Confirmit.

# Confirmit ModelBuilder User Guide



This is document revision 2 of the Confirmit v19 Model Builder User Guide published in May 2016. The information herein describes Confirmit Model Builder and its features as of Build nr. 3.0.6. New features may be introduced into the product after this date. Go to www.confirmit.com or check "News" on the Customer Extranet for the latest updates.

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The companies, names and data used or described in the examples herein are fictitious.

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# What's New in this Revision?

The following changes have been made in revision 2 of the Confirmit v19 Model Builder User Guide:

- The text in the Models List Details section is edited (see The Models List Details on page 3 for more information).
- The text and illustration in the More Options Menu section are edited (see The More Options Menu on page 7 for more information).
- The text in the Testing the Model section is edited (see Testing the Model on page 23 for more information).
- The Versioning section is renamed to Launching the Model and moved to chapter 3 (see Launching the Model on page 23 for more information).

Note: The general layout and language in this document is continually being corrected, adjusted and improved to ensure the user has the best possible source of information. Only NEW information and details of functionality that has changed since the previous issue are listed here - minor corrections to the text and document layout are not listed.

#### Important

We need your feedback so we can improve this document and provide you with the information you require. If you have any comments or constructive criticism concerning the content or layout of this documentation, please send an email to documentation@confirmit.com. Please include in your email the section number and/or heading text of the section to which your comment applies.

# 1. What is Model Builder?

Confirmit Model Builder is an integral part of the Confirmit Genius text analytics application.

Genius analyzes text responses to survey questions, groups them according to subject, and grades them on an 11-point scale (-5 to 0 to +5) according to how positive or negative the respondent is to the subject of the question.

For example, a shop could ask customers what they thought of the service they received while making their most recent purchase. A respondent's reply could read: "Your employees were very knowledgeable and helpful, but the floor was dirty and the shop was rather untidy." The meaning of this sentence and its clauses is obvious to a person who knows the language, and this sentence could result in "staff knowledge" being graded at +4 and "staff helpfulness" at +3, while "shop cleanliness" is graded at -3 and "tidiness" at -2. However if you have several thousand such replies, all of them slightly different, extracting the overall sentiment by manual analysis becomes a laborious and inaccurate job. Analysis by computer then becomes the only feasible option. After automatic processing, the several thousand replies will provide the shop with a set of data they can use as a basis for changes such that the customer experience, and hopefully thereby customer retention, is improved.

During the analysis part of the process, each word in each response is compared against a database (the model) of words and groups of words that could be used in responses to the question. The model must therefore contain all the terms that are to be searched for in the responses. Model Builder is the application that assists you with creating and compiling the model.

As the vocabulary used in different situations can differ considerably, the model must be tuned for the specific customer domain. For example, the retail branch, call centers, consumer electronics branch, hotel branch and vehicle workshop branch etc. will all need different models. And even within branches, different specializations will need to be fine-tuned; for example a hardware store may well need a different model than a chemist. Template building blocks are available that can be used to speed-up the process.

# 1.1. Logging In

When you go to the Model Builder URL, you are presented with the login page.

	MODEL BUILDER	
Email	Email	
Password	Password	
	Remember Me	Forgot Password?
		Sign in

Figure 1 The Model Builder login page

Type your email address and password into the fields and click **Sign in**. In the event you have forgotten your password or you are a new user and do not yet have one, click **Forgot Password**. You are taken through the new password routine so you can reset your password (see Forgotten Password on page 2 for more information).

The Model List page opens. This shows all models that have been built within your customer account.

Confirmit. Models Search			1
Model Builder			
Models			New model
Q 3 of 3 models			Sort by recent -
Name	Last Edited By	Last Modified	Options
Generic Retail Model m44 - Created 15 Feb 2016		15 Feb 2016	Z 0-
VOE Model m52 - Created 15 Feb 2016		15 Feb 2016	/ 0-
Retail Model - Documentation m126 - Created 15 Feb 2016		15 Feb 2016	10-

Figure 2 Example of the model list for a customer

Here you can select an existing model to work with, or create a new model.

