Digital Psychometrics and it’s Future Effects on Technology

Sandra Matz, Computational Social Scientist
Digital Psychometrics and its Future Effects on Technology
Digital Psychometrics in the News

The Data That Turned the World Upside Down

Psychologist Michal Kosinski developed a method to analyze people in minute detail based on their
Short Personality Test

I talk to a lot of different people at parties

Very Inaccurate
Moderately Inaccurate
Neither Inaccurate nor Accurate
Moderately Accurate
Very Accurate
Traditional Psychometrics
Assessment of psychological traits from...

- Personal websites
- Tweets
- Facebook Likes
- Facebook status updates
- Profile pictures
- etc
Apply Magic Sauce
PredictAPI

Apply Magic Sauce translates individuals’ digital footprints into detailed psychological profiles.

Sign up - it's free  Test
Digital Psychometrics

Apply Magic Sauce

Personalise the Internet

A personalisation engine that accurately predicts psychological traits from digital footprints of human behaviour

See how others see you

Predict My Profile

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The myPersonality Database
The myPersonality Database

Psychometric test responses
- Personality (Big Five)
- Values
- Life satisfaction
- Impulsivity

7 million users
Digital Psychometrics

The myPersonality Database

Psychometric test responses
- Personality (Big Five)
- Values
- Life satisfaction
- Impulsivity

Facebook Profiles
- Facebook Likes
- Status Updates
- Profile Pictures
- Political / Sexual orientation

7 million users
3.5 million users

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Extroversion
Digital Psychometrics

Extroversion

Introversion
High Agreeableness
High Agreeableness

Low Agreeableness
Digital Psychometrics

Introversion vs. Extroversion

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How Accurate Is Digital Psychometrics?

10 > Work Colleague
How Accurate Is Digital Psychometrics?

![Computer with thumbs up and number 65] > Friend
How Accurate Is Digital Psychometrics?

120 > Family Member
How Accurate Is Digital Psychometrics?

250 > Spouse/Partner
Digital Psychometrics “in Action”
Digital Psychometrics “in Action”
Personality-Customized Advertising

Can we use the knowledge of a person’s psychological make-up to increase the effectiveness of digital marketing?
Personality-Customized Advertising

Extroverted Ads

Dance like no one’s watching (but they totally are)

Introverted Ads

Beauty doesn’t have to shout
Personality-Customized Advertising

6,443,120 Impressions

10,348 Clicks

390 Conversions (Purchases)
Personality-Customized Advertising

- **6,443,120** Impressions
- **10,348** Clicks
- **390** Conversions (Purchases)

- On average, 1.5x higher conversion rates in matching conditions
- On average 60% higher Return-on-Investment rates in matching conditions
Digital Psychometrics “in Action”
Identifying People at Risk

- Geospatial activity (GPS/WiFi)
- Kinesthetic activity (Accelerometer)
- Sleep Duration
- Co-location
- Call logs
- Human interaction (Microphone)
Coalition of consumer groups calls on Facebook to ‘immediately release’ marketing research into depressed teens

Published: May 10, 2017 7:16 a.m. ET

The world's biggest social network said it has not targeted this group with ads

By QUENTIN FOTTRELL
PERSONAL FINANCE EDITOR
A Look Into the Future of Digital Psychometrics
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With Great Power Comes Great Responsibility
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