

QuestionPro

Developing Dynamic Surveys



Summary

Internet surveys allow the researcher to dynamically tailor a survey based on how a respondent answers questions. Dynamic surveys learn about the respondent each time a response is submitted. Using answers to demographic and behavioral questions allow the researcher to generate follow on questions and direct the respondent through personalized sections of the survey.

Smart surveys that present the respondent with questions and answers specifically tailored to each individual respondent improve response rates and improve the integrity of collected data. QuestionPro.com offers the ability to create smart surveys using a simple point and click interface.

Many techniques may be utilized when developing surveys that dynamically direct a respondent through a survey based on the respondent's prior survey responses. The standard example is Simple Branching. For instance, if a respondent answers 'Dissatisfied' to a question regarding support satisfaction, then show a series of questions to gather more information regarding their feedback; alternatively, skip the additional information questions.

There are a multitude of options for developing dynamic surveys using QuestionPro.com, including:

1. Simple Branching
2. Piping
3. Looping
4. Compound Branching
5. Delayed Branching
6. Show/Hide Question Logic
7. Show/Hide Answer Logic
8. Extraction
9. Simple Quotas
10. Complex/Nested Quotas
11. Randomization

Generally speaking, each type of logic has two parts, criteria and a resulting action.

The criteria are the triggers that define when the logic will be executed. The criteria can be the answer to a single question or answers to multiple questions. For instance, a criteria may be 'If the respondent is Male AND If the respondent is between the ages of 18 and 24 then do some action.'. This is an example of compound logic, where more than one condition defines the criteria. In this example the criteria is defined by two conditions that **both** must be true. Compound criteria may also be defined using OR conditions. For instance, 'If a respondent is a current iPod owner OR they plan on purchasing an iPod in the next 90 days, then do some action'.

In addition to logic that is based on *how* a respondent answers a particular question, quota criteria may be defined by *how many* respondents answered a question a particular way. Quotas may be used to balance the sample in your survey. If your are targeting 100 survey completes and a balanced sample of 50% males and 50% females, you can set a quota on the gender question that branches respondents to a quota complete screen if you've reached the desired 50 responses for that gender.

There are also a number of resulting actions that can be defined if particular criteria are met. They are as follows:

1. Branch to any subsequent survey question.
2. Branch to the Thank You page (registers a survey complete)

3. Terminate the survey (does not count the survey as a complete)
4. Branch to a quota complete screen
5. Branch out of the current survey to another survey
6. For multiple choice, multiple answer, logic may be configured to loop through a subsequent question (or block of questions) once for each selected answer option.

There are some subtle differences between how to branch a respondent out of the survey. These differences are mainly applicable when a survey panel is utilized from a sample provider. Typically there are three outcomes that panel providers require for respondents, survey complete, survey terminate, and quota complete. A survey complete means the respondent met the targeted demographic for the study and completed the survey. A survey terminate means the respondent did not meet the demographic requirements for the study. A quota complete means the respondent met the demographic requirements, but the quota was already met.

Simple Branching – The criteria for Simple Branching is defined by a single answer option in a multiple choice question. When configuring a Simple Branch, a screen shows each answer option in one column and a 'Jump To' column that is the target if a respondent answers that particular answer option. The 'Jump To' can be defined as any of the resulting actions as discussed above.

	Jump To
Very Satisfied	--Goto Thank You Page--
Satisfied	--Goto Thank You Page--
Neutral	--Goto Thank You Page--
Dissatisfied	2. [COMMENTS] Comments
Very Dissatisfied	2. [COMMENTS] Comments

Piping – Piping is used in conjunction with branching. Piping assigns a value dynamically to a subsequent question based on how a respondent answers a question. For example, you may want to ask a respondent to select every brand of soda that they drink on a regular basis.

select each brand of soda that you drink on a regular basis

- coke
- pepsi
- mountain dew
- tab

After this question, a follow up question may be asked that dynamically replaces the brand of soda.

select where you most often purchase \${piping_text}

- grocery store
- convenience store
- vending machine

The variable `${piping_text}` will be replaced with the piping text that you have configured from the prior question. Piping text is configured by entering a value that is piped to this question for each answer option in the prior question. This logic is configured on the same screen where Simple Branching is configured.

