



EcoMetricx

Monetizing GenAI Personas in Marketing

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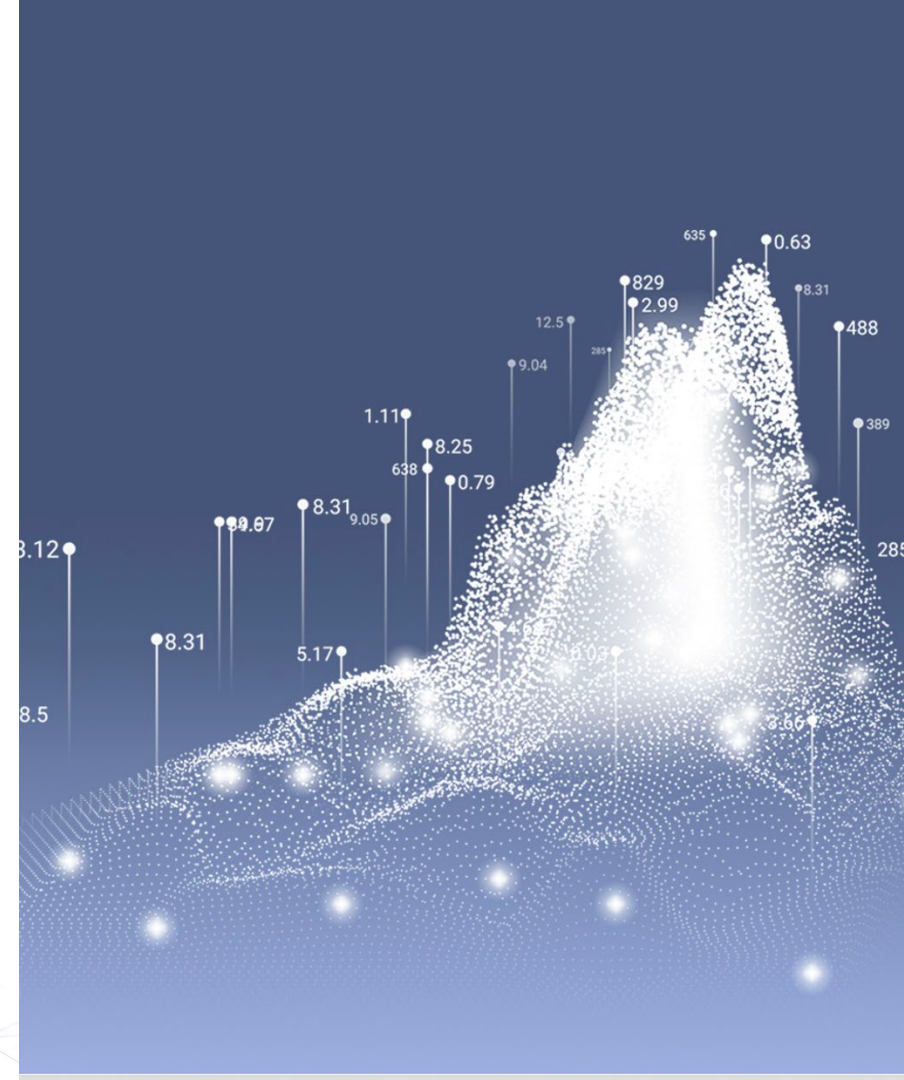
Benjamin Westrich, UC Irvine and Warrior Fitness INC

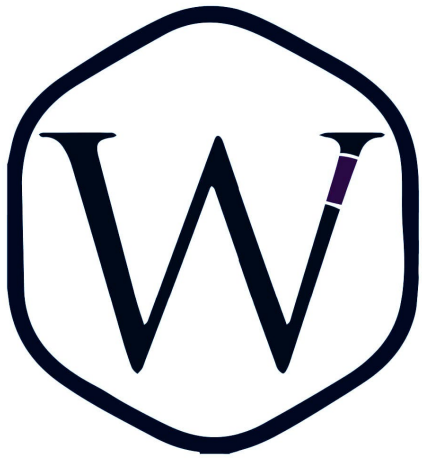
EcoMetricx

AI-Powered Economics and Data Science Services

- Data Engineering
- AI / ML Tools
- Predictive and Causal Analytics
- Behavioral Science
- Statistics, Economics

Actionable Insights, Forecasts, Trends & Advice





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Ben Westrich

- U.S Army Veteran, Bronze Star Recipient
- MSc in Economics, Purdue
- PhD candidate, Economics, UCI
- **Founder of Warrior MMA and WFC**
 - Physical gym locations across the US
 - World-wide training program for gyms
 - Specializes in:
 - Small startup gyms
 - Underserved markets
 - Growing brand value



Monetizing GenAI Personas

Agenda

This talk explores the potential for GenAI digital personas to reduce the marketing costs associated with optimizing campaigns for specialized customer segments

01

Introduction

02

Setting: Warrior Gym

03

Survey

04

Findings

05

AI optimization



Why AI marketing personas?