Later when you have completed your work with Model Builder, close and log out of the application by going to the **User** menu and selecting **Log Out** (see The User Menu on page 6 for more information). This closes Model Builder correctly and returns you to the Log In page.

### 1.1.1. Forgotten Password

Your Model Builder password prevents unauthorized people from using your account and interfering with your models. You must therefore ensure your password is difficult to guess and is known only to you. This of course can create problems - if you forget your password then you will not be able to use Model Builder. The login page therefore includes the possibility for you to reset your password should you forget it, and also create a password the first time you log in to Model Builder. To do so:

1. Click the Forgot Password? link below the login page.

The dialog shown below opens.

Forgot password	
Email	
Email	
Please enter your email and we'll send you a link to res	set your password.
← Back to sign in	Send me the link

Figure 3 The "Forgot password" dialog

2. Type your email address into the field and click Send me the link.

A message is sent to Confirmit. Assuming your email address is registered, an email will be sent to you containing a link and instructions for how you can reset your password.

Note: The reset password link is only valid for one hour. If you do not reset your password within the hour then the link will expire and you must repeat the procedure to be sent a new link.

### 1.1.2. Inactive-Screen Lock

For security reasons, when the Model Builder application has been inactive for 30 minutes it will be locked and you will have to log back in to continue. If you have not logged back in within three hours, Model Builder will close and any work that has not been saved will be lost. If you log back in within the three-hour period, Model Builder will reopen at the place you were last working.

#### Warning

Save your work at regular intervals, and ensure you save before you leave Model Builder unattended.

# 1.2. The Models List Details

When you open the Models page, each model that you have access to is displayed as one row in the list.

Confirmit, Models Search			1
Model Builder			
Models			New model
Q 3 of 3 models			Sort by recent +
Name	Last Edited By	Last Modified	Options
Generic Retail Model m44 - Created 15 Feb 2016		15 Feb 2016	/ 0-
VoE Model m52 - Created 15 Feb 2016		15 Feb 2016	/ 0-
Retail Model - Documentation m126 - Created 15 Feb 2018		15 Feb 2016	10-

Figure 4 Example of the Models list

In the event you have many models available, you can use the Search field to find the model you wish to work with. The search looks at both the model names and numbers. You can type a text string into the Search field to filter the model list and display only those models with names that include the entered characters anywhere in the model name. Or you can search by model number, using the 'm' prefix or just the number. If for example you search for 15, Model Builder will return all models with a 15 anywhere in the name or in the number. Note that the search field is not case-sensitive. To re-display the full list, clear any characters from the field.

You can sort the model list by the most recent accessed, the newest (most recently created), and alphabetically by the model name. The button then indicated the sort selected. Click **Sort by...** to open the drop-down.

Click on the blue model name link to open the Design page for that model. The details displayed for each model include:

- Model name this is the access link to the model. Click on the link to open the Design page for that model.
- **Model ID** when the model is created it is automatically given the next available identification number. If a model is deleted, its number is not re-used. This model ID is used when setting up Genius in Horizons.
- Created date the date the model was created.
- Last Edited By the user name of the person who last edited the model.
- Last Modified the date the model was last modified.
- View/Edit has the same effect as clicking the blue Model name link see above.
- More options opens the More Options menu, enabling you to duplicate the model, archive the model, and open the list of categories.

# 1.3. The Menus

Model Builder holds a number of menus in a bar across the top of the screen and on the various pages in the application. These menus and tools provide access to the functionality.

### 1.3.1. Models

Click to return to the Models page, in which all the models to which you have access are listed.

# 1.3.2. Search

This opens the Search page.

🧢 Confirmit.	Models	Search		T
Model Builder				
Search <b>Y+</b>				
			Searc	h

Figure 5 The Search page

Use this page to test proposed keywords on your verbatims before you add the keywords to your expressions. Adding keywords can sometimes be quite complex, in that you need to test which words and combinations of words achieve the most correct hits. There will be occasions where keywords merely return 'noise', but you will need to assess whether or not the hits-to-noise ratio is acceptable. The Search page can help you to decide this for individual words without having the results cluttered by the hits for all the other words in the expression.