Question

select each brand of soda that you drink on a regular basis

If no branching answers are selected, enter the default destination:

--Goto Thank You Page--

	Jump To	Piping Text(Optional)
coke	2. [Q2] select where you most often pu ...	coke
pepsi	2. [Q2] select where you most often pu ...	pepsi
mountain dew	2. [Q2] select where you most often pu ...	mountain dew
tab	2. [Q2] select where you most often pu ...	tab

Enable Multiple Branch (Looping)

Each answer option has a corresponding value for the piping text. In this example, piping text is exactly the same as the answer option, which is not always the case. In order for piping to function properly, the 'Jump To' should be the target question that contains the `${piping_text}` variable.

If a respondent selects 'coke' as the answer option to the initial question, then the follow up question will appear with 'coke' in the question text.

select where you most often purchase coke

- grocery store
- convenience store
- vending machine



Looping – The Simple Branching screen is also the same screen where looping is configured. Looping is typically used in conjunction with both Simple Branching and Piping. Looping simply asks the follow up question with the `{piping_text}` variable once for each answer option selected.

select each brand of soda that you drink on a regular basis

- coke
- pepsi
- mountain dew
- tab

If a respondent selected more than one answer option then the follow up question may be asked once for each answer option selected. Looping is also configured on the Simple Branching screen, by selecting the option to 'Enable Multiple Branch (Looping)'.

Question

select each brand of soda that you drink on a regular basis

If no branching answers are selected, enter the default destination:

--Goto Thank You Page--

	Jump To	Piping Text(Optional)
coke	2. [Q2] select where you most often pu ...	coke
pepsi	2. [Q2] select where you most often pu ...	pepsi
mountain dew	2. [Q2] select where you most often pu ...	mountain dew
tab	2. [Q2] select where you most often pu ...	tab

Enable Multiple Branch (Looping)



If this option is selected, the system will automatically loop through the follow on question and replace the `{piping_text}` with the appropriate text.

Compound Branching – Compound Branching is also used to direct a respondent through a survey based on how they've answered survey questions. Different from Simple Branching which is controlled by one answer option in one question, Compound Branching allows for multiple criteria to be defined from one or multiple questions. For example, if a particular age group and internet usage profile is required to collect data on a question, then two questions and multiple answer options may control a branch.

<p>What is your age?</p> <p><input type="radio"/> under 13</p> <p><input type="radio"/> 13-17</p> <p><input type="radio"/> 18-34</p> <p><input type="radio"/> 35-49</p> <p><input type="radio"/> 50-64</p> <p><input type="radio"/> 65 or older</p>	<p>How many hours per day are you on-line?</p> <p><input type="radio"/> 0-1</p> <p><input type="radio"/> 1-2</p> <p><input type="radio"/> 2-3</p> <p><input type="radio"/> 3-4</p> <p><input type="radio"/> 4-5</p> <p><input type="radio"/> More than 5</p>
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After clicking the 'Add/Update Logic' link, an option for 'Compound Branching' is displayed. Clicking 'Compound Branching' shows the screen for configuring a Compound Branch. If criteria have not already been configured, click on the link to 'Add New Criteria'.

Setup Compound/Delayed Branching
BETA

Step 1 : Choose Criteria

Pre-Defined Criteria Select-- + Add New Criteria

Select Criteria...

Step 2 : Setup Logic

If Condition Matches Branch To : Select--

Otherwise Branch To : Select--

Update/Add Logic

Compound Branching criteria may be defined for only the ages 18 – 49 and only those who spend greater than 3 hours per day online.

Step 2 - Add/Edit Criteria

The Add Criteria screen allows for multiple conditions that form your criteria for the Compound Branch. Notice that the 'What is your age?' question is using the '=' operator for the condition. The equal operator means that the answer to that question must be one of the two answer options highlighted in the list. The next criterion uses the 'How many hours per day are you online?' question and a greater than operator. This tells the system that this condition is true if the respondent answers any answer option that is greater than the highlighted option. The operators available are shown here:

Step 2 - Add/Edit Criteria

They are *equals*, *greater than or equal*, *less than or equal*, *greater than*, *less than*, and *not equal* in order of appearance in the drop down.

After criteria have been established, then the resulting actions need to be defined for a positive match on the condition as well as a negative match. The resulting actions in Compound Branching are similar to adding a 'Jump To' target for Simple Branching. There is an action for a positive match and a negative match.

