Message Testing 3.0

Message Testing for Marketing of the Future

Why the science behind message testing needs a serious upgrade and what is the future of message testing?

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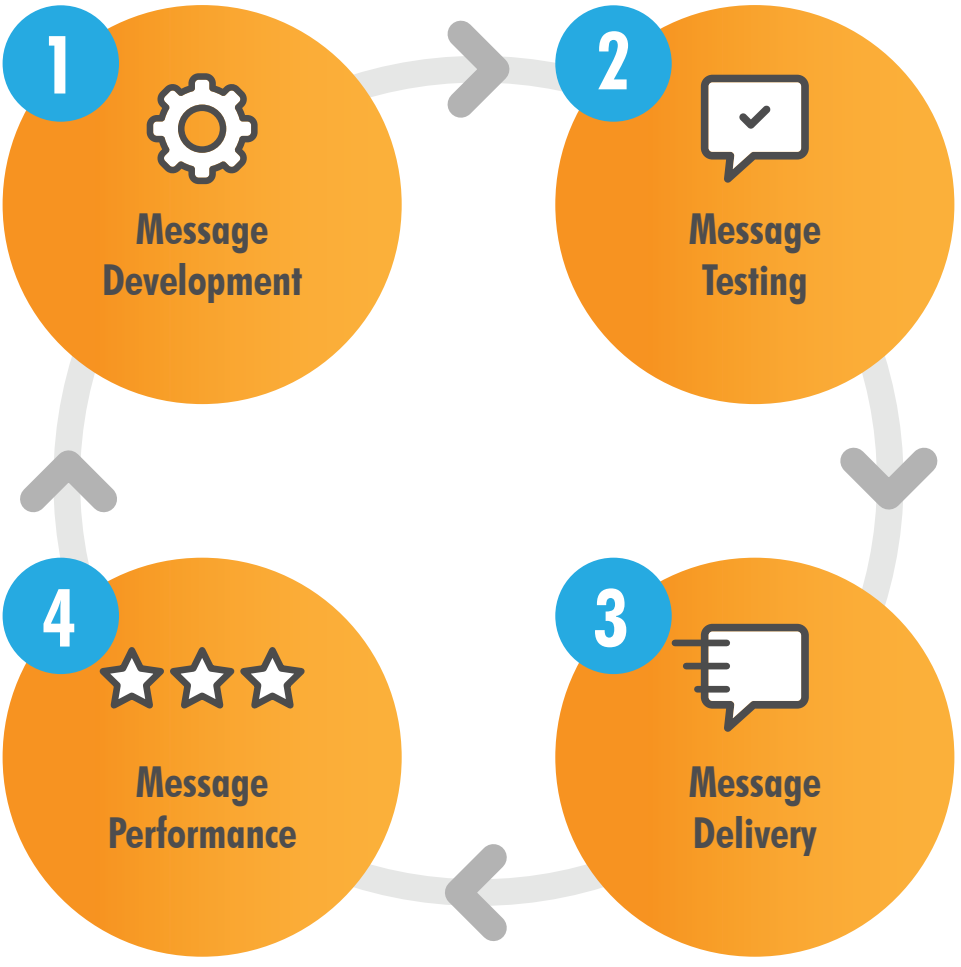
WHY PHARMA NEEDS A STEP CHANGE IN MESSAGE TESTING

In the last decade, the pharma industry has gone through significant changes in how it messages to physicians, patients and payers.

The processes and tools pharma brands use to DEVELOP messages has changed a lot over the years as marketers are being forced to develop more persuasive, behavior change messaging for their brands.

Similarly, the EXECUTION of messages in the market has also transformed with the introduction of new channels of communications, new technologies that help optimize the delivery of messages, etc.

However, what hasn't changed much is the TESTING of messages in market research prior to execution. It is still too common for brands to test messages in qualitative IDIs despite the known shortcomings of qualitative research. In fact, entire message campaigns can be decided based on 20-30 qualitative interviews, campaigns that are supported by $10-100 millions in



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An industry wide study on the Future of Messaging commissioned jointly by Intellus Worldwide and Newristics highlights the urgent need for advanced message testing optimization methodologies in pharma.

Complexity

- Pharma marketers and researchers believe that messaging will become more complex in the future.
- There will be more and different types of data to communicate, MOA explanations will be more complex, even DSE messaging will be more difficult.

Frequency

- Pharma marketers and researchers expect messaging to be refreshed more often in the future because of more frequent market events, new data, new LCM initiatives, etc.

Effectiveness

- There is clear consensus in the industry that messaging will need to be more effective in the future.
- Customers are restricting access to messaging from pharma brands, which means the message storyflow has to break through even with limited access.
- Separately, every disease state is hypercompetitive now with many brands messaging to similar data and arguments at the same time.