You can filter by survey so that you can view the results from a particular survey.

1. Click the filter icon beside the Search page title to open a list of the surveys to which you have access.

Model Builder	
Search T+	
Surveys	
Search	
D p1403664017	
□ p2838802	
□ p3075950866	
□ p1080499	
□ p1849839884	
□ p3075864511	
Apply Cancel	

Figure 6 Selecting a survey to use

- 2. Select the survey or surveys you wish to use (note that you can select more than one).
- 3. Click Apply.

### 1.3.3. Company Name

Your company account name is displayed next to the **User** menu icon. In the event you have administrator access to more than one customer, click the account name to open a list of the customers to which you have access, and select the customer you wish to work with. The list of models associated with that customer and to which you have access then opens.

### 1.3.4. The User Menu

The User menu , located towards the right end of the main toolbar, provides access to commands applicable to you personally as the user.

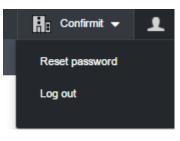


Figure 7 The User menu

- **Reset password -** click to open the Forgot Password page so you can change your password (see Forgotten Password on page 2 for more information).
- Log out click to log out of Model Builder and return to the login page (see Logging In on page 1 for more information). The next time you log in you will be taken to the Models list. In the event you have access to more than one company, you will be taken to the Models list for the company you were last working with when you logged out.

### 1.3.5. The More Options Menu

The **More options** icon <sup>(1)</sup>, located towards the right end of each model row in the Model List, opens the More Options menu.

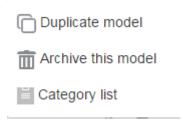


Figure 8 The More Options menu

The options in this menu are:

- **Duplicate model** if you need to create a new model that you know will be similar to an existing model, you can create a copy of the existing model and edit the copy, thus saving much time.
- Archive when you no longer need to use a model and you wish to remove it from the Model List, you can archive it (see Archiving Models on page 7 for more information).
- **Category list** opens a dialog box that gives you access to the category list (with sub-categories and attributes) and the associated category and attribute IDs (see The Category List on page 7 for more information).

# **1.4. Archiving Models**

To remove a model from your model list, click in the cogwheel (on the Model List page or next to the name of the model in the Design page) and the model will be archived.

If you have archived a model in error and you wish to reinstate it, contact Support.

# 1.5. The Category List

The **Category List** menu item is located in the **More options** menu on the Model List page and next to the model name on the Design page. This menu item opens a dialog box that lists the categories in the model (with sub-categories and attributes) and the associated category and attribute IDs. You can copy this list from the dialog box into an Excel® spreadsheet and save it as a tab delimited text file for use in the hierarchy table in Database Designer.

Category and sub-category IDs start with a 'c' and attribute IDs start with an 'a'.

Categories & Attributes for Retail model m816	
Version: Latest launched •	
Categories & Attributes Categories	
Select all	
ld 19 Parent	
c21668 Experience	
c21669 Quality of service c21668	
c21670 Wait time c21668	
c21671 Finding items c21668	
c21672 Finding help c21668	
c21673 Staff availability c21668	
c21674 Speed of service c21668	
c21675 Ease of c21668	
c21676 Navigation c21668	-
Close Cancel	

Figure 9 Example of categories and attributes for a model

1. Choose whether you want to use the 'working version' (that is, the version that will be subject to any changes made in Model Builder) or the 'latest launched' version (the saved version that will remain the same until you launch new changes) (see Launching the Model on page 23 for more information).

The appropriate list will be displayed.

#### Important

Ensure you use the 'Categories and Attributes' tab to get your category and attribute IDs. The 'Categories' tab is for use in older projects that use a flat category structure and that have not yet been transferred to the hierarchical model.

2. Click Copy all to select the full list, then use the Ctrl+C keys on your keyboard to copy the list.

# 2. General Information

This chapter explains the basic principles of the process and defines the terminology.