Step 1 : Choose Criteria

Pre-Defined Criteria  Add New
 Criteria
 Select Criteria...

Step 2 : Setup Logic

If Condition Matches 
 Branch To :
 Otherwise Branch To :

Delayed Branching – Delayed Branching can also be configured using multiple criteria, similar to Compound Branching. Delayed Branching, as the name suggests, is different in that the execution of the branch happens somewhere later in the survey. Delayed Branching can be configured at any point in the survey as long as the data that defines the criteria has already been collected.

Show/Hide Question Logic – The Show/Hide Question Logic shares the same trigger mechanism as Compound and Delayed Branching. Any criteria can be used to either show or hide a question. Show/Hide Question Logic is somewhat similar to branching because it controls whether or not a question is displayed to a respondent. The subtle difference with Show/Hide Question Logic is that it does not require a page break immediately before the shown or hiding question in a survey. A single page that displays a block of questions can dynamically show or hide a question anywhere on the page. This functionality may be important if a researcher is attempting to minimize page submits which helps prevent respondent fatigue.

Setup Show/Hide Logic
 BETA
Step 1 : Choose Criteria

Pre-Defined Criteria  Add New Criteria 
 Manage Logic Criteria (1)
 Select Criteria...

Step 2 : Choose Display Mode

Display Mode

Show/Hide Answer Logic – Show/Hide Answer Logic incorporates the capability to conditionally display an answer option within a question. Again, the criteria for this logic are the same that is used throughout the survey for branching. After configuring the desired criteria, logic is selected to either show or hide each answer. Each answer option is linked to criteria that control the display of that individual answer option.

Setup Show/Hide Options Logic BETA

Hide Option If Criteria Matches (Show By Default)

Option	Logic/Criteria
	Add New Criteria Manage Logic Criteria (1)
google	Select-- Select Criteria...
live search	Select-- Select Criteria...
yahoo	Select-- Select Criteria...
ask	Age 18 - 49 and Online Greater than 3 <div style="border: 1px solid #ccc; padding: 2px;"> 1. What is your age? = 13-17 , 18-34 AND 2. How many hours per day are > 1-2 </div>

In this example, the option 'ask' is hidden if the criteria 'Age 18-49 and Online Greater than 3' is a match. Similar logic may also be applied to a multiple choice matrix.

	Very Satisfied	Somewhat Satisfied	Neutral	Somewhat Dissatisfied	Very Dissatisfied
Measurement Item 1	<input type="radio"/>				
Measurement Item 2	<input type="radio"/>				
Measurement Item 3	<input type="radio"/>				

The Show/Hide Logic allows for conditionally displaying measurement items in the multiple choice matrix tables. Clicking on the 'Show/Hide Options' link for a multiple choice matrix will allow for linking criteria to individual measurement items in the matrix.

Setup Show/Hide Options Logic BETA

Option	Logic/Criteria + Add New Criteria - Manage Logic Criterias (1)
Measurement Item 1	Select-- Select Criteria... No Logic
Measurement Item 2	Age 18 - 49 and Online Greater than 3 Select Criteria... 1. What is your age? = 13-17 , 18-34 AND 2. How many hours per day are > 1-2 Show Option If Criteria Matches (Hide By Default)
Measurement Item 3	Select-- Select Criteria... No Logic

Update/Add Logic

Measurement Item 2 has been linked to 'Age 18-49 and Online Greater than 3' to Show the Option if Criteria Matches.

Extraction - The Answers to a question are dynamically displayed based on answer options selected for another question. Extraction is controlled by a multiple choice multiple answer question.

What Search Engines have you used ? (Check All That Apply) *

- Google
- MSN
- Yahoo!
- Lycos
- HotBot
- Other

Next ->

This survey question allows multiple answers. Using extraction, one or more subsequent questions can be generated dynamically from this multiple choice multiple answer question. Extracted questions can be any of the following question types.

1. Multiple Choice
2. Text Input
3. Rank Order
4. Constant Sum
5. Multiple Choice Matrix

An extracted question type will appear with the text 'XTR' on the Edit Survey screen.

