



INTRODUCTION TO
TUFRF

**TOTAL UNDUPLICATED
REACH AND FREQUENCY
ANALYSIS**

A QuestionPro Publication

What is TURF Analysis?

TURF is a statistical model that can be used to answer questions like:

- * Where should we place ads to reach the widest possible audience?
- * What kind of market-share will we gain if we add a new line to our model?

It was originally devised for analysis of media campaigns, and has been expanded to apply to product, line and distribution analysis. With QuestionPro any Multiple Choice/Multiple Answer question can be analyzed using TURF.

The TURF Simulator calculates Optimal configurations for maximizing reach. Reach or Coverage is defined as the proportion of the audience (target group) that chooses a particular option.

Example:

QuestionPro conducts surveys on a regular basis to find out what kind of information our users are looking for when they initially come to our site. One of the questions in a Popup Survey is the following:

Email me more information about:

- Pricing
- Feature Matrix (Question Types, Graphs and Analysis Result)
- Extraction Features
- Piping Features
- Conjoint Analysis
- Data Integration Services (Linking Surveys to Databases - Customer)
- Other

What we want to know is what Three choices among these Seven choices that will give us the greatest reach? A Simple Frequency Analysis gives us the following results:

Data Analysis			
Email me more information about:			
# Answer	Frequency	Percentage	Mean Calc.
1 Pricing	167	29.61%	<input checked="" type="checkbox"/>
2 Feature Matrix (Question Types, Graphs and Analysis Result)	121	21.45%	<input checked="" type="checkbox"/>
3 Extraction Features	74	13.12%	<input checked="" type="checkbox"/>
4 Piping Features	51	9.04%	<input checked="" type="checkbox"/>
5 Conjoint Analysis	57	10.11%	<input checked="" type="checkbox"/>
6 Data Integration Services (Linking Surveys to existing Databases -- Customer, Client etc.)	72	12.77%	<input checked="" type="checkbox"/>
7 Other	22	3.90%	<input checked="" type="checkbox"/>

Please note that the simple frequency does not give us any particularly interesting data. Here we note that Pricing, Feature Matrix and Extraction Features are the three most important pieces of information that people want.

Is this really the right answer though? Probably not because we have not taken into consideration that the same people who requested Feature Matrix might have requested Extraction Features also!

We need to eliminate the duplicates and to find out the "Reach" of any three of the elements to effectively come to a conclusion.

With the TURF Analyzer and Simulator from QuestionPro, we find the exact reach for any number of the options:

[Analysis](#) | [Simulator](#)

Answer

- Pricing
- Feature Matrix (Question Types, Graphs and Analysis Result)
- Extraction Features
- Piping Features
- Conjoint Analysis
- Data Integration Services (Linking Surveys to Databases -- Customer)
- Other

Total Recorded Responses : 228
Reach Count : 198 Market Share (Reach %) : 86.84%

Calculate Unduplicated Reach

This shows that Pricing, Feature Matrix and Piping Features give us a Reach of 87%. This is good, but we also want to find out what three options give the the maximum reach. We use the TURF Simulator for this.

You can use the TURF Simulator to find the “Optimal” three choices that gives you the MAXIMUM Unduplicated Reach. The TURF Simulator runs through every possible configuration of three choices at a time and gives you a sorted order of “Reach %”.

[Analysis](#) | [Simulator](#)

3 Simulate Choices

Total Recorded Responses : 228

	Configuration	Market Share (Reach %)	Count
1	Pricing Feature Matrix (Ques ... Other	89.47%	204
2	Pricing Feature Matrix (Ques ... Data Integration Ser ...	89.04%	203
3	Pricing Feature Matrix (Ques ... Piping Features	86.84%	198
4	Pricing Feature Matrix (Ques ... Extraction Features	86.40%	197
5	Pricing Data Integration Ser ... Other	85.53%	195

Here we find out that Pricing, Feature Matrix and either Other or Data Integration Services will give us about 90% reach!

It is also worthy to note that our simple frequency analysis yielded a different result.

TURF Analysis can be done in two ways depending upon what you are trying to achieve:-

1. Analysis - Choose the options (Answers) that you would like to calculate the REACH for and then click on Calculate Unduplicated Reach -- This will give you the Reach % or market share for those options. Use this option to calculate the Unduplicated reach for a set of alternatives.
2. Simulator - If you would like the TURF Simulator to run through Every Possible Combination and present you with the optimal REACH for a limited set of choices click on Simulator
3. Price Modeling - With this option, you can assign a "Cost" or a "Price" for each of the options, and also specify a "Budget". The Price Modeling Simulator will Simulate Every Possible combination that falls within the budget, and give you optimum configurations for the maximum reach.
4. Line Optimization - With this option, if you have a Minimum Reach % that you need to achieve, and would like to find out the the cheapest alternative for that.

Online Research Made Easy

Why more organizations choose QuestionPro.com

Superior Technology

The system has been designed from the ground up to accommodate the needs of anyone conducting online research. Our simple interface, cutting edge features, and competitive price have landed us in the top tier of web-based survey software providers. We truly believe that you will not find a better value on the web today.

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Proven Track Record

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Support

Our customers have access to an expert team of developers who are responsible for ensuring 100% client success.



SURVEY ANALYTICS LLC

QuestionPro.com
3518 Fremont Ave N #598
Seattle, WA, 98109
USA

Global / Americas
Seattle, US
+1 (206) 686-7070

Europe / Middle East
London, UK
+44 (20) 7871-4079

Asia Pacific / Australia
Auckland, NZ
+64 (9) 950-3305

For more information contact our sales team at +1 (206) 686-7070.

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