# 2.1. Where do you Start

In the knowledge that we are seeking, the subjects are typically your customers or consumers, and the objects are typically elements of your products and services. The relationships are the customers' views and opinions; their sentiments. The first step in creating a model is to determine which objects you are interested in. Objects can be grouped into categories, and the objects within each category are arranged as a hierarchy. The depth of the hierarchy for a category depends on the level of granularity needed to determine the knowledge that you can act upon, and also on the volume of texts that will match the category.

For example, the ordering channel for a product could be categorized as "Online", "Call-center" or "Store". "Staff" could be divided into "Managers", "Associates", "Cashiers" etc. Remember that you will need to sort these keywords from your customers' verbatims, so you will need to create sub-categories based on the terminology that your customers use. The temptation might be to refine the hierarchy to many levels, but often the consumer does not easily distinguish things to the same detail so it may not be worthwhile spending time defining a complex model.

On the other hand, not refining the model sufficiently will mean losing out on valuable intelligence. For example, having a single category of "Flight" does not allow you to separate out analysis of different aspects of the flight, such as legroom, cabin service, menu choice, entertainment, etc. These are items that customers are likely to express opinions about, so it makes sense to build these hierarchy levels into the categorization model.

At the same time as you are thinking about the objects that are being discussed in the texts, and how they can be classified, you should also think about the way opinions about the objects can be categorized. For example, what opinions could be expressed about the staff in a store, or about the flight experience? How helpful were the staff in the store, or how knowledgeable were they? How comfortable were the seats, how extensive was the choice of in-flight entertainment etc? These are Attributes and they need to be carefully thought through such that they can be segmented into useful groupings that can typically be determined from analysis of textual content. While we might be interested in consumers' opinions of the change in color of our logo, they are unlikely to express an unsolicited opinion about it. If we were to ask them for an explicit opinion using an open-ended question, then we already have the context and we do not need to look for it in the text.

# 2.2. Asking the Right Questions

One way to approach building your categorization model and associated attributes is to think about how you would ask structured questions. With text analytics, you are effectively asking questions of the open-ended text, and the answers are in the structured output you get in the categorization model and the sentiment analysis of the opinions in the text.

Using an open-ended question instead of a series of closed questions means you are not explicitly asking about a particular aspect that you are interested in, such as the friendliness of the cabin staff. However you can imagine asking that question of the open-ended text responses and using that thought to help build your categorization model. This can also help to segment which questions you want to ask explicitly in a closed-question format, and which questions you can leave to be asked by the analysis of open-ended text responses.

In a survey, the way an open-ended question is worded impacts the answers. If you say to a customer "Tell us why you like the product", then you will get answers about aspects of the product but not necessarily opinions, such as "The price", "The design", "The range of add-on modules available", etc. This is fine as long as you have previously determined from a closed question that the customer actually likes the product, as you can then derive actionable insight from this.

If you are considering analyzing unsolicited comments, for example from social media or call-center notes, then ideally you should analyze these comments alongside your survey comments. In this case your survey question should be less loaded, for example "Please provide any further comments you have about the product". Your text analysis will then ask the questions of the solicited response text in the same way as it is asking questions of the unsolicited text from support or social media interactions.

# 2.3. The Elements of a Categorization Model

The Genius categorization model is built in a tree hierarchy structure. Some basic definitions:

- **Category** an object that you have defined within the business (see Categories and Sub-Categories on page 10 for more information).
- Sub-category a further refinement of the category.
- Attributes The elements of opinion. These are applied to categories and sub-categories, and have their own
  expressions (see Attributes on page 10 for more information).

# 2.4. Categories and Sub-Categories

The categories and sub-categories are the main parts of the categorization tree. The categories describe the main touch points of the business, such as 'Staff', 'Store' and 'Product', and these can be broken down into sub-categories that further define these categories. For example "Staff" could be broken down into 'Management', 'Associates', 'Trainees' and 'Other Staff', while 'Product' could be broken down into the different products that you offer, or sub-categories based on groups of products..

Model	
Management	
Associates	
Trainees	
Other Staff	

Figure 10 Example of categories and sub-categories

Expressions are added onto the child nodes, that is the sub-categories that have no further children (in this case Management, Associates, Trainees and Other Staff). This is where you add all the keywords that will add verbatims into that category. Parent nodes, that is the categories that contain leaf or child nodes (Staff in the above example), do not have their own expressions. Their expressions are made up of the expressions of the child nodes joined with an OR Boolean operator.

