion	0.07	ns	-	0.12	-	0.02	-	0.05	-	0.07	-	-	-	-
Space	ns	-0.18	-	0.21	ns	ns	0.16	ns	ns	ns	0.02	-	-	-
Time	ns	0.02	-0.19	0.08	ns	ns	0.12	0.06	0.09	0.09	-	-	-	-
Work	-0.12	-0.08	-	-0.02	-0.08	-0.05	ns	0.03	ns	0.1	-	-	-	-
Achievement	-	-0.17	-	0.16	-0.09	ns	ns	0.05	0.14	0.11	-	-	-	-
Leisure	ns	-0.08	-	0.03	0.08	0.06	0.15	0.04	ns	0.03	-	-	-	-
Home	0.15	0.19	-	0.18	ns	ns	0.19	0.03	ns	0.04	-	-	-	-
Story	-0.1	-0.12	-	0.24	ns	ns	-0.11	0.04	ns	0.03	-	-	-	-
Religion	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Death	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Assent	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nonfluency	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fluency	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Word use	-	-	-	-	-	-	-	-	-	-	-	-	-	-

SOURCE: "Personality, Gender, and Age in the Language of Social Media: The Open-Vocabulary Approach," Schwartz, et al



SOURCE: "Assessing the Big Five personality traits using real-life static facial images," Kachur, et al.



SOURCE: "Just the Way You Are: Linking Music Listening on Spotify and Personality," Anderson et al.



# As growth-oriented practitioners, how do we operate at the intersection of behavioral science, machine learning and experience design to unlock a whole new world of empathy-oriented journeys that engage, delight and drive outcome?

## PUTTING IT TOGETHER

We know that humans can be very complex and seemingly irrational. While using rules-based behavioral clues to craft your CX can be very helpful, it still does not reveal that *Hidden Who™* that allows for real empathy in creating effective experience design. Now, at the nexus of behavioral science, machine learning and experience design, we will begin to unlock a whole new world of empathy journeys.

### **STEP 1: Learn the science of decoding the human Sensemaking Genome™**

*Ogilvy has developed easy-to-digest workshops that introduce these concepts.*

### **STEP 2: Test or use inference to create cognitive & personality personas**

*This can be done either via a customer opt-in to a personality test, or via an established inference method (see above) so long as the data capture is legal and ethical.*

### **STEP 3: Dynamically morph your CX to match the personality segments**

*Working with Ogilvy, you can develop psychographically-crafted personas that inform the tone, language, style and framing of the UI and total CX so each can be matched to the appropriate customer type.*

### **STEP 4: Ensure you always have your human customer's best interests at heart, and never exploit their inner wirings against those best interests.<sup>EXP</sup>**

*SOURCE: All images/icons included were sourced from Pexels, Unsplash & Flaticon*