Motivation: AI and Marketing Personas

- AI technology has rapidly advanced in several domains to the point where AI agents outperform their human counterparts
- Professional decision-making benefits greatly from super-human abilities like computation, ingestion of large amounts of information, translation etc.
- GenAI *appears* easy to use
- Why not build digital personas using GenAI?
- But can they be trusted to respond the same as a target customer to an ad?



Motivation: Marketing challenges

- Traditional marketing relies on customer surveys and focus groups
- Particularly challenging in **niche markets** where preferences are substantially different from the general population, products are unique, available population from which to sample is small, geographically narrow
- High costs of sampling especially for small firms who operate in local markets
- Small samples
- “Digital twins” are cheap alternatives to expensive humans

Does an AI have the same willingness to pay?

For a given set of customers can an AI learn their preferences?

Concerns:

- AI has more information
- AI has biased information
- AI may act as the median voter



Study Setting: The Warrior MMA Gym



Background

Warrior MMA has their flagship location in **Colorado Springs, Colorado.**

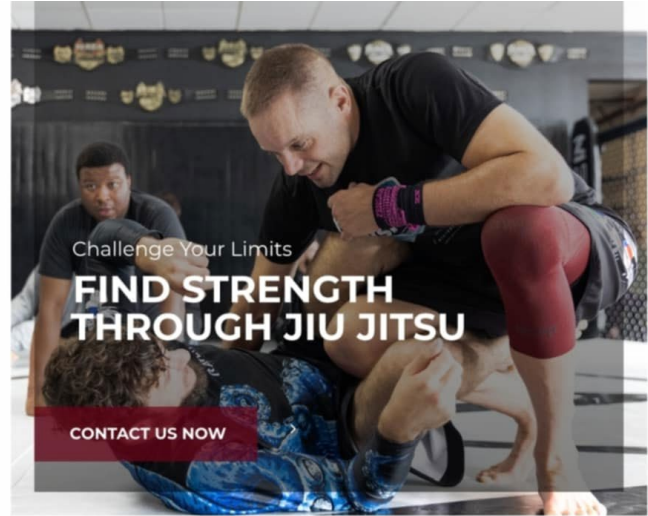
- Population of Colorado Springs MSA is 755,105
- Population within normal gym commute range is 145,000
- Estimated that 0.5% - 0.7% of a given population will train in a combat sport
- Current gym membership is > 600
- Conversion rate on ads for remaining audience is low
- **Due to space per customer constraints, advertising must target high WTP individuals**

The Survey

- Target: Warrior MMA members w/ active contract
- 10 ads shown:
 - 7 previous gym advertisements
 - 3 gym ads chosen from the Meta ad

marketplace

- 5 survey sections:
 - Demographics
 - Value
 - Ad aesthetics
 - Relative ad rankings



Based on this ad alone...

0 1 2 3 4 5 6 7 8 9 10

...what would you say the quality of the services provided by this facility will be?



...how effective will this gym be at helping you achieve your training goals?



...how welcoming do you feel this facility is for you?



Demographics

- Age: Between 18-45
- Gender: 72% male, in line with overall gym demographics
- Income: 42% earn over \$100,000. Median household income in COS is \$83,215
- Race / Ethnicity: Higher representation of minorities than in COS
- Education: In line with city demographics

Gym demographics match the city demographics

- Wealthier clients vs Higher WTP

Findings

Value:

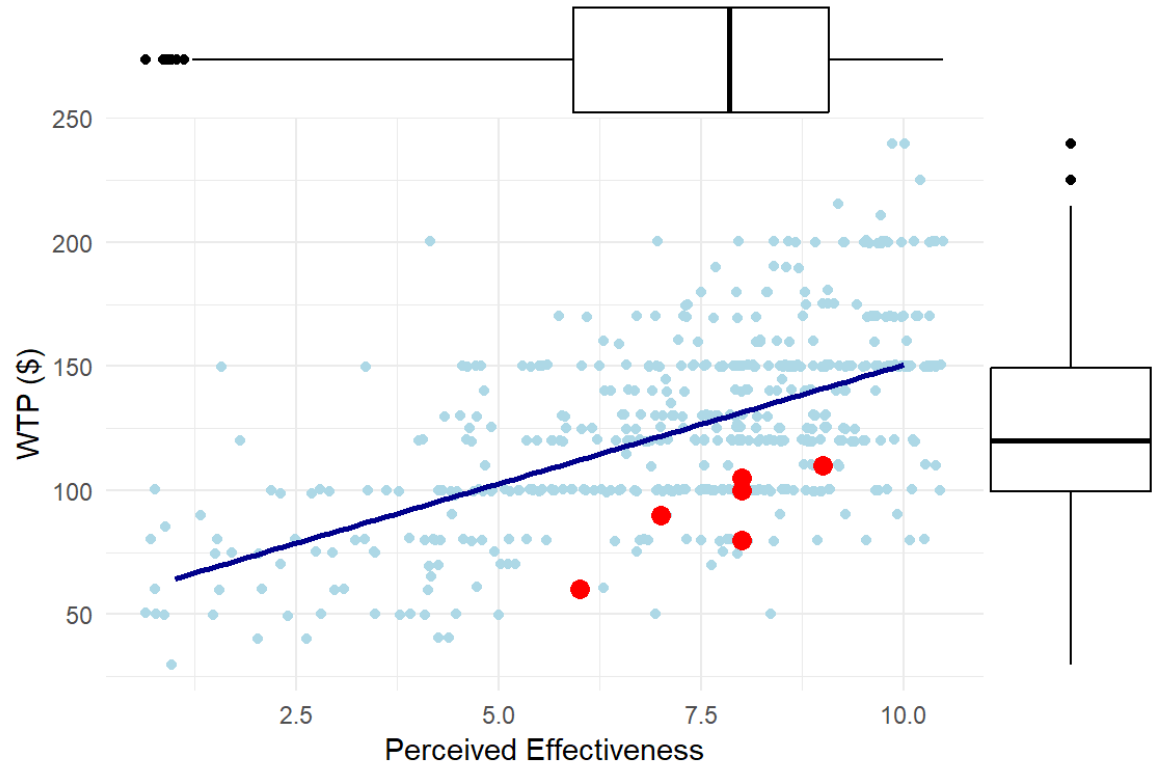
- Perceived service value from ads ranged between \$30 and \$240
 - The mean was \$125
- Higher USD values were correlated with higher “yes” responses to:
 - “Would you pay a higher price for this gym than similar gyms/training?”
 - “Does this ad make the product appear worth its price”
- Three questions responses showed a statistically significant effect on perceived value:
 - “How effective...,” with an effective size of \$6.21 ($p=0.00$)
 - “How welcoming...,” with an effect size of \$1.86 ($p=0.017$)
 - “... communicate value,” with an effective size of \$2.34 ($p=0.014$)

Comparisons

ChatGPT performed generally well at predicting consumer behavior, however:

- **Undervalued** the service by an average of \$31.75
- **Underestimated** high performing ads – by an average of 0.98
- **Overestimated** low performing ads - by an average of 3
- Generally ranked ads well, other than the top 3 performing ads

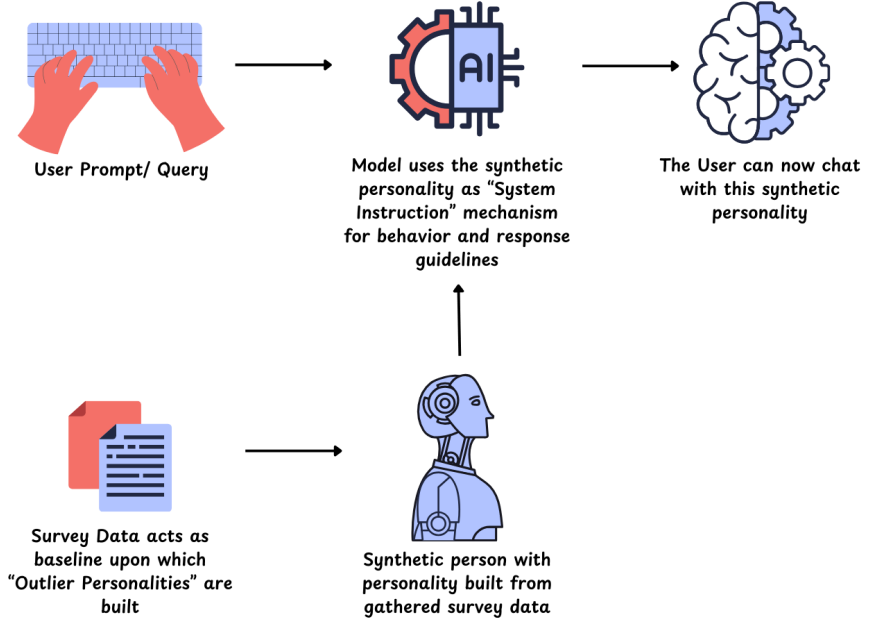
Survey / AI Comparison



Creating AI Personas

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- **Synthetic Personality Creation:** Survey data provides a foundational baseline for crafting unique "outlier" personalities, enabling a diverse range of AI personas tailored to different user profiles and insights.
- **System Instruction Mechanism:** These synthetic personalities serve as system guidelines, directing AI behavior and response styles to align with the specific personality traits active in each interaction.



Thank You!

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