Note: If you add a sub-category to a category that already has an expression, then you will be asked if you want to move the expression to the sub-category you are creating. If you decline this invitation then the expression will be deleted from the parent category.

#### Warning

To avoid disappointment, save your work at regular intervals, and ensure you save before you leave Model Builder unattended (see Inactive-Screen Lock on page 3 for more information).

# 2.5. Attributes

Attributes are the elements of the categorization model that you wish to measure; your customers' opinions. These could be for example Product knowledge, Friendliness, Speed of service of the Staff, Location, Opening hours, Cleanliness of the Store, Availability, Reliability, Variety of the Product etc.

These attributes can only be applied to the lowest node of the tree. Attributes are joined to their category / subcategory nodes with an AND Boolean operator. So the expression that Genius will use for determining if text is referencing the friendliness of management could be:

```
(manager OR managers OR management OR "mgr" OR supervisor OR "in charge")
AND (friendly OR friendliness OR "not friendly"~3)
```

By analyzing only those verbatim texts that match this expression, Genius can then use its sentiment algorithm to determine the opinion expressed by the customers regarding the friendliness of the manager.

# 2.6. The Logical Operators

You can use logical operators in the search field when you write search expressions. The logical operators combine search words in your expression.

#### Logical AND

The AND operator will combine two (or more) search words. For example if you want to search for posts containing both of the car manufacturers Audi and Mercedes, your search expression will be "audi AND mercedes". Only posts where both words occur will be returned in the search result. Note that the order in which the words appear, and their distance apart, will not be taken into consideration.

#### Logical OR

The OR operator will return posts where any of the given search words are represented. For example if you want to search for posts that mention either of the phone companies O2 or Vodafone, your search expression will be "o2 OR vodafone". Any posts containing either O2 or Vodafone will then be returned.

#### Logical NOT

The NOT operator is used to exclude posts that contain the specified search words. For example if you want to search for all posts that mention iPhone, but exclude posts that mention Samsung, your search expression would be "iphone AND NOT samsung".

Note: Logical operators are always written in UPPER CASE. To make your search expressions easier to read we suggest that you always write your search words in lower case. For example both "AUDI AND MERCEDES" and "audi AND mercedes" will return the same results, but the latter is easier to read.

#### **Proximity operator**

The proximity operator (~) is useful when you are searching for two words in a verbatim, but you are not certain about the order in which they might appear or how far apart they are. In a long verbatim the two words may appear but could also be unrelated. Use the proximity operator therefore to specify a maximum number of words between your two search words. For example if you want to find the posts where car manufacturers Audi and Mercedes are close to each other, you would use the proximity operator. Your search expression could then be " "audi mercedes"~2 ". In this example the expression will return only those posts where there are a maximum of two words between the two names.

#### **Special Characters**

Some characters have special functions (operators) and cannot be searched-for like normal characters. However they can be used inside quotation marks "", or they can be escaped. They are escaped if they have backslash (\) before them <u>or</u> quotation marks around them ("").

Example: \+ OR "+"

	Special characters	Special characters
+	)	"
-	{	~
&&	}	*
	[	?
!	]	:
(	٨	\

#### Parenthesis

Parenthesis can make or break your expressions. They are very useful for simplifying and making the expressions readable, but incorrect usage will give incorrect hits.

Ensure that multiple words have quotation marks around them - "multiple words".

#### Wildcards

The \* wildcard ensures that all words starting with the preceding text characters will be captured. For example, categor\* will find words such as category, categories, categorisation, categorization, etc. Note that you cannot have a \* within quotation marks; for example "all categor\*" will not work!

# 3. Creating a New Model

A categorization model must be built around how <u>your</u> customers are speaking about <u>your</u> business; borrowing a model from another business will not work. So before you start to build the categorization structure you will need to have a fairly detailed understanding of what your customers are saying about you. Based on this you can then identify the major themes or categories that consider your business structure, and decide where Text Analytics will provide value by reporting sentiment about each category.