	1	2	3	4	5	6	7	8	9	10
Google XTR	<input type="radio"/>									
MSN XTR	<input type="radio"/>									
Yahoo! XTR	<input type="radio"/>									
Lycos XTR	<input type="radio"/>									
HotBot XTR	<input type="radio"/>									
Other XTR	<input type="radio"/>									

This is a reminder for the survey builder that this survey question was created using Extraction logic. The above example is extraction to a multiple choice matrix. The respondent will only see the answer options that were selected on the multiple choice multiple answer question.

<input checked="" type="checkbox"/> Google	
<input checked="" type="checkbox"/> MSN	
<input checked="" type="checkbox"/> Yahoo!	
<input type="checkbox"/> Lycos	
<input type="checkbox"/> HotBot	
<input type="checkbox"/> Other	<input type="text"/>

Only the options Google, MSN, and Yahoo were selected in the control question. Two follow up extraction questions are dynamically generated with only these three answer options.

Rate the following between 1 and 10

	1	2	3	4	5	6	7	8	9	10
Google	<input type="radio"/>									
MSN	<input type="radio"/>									
Yahoo!	<input type="radio"/>									

Rank the following: -

Google	<input type="text"/>
MSN	<input type="text"/>
Yahoo!	<input type="text"/>

Rank values must be between 1 and 3

Extraction can also be controlled by multiple choice matrix questions.

	Very Satisfied	Somewhat Satisfied	Neutral	Somewhat Dissatisfied	Very Dissatisfied
Measurement Item 1	<input type="checkbox"/>				
Measurement Item 2	<input type="checkbox"/>				
Measurement Item 3	<input type="checkbox"/>				

Step 2 : Choose the Question Type to extract to.

Step 3 : If respondent does not choose the criteria target question to jump to :

Simple Quotas – As described earlier, quotas are used to balance the sample in a study. Simple Quotas can be attached to individual survey questions. If age is only question controlling the quota then Simple Quotas can easily be configured by assigning a quota limit to each age group.

What is your age?			
	Enable Quota 	Quota Limit	OverLimit Jump To
under 13	<input checked="" type="checkbox"/>	10	--Quota Overlimit--
13-17	<input checked="" type="checkbox"/>	20	--Quota Overlimit--
18-34	<input checked="" type="checkbox"/>	20	--Quota Overlimit--
35-49	<input checked="" type="checkbox"/>	20	--Quota Overlimit--
50-64	<input checked="" type="checkbox"/>	20	--Quota Overlimit--
65 or older	<input checked="" type="checkbox"/>	10	--Quota Overlimit--

This Simple Quota is controlled by one question and allows only the Quota Limit for each of the answer options.

Complex/Nested Quotas – Complex/Nested Quotas control the response distribution over multiple questions and answer options.

Close



Complex/Nested Quota Control

Select Question: 1. [Q1] Sex

Male	50.0 %
Female	50.0 %
Total : 100 %	

Total Completed Responses : 100

After setting up the initial quota based on one question, additional quotas can be added that are controlled by other questions in the survey. Complex/Nested Quota Control limits the distribution of respondents from all of the questions.

Complex/Nested Quota Control

1. [Q1] Sex  Edit  Delete

Male » 50.0%
Female » 50.0%

2. [Q2] Age  Edit  Delete

Under 18 » 50.0%	<u>25.00%</u>	<u>25.00%</u>
	25	25
18 and Above » 50.0%	<u>25.00%</u>	<u>25.00%</u>
	25	25

 Add Complex/Nested Quota Total Completed Responses : 100

Randomization - Randomization is used to randomly assign the order of questions or answer options to respondents. Randomization of answer options is typically used to prevent order bias, or the tendency for respondents to answer the first or last answer options. Randomization is configured by selecting the checkbox in the question wizard.

Questions may also be displayed in a random order. The system supports randomly displaying just one in a block of questions OR displaying *all* of the questions in a block in a random order.

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.

Reliability and Commitment

Our absolute commitment is to the success of our clients. We recognize what our clients need to make their online research a success and we're 100% focused on creating solutions that meet and exceed these requirements.

Proven Track Record

Thousands of clients worldwide have chosen our system to conduct their online research. Companies, both large and small have chosen us as their trusted partner for conducting online research.

Security

Our system adheres to the highest level of security standards on the internet. Data security and privacy are addressed at all levels starting with survey delivery all the way through protecting your survey results.

Support

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



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