Profile Ranking Index
Interpretation & Calculations

OVERVIEW

The Profile Ranking Index report compares a selected profile to a list of other profiles. Results show how likely users of the selected profile are to engage in the other profile behaviors, giving you a better understanding of how to gear your media and advertising strategies.

BUSINESS ISSUES IT CAN SOLVE FOR:

- Identify where a selected audience eats, shops, travels or plays.
- View and compare media preferences for a selected audience to identify effective advertising strategies.

WHAT QUESTIONS CAN IT ANSWER/WHY IS IT IMPORTANT?

- What other products or services are used or purchased by a select audience?
- What are the behaviors of a select audience?
- What are effective mediums to reach a select audience?
- How can I tailor my message to attract a select audience?

SAMPLE REPORT OUTPUT

Profile Ranking Index

Profile List Title	Profile List			Go Hiking- 1yr (A)			
	Total Profile Count	Total Base Count (Unprojected)	Total Profile Users/100	Count	Users/100 HHs	Index	ROC
Do Outdoor Gardening- 1yr (A)	1,433,692	48,620	64	416,462	73.65	114	0.60
Own Stationary Bike (A)	216,405	48,620	10	63,984	11.32	116	0.56
Go Camping- 1yr (A)	[A] 563,805	[B] 48,620	[C] 25	[D] 172,855	[E] 30.57	[F] 121	[G] 0.87
Do Photography- 1yr (A)	482,005	48,620	22	146,525	25.91	120	0.90
Do Bird Watching- 1yr (A)	183,784	48,620	8	51,166	9.05	110	0.37

A. Total Profile Count: The number of users who engage in the selected profile in the projected analysis area. Ex) There are 563,805 adults in the Atlanta CBSA who go camping.

identify
deliver
optimize

B. Total Base Count (Unprojected): The base count for the unprojected profile. There are 48,620 respondents in the Mediamark Research Inc. (MRI) survey.
C. Users/100 HHs: The number of users within the projected analysis area who engage in the selected behavior. Ex) Out of every 100 households in the Atlanta CBSA, there are 25 adults who go camping.
D. Profile Count: The number of users who engage in both the selected and comparison profile. Ex) There are 172,855 adults in the Atlanta CBSA who go camping and go hiking.
E. Users/100 HHs: The number of comparison profile users who also engage in the selected profile behavior. Ex) Out of every 100 households who go hiking in the Atlanta CBSA, there are approximately 30 adults who go camping.
F. Index: The likelihood of comparison profile users also engaging in the selected profile. Ex) Adults who go hiking are 21% more likely to go camping.
G. Rank Order Correlation (ROC): Measures the correlation between the comparison profile and selected profile. Ex) The profile for going hiking correlates very highly (0.87 ROC) with going camping.

REPORT FORMULAS

This analysis uses the following formulas:

- Users per 100 Households (Users/100 HHs)

$$\frac{\text{Comparison Profile Count}}{\text{Total (U.S.) Comparison Profile Count}} \times 100 = \text{Users} / 100 \text{ HHs}$$

- Index

$$\frac{\text{Users} / 100 \text{ HHs of Behavior}}{\text{Users} / 100 \text{ HHs of Base}} \times 100 = \text{Index}$$

Rank Order Correlation (ROC)

To calculate a Rank Order Correlation (ROC), Claritas uses the standard Spearman rank order correlation. The strength and direction of a correlation is indicated by a value in the range 1.0 (perfect positive correlation) to -1.0 (perfect negative correlation). When two profiles have a ROC of zero, they are not correlated.

A correlation of +.50 and above, or -.50 and below, is considered evidence of a strong correlation. Correlations between +.50 and +.30, and -.50 and -.30, indicate a moderate to weak relationship. Correlations between +.30 and -.30 indicate that there is no relationship between two profiles.

The actual formula is calculated as follows:

a. Index values are calculated for the attribute and comparison profiles.

Comparison Profile			Profile 1		
Segment	Index	Rank	Segment	Index	Rank
1	200		1	300	
2	200		2	100	
3	100		3	200	
4	100		4	150	

b. Each profile is sorted by its index and then each segment is assigned a rank number. For segments with the same index, an average of the rank is taken.

Comparison Profile			Profile 1		
Segment	Index	Rank	Segment	Index	Rank
1	200	1.5	1	300	1
2	200	1.5	3	200	2
3	100	3.5	4	150	3
4	100	3.5	2	100	4

c. Each profile is sorted by its segment code, calculating the difference between the comparison profile's rank and each desired profile's rank, and then each difference's sum is squared. Finally, all the squared sums are added.

Comparison Profile			Profile 1			
Segment	Index	Rank	Segment	Index	Rank	Rank Diff²
1	200	1.5	1	300	1	$(1.5-1)^2 = 0.25$
2	200	1.5	2	100	4	$(1.5-4)^2 = 6.25$
3	100	3.5	3	200	2	$(3.5-2)^2 = 2.25$
4	100	3.5	4	150	3	$(3.5-3)^2 = 0.25$
						Total = 9.00

d. ROC is calculated.

$$1 - \left(\frac{(6 \times \text{Sum of squares of the rank differences})}{(\text{Number of segments} \times (\text{Number of segments } ^2-1))} \right) = ROC$$

For additional information on rank order correlation, reference the Claritas 360 Calculations Guide.