When creating a new model it is best to start simple and to build up more complex categories as you explore your verbatim data. Having identified the main categories, you must then identify the sub-categories. Here you should start with simple sub-categories; you can always create further sub-categories as you find them.

You can then create the expression for each sub-category.

Identify what customers are saying about these categories that you want to be able to measure; these will be your Attributes that the analysis will look for.

Create the expressions for the Attributes.

#### Warning

To avoid disappointment, save your work at regular intervals and ensure you save before you leave Model Builder unattended (see Inactive-Screen Lock on page 3 for more information).

### 3.1. How to Create a New Model

1. In the Models page, click **New Model**.

The Create Model overlay opens.

Create model	×
Name	
New model name	
Sentiment Configuration	
Nothing selected	-
Create model Cancel	

Figure 11 The Create Model overlay

- 2. Type in a name for your new model.
- 3. Select the sentiment configuration you want to use.

The options available to you are in the drop-down list.

4. Click Create model.

The model is created and given a model ID number, and the Add Category overlay opens.

Cardinmit Midem Search			B test - 1
Moder Buildey Design			
Documentation Model wave O	τ+		Test second An increase Lawren
Madel			
No fame	-		
		You don't have anything in your model yet.	
		Add Category	
		N N	
		J.	
		Add Category	
		The Categories are defined by the terms and parameters that are important to the parameter. Note can cruster a termstrifty of categories appendix to your burners	
		mpaterierts.	
		Products - Exectionics	
		- Mihile goodk	
	30		

Figure 12 The Add Category overlay

#### 5. Click Add Category.

The Create a new Category overlay appears.

Create a new Category	×
Please enter Category name	
Create Cancel	

Figure 13 The Create a new Category overlay

6. Type the category name into the field, then click **Create**.

The category pane opens. You can now create your expression for this category or choose to create a subcategory if you want to refine your model further. If this category is to be a leaf node - the last level in the category hierarchy - then enter the required expression in this overlay.

#### Warning

To avoid disappointment, save your work at regular intervals and ensure you save before you leave Model Builder unattended (see Inactive-Screen Lock on page 3 for more information).

### 3.1.1. How to Edit the Model Name

You can edit the model name and sentiment configuration. To do this:

1. Click on the cogwheel next to the model name and selecting Edit properties.

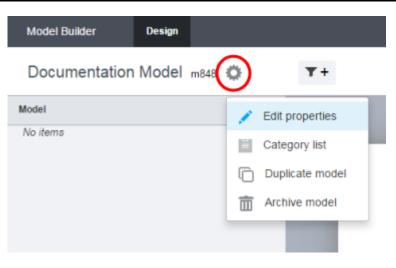


Figure 14 Accessing the Edit Properties menu item

The Edit Model overlay opens (the same overlay that you used when you created the model).

Edit model		×
Name		
Documentation Model		
Sentiment Configuratio	n	
General English V3		-
Update model Ca	ncel	

Figure 15 The Edit Model overlay

2. Make the required changes and select Update model.

# 3.2. Creating the Categorization Hierarchy

You can now start to create your categorization tree. From your first category, you have 3 options:

1. You can click on the + Category button at the bottom of the expression pane to add another category.

Model	_	
>   Store	T Product	1
) 🔟 Staff	Expression	Results
Product O		Will this be your leaf node? Then enter an expression.
	+ Category + Attribute	

Figure 16 To add a Category

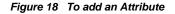
2. You can click on the drop-down arrow of the **+ Category** button at the bottom of the expression pane to add a Sub-category.

Model		
>	Product	
	Expression	Results
>		Will this be your leaf node? Then enter an expression.
	+ Category + Attribute	

Figure 17 To add a Sub-category

3. You can click on the **+** Attribute button at the bottom of the expression pane to add an Attribute.

Model		
> ₩ Store	Product	1
> ₩ Staff	Expression	Results
Product C		Will this be your leaf node? Then enter an expression.
	+ Category + Attribute	



Build up your categorization tree based on how your model needs to look, with Categories and Sub-categories describing the touch points in the business and Attributes describing the emotions or measures of those touch points.