Customization

- Pharma brands are increasingly relying on more multi-channel messaging to reach their customers.
- Every channel has its own messaging requirements and brands need to customize their messaging for each channel to get the most impact.
- Brands are also trying to customize messaging to different customer segments based on behaviors, attitudes, and other variables, both in personal and non-personal promotion.

Traditional Qualitative Message Testing (IDIs/TDIs)

How It Works

Qualitative research is used extensively in the pharmaceutical industry to test messages with customers (HCPs, Patients, and Payers).

1 Typically, messages are tested qualitatively in 1-on-1 interviews lasting 60 mins (IDI/TDIs).

2 Messages are organized into attributes like Efficacy, Safety, MOA etc. and are exposed to respondents one message at a time.

3 After every message exposure, respondents are asked to score the message and "talk" about the rationale for their score.

4 The moderator probes on what respondents like/dislike in each message and tries to capture ideas for improving each message.

5 Prioritized messages from each attribute are shown again to respondents and they are asked to organize the messages in a story flow.

Limitations of the Traditional Qualitative Approach

Traditional qualitative message testing has many limitations and should, ideally, no longer be used in the pharma industry. Yet, tens of millions of valuable market research dollars are spent every year by pharma brands to test messages qualitatively.

1. 
Only a small number of messages can be tested, forcing brands to make tough choices on what to test.

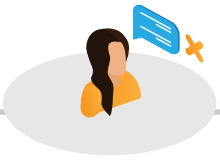
2. 
Respondent feedback to messages is all 'stated' and there are no derived insights.

3. 
It is not representative of the real world and makes respondents artificially pay attention to messages.

4. 
There is little or no differentiation in message scores or regression to the mean for all the messages.

5. 
Feedback from outliers is neglected even though there are many outliers in the real world.

6. 
Bad solution for message bundling/storyflow – too many combinations are unexplored.

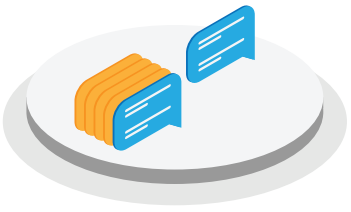
7. 
Improvements suggested by respondents are rarely useful since they are not marketers.

Traditional Quant Message Testing (Maxdiff/TURF)

How It Works

Traditional quantitative message testing methodologies use choice-based models like conjoint, discrete choice or Maxdiff/TURF.

1 Take respondents through 15-20 choice sets containing 3-4 messages in every choice set.



2 Choices can be individual messages or message bundles.

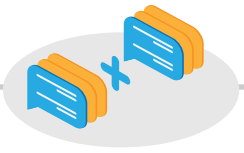
3 Each respondent sees 45-80 choices, but they are not all unique. Some choices are tested more than once with the same respondent.

4 Since there are more choices possible than what can be shown, a Design of Experiments (DOE) is created to make sure that enough choices are tested and each choice is tested with enough respondents.

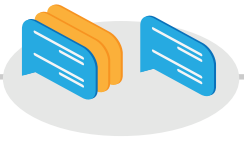
5 Utility scores are aggregated for each message based on data from the respondents and are used to create a message hierarchy.

Limitations of the Traditional Quantitative Approach

Traditional choice-based methodologies also have some known limitations that create challenges for message testing:

1. 

The Design of Experiments approach works well with up to 30-40 messages, after which, either respondents have to be shown an overwhelming number of choices or the sample size has to be increased.

2. 

If individual messages are tested, then message bundles have to be modeled with a simulator, which is not ideal because interaction effects between messages are not adequately accounted for.

3. 

When message bundles are tested, scores for individual messages have to be modeled, which is also not ideal because many messages end up having similar scores.

4. 

The design of experiments does not take into account individual respondent-level choice drivers, which means that irrelevant choices could be tested with many respondents in many choice sets.

5. 

Traditional methodologies don't provide feedback on why messages do/don't do well in research and how to improve them.

Heuristics-Based Message Testing: A futuristic approach

Decision heuristics science or behavioral science offers a novel approach to market research in general, and many use case scenarios for behavioral science in market research have emerged in the past few years. From deep insights research to patient journey to idea testing to brand health, decision heuristics science can be incorporated into almost every type of customer research.

What is decision heuristics science?

Decision heuristics science sheds light on how humans behave in real life and research.

Decision heuristics are mental shortcuts that drive human decisions. In every therapeutic area, there is a set of dominant decision heuristics that drive most of the treatment decisions.

Physicians and patients don't realize that they are using heuristics to make decisions and don't offer them as explanations for their behaviors.

Many of the heuristics are cognitive biases, judgment fallacies, psychological or social effects and can even lead to irrational decisions when used very quickly.

Decision heuristics have been discovered by conducting behavioral experiments that are designed to put people under certain predetermined situations and then track their behaviors/choices.

Decision heuristics science is ideally suited for market research