### 3.2.1. How to Edit a Category Name

To edit the names of the categories, sub-categories or attributes:

1. Click on the Edit icon in the blue bar.

🖉 Management			(	
Expression	:=	≡	1	Results
Staff				View r

Figure 19 Click the Edit icon in the blue bar

The text field opens.

0	Management	Ι				×	
Expr	ession			:=	≡	1	Results
	Staff						View re

Figure 20 The text field opens

2. Edit the name as required, then press Return or click out of the field to close it.

# 3.3. Writing an Expression

Your expressions are made up of the keywords that describe your category, sub-category or attribute. Click on the **Edit** icon to start writing your expression.



Figure 21 Starting the expression

You will need to build up the expression by testing the keywords against your verbatims from the survey to ensure that they are collecting the correct verbatims for that category. When you start out, you can test keywords in the expression pane by clicking on **View results**. If you find you are getting verbatims that shouldn't be in that category then you will need to refine your expression by using more targeted keywords or proximity indicators and AND NOT operators. You will also need to add in misspellings to ensure that misspelled words and words that are written in text speak are included in the analysis.

Once you have a longer expression, the process can be simplified by using the Search page (see Search on page 5 for more information). Here you can test keywords, test the proximity of the words to one another, and test the effect of using an AND NOT on your expression. It is recommended to go through a good set of results in order to validate that the expression is bringing through a good percentage of accurate hits. You should aim to reduce noise (unwanted hits) as much as possible, but this is not always 100% possible. You will need to decide how much noise is acceptable for each category.

When writing expressions in Model Builder, you should save the expression at regular intervals and between adding new keywords as any changes will be lost if you leave Model Builder for 30 minutes with no interaction. This is especially valid if using a separate tab with your Search page opened.

You can use the different AND and OR boxes to separate parts of your expression and to format it for easier reading. You might like to keep certain concepts or words and misspellings together so that it is easier to read and edit afterwards.

AND boxes will always be associated with an OR box. This means that at least one of the keywords in the AND box will need to be present in the verbatim as well as at least one of the keywords from the OR box. You can have a separate OR box that will not have the AND box association, if you click on the button for a different OR box. The gray line on the left side shows you the association.

The global AND NOT box towards the bottom of the pane is used when you have some keywords that need to be excluded from the entire expression. You can also add local AND NOTs in the other OR and AND boxes.

Management		1.
Expression I	= /	Results
Staff		View results
AND		
(manager OR managers OR management OR "mgr" OR sup or "in charge")	pervisor	
O AND		
OR		
C AND		
	🔁 OR	
AND NOT		
Global exclusion expression.		
Save Cancel		

Figure 22 The AND, OR and AND NOT fields

#### Warning Save your work at regular intervals, and ensure you save before you leave Model Builder unattended.

### 3.3.1. Error Messages

In the event you make a mistake and your expression in invalid, an error message will be displayed and you will not be able to save your expression until the errors have been rectified. You will need to ensure that the parentheses match up, that all the Boolean operators are in capitals and that the required formatting is correct. Checking your expression in an application such as Notepad++ can help to verify the parentheses are matched.

🗃 Manager
Expression /
<b>Oops!</b> There are some errors in the expression.
(manager OR managers OR management OR "mgr" OR supervisor OR "in charge")
C AND OR
C ("the boss
Something is not validating correctly here
AND OR

Figure 23 Example of an error message

### 3.3.2. The Survey Filter

If you have Genius Text Analytics on more than one survey, the results that you see when clicking on 'View results' are from all of the survey variables that have the Genius folder attached for analysis. To view results from a reduced set of surveys, use the survey filter.

🧢 Confirmit. 🛛 Mo	dels Search
Model Builder De	sign
Retail Demo m785	o <b>T</b> +
Model	Surveys
Store	
Staff	Search Q
Product	V All
	p1403664017
	p2838802
	p3075950866
	p1080499
	p1849839884
	p3075864511 -
	Apply Cancel

Figure 24 Example of the survey filter

Click the **Filter** button to open a list of the Project IDs that have had Genius Text Analytics added to the open text variables. Select the survey(s) you wish to use and click **Apply**.

Once you've applied a filter, you will see the filter that has been applied next to the filter button. This will remain there for the duration of the session or until you cancel the filter by clicking on the (X) to remove it.

🧢 Confırmıt.	Models	Search		
Model Builder	Design			
Retail Demo m	785 🔅	Ψ+	Surveys: p2838802, p3075950866	8
Model				
Store				
Staff				
Product				

Figure 25 A filter applied

#### Warning

Save your work at regular intervals and ensure you save before you leave Model Builder unattended (see Inactive-Screen Lock on page 3 for more information).

# 3.4. How to Edit an Existing Expression

To edit an existing expression:

1. Click on the Edit icon in the expression pane.



Figure 26 Click the Edit icon

This opens the Edit Expression pane for editing.

🖬 A	ssortment - Assortment - Color	1
Expres	ssion 🧨	Results
8	(((("red" OR " blue" OR " black" OR " white" OR " green" OR " gold" OR " orange" OR " yellow" OR "purple" OR "silver" OR " grey" OR "gray" OR "colors" OR "colored"))))	View results
	😌 OR	
AND	D NOT	
G	lobal exclusion expression.	
	Save Cancel	
	+ Category - + Attribute	

Figure 27 The Edit Expression pane opens

You can now click into the expression and add and take away keywords and add additional operators as required.

# 3.5. Testing the Model

You can test the model against your verbatim set at any time. To run a test, click the **Test Model** button towards the upper right corner of the Model Builder screen.

This will run all the available verbatims through the entire model, and once it has completed running it will show as the number of hits against each category.

A new folder will also be placed at the bottom of your categorization tree, called 'Other'. This folder contains all the verbatims that have not been categorized by the rest of the model. You can go into this folder to look through the results to see whether there are any misspellings or keywords that need to be added to the existing model or whether you need to add any further categories, sub-categories or attributes.

# 3.6. Launching the Model

Model Builder supports versioning of the categorization models.

For a model to be used in Horizons, it must be launched, thereby creating a version of the model. Once launched the model is given a version number, and any edits that are made to the model after it has been launched are made in the 'working version'. The working version will need to be launched again (getting a new version number) before the changes are used in Horizons. Any changes to the structure of the model (for example if you have added any new categories, sub-categories and attributes) will need to be updated in the Horizons Database Designer table. Refer to the Genius User Guide for more details.

The **Launch** button is located towards the right side of the Design page for the Model. Update text next to the **Launch** button tells you whether you have uncommitted changes and the date that the first set of changes were made. Once you launch the next version of the model, this update will reflect whether you have made any further changes.

Model Builder Design					
Retail Demo mras O	Ψ+			Test model	Uncommitted changes Launch
Model		-			
▶ 📺 Store	•	Store	1		
>   Staff		Expression	III Results	· · · · ·	
Product		Room to shop OR	View results		50 -
		Signage			

Figure 28 The Launch button on the Design page

In Horizons you can choose to run the verbatims against the 'working version' or the 'latest launched' version. Running them against the 'latest launched' version will mean that you can be sure that you are looking at results according to a consistent model and that any other changes that you have made to your model will only be reflected in your results after you have launched the model once again.

To launch your model:

- 1. Go to the Design page for the model you wish to launch.
- 2. Select the **Launch** button in the upper-right corner of the page.

The Launch model overlay appears.

Launch Documentation Model model	×
Version name	
Description	
Dease make sure to unriste vour category list in horizone	6
Please make sure to update your category list in horizons	
Launch Cancel	

Figure 29 The Launch model overlay

3. Add a name for the version as appropriate, and a description for future reference, then click Launch.

The model is "locked" (it can no longer be edited) and is released for use.

4. If you have made changes to the structure of the model (that is, you have added or deleted any categories, sub-categories or attributes), you will need to update these in the model hierarchy (in Database Designer) in Horizons.

The next time changes are made to the model, a new "working version" will be created automatically and the changes will be made to that version. That version will then remain the working version until it is launched, whereupon it will be locked and a new working version will subsequently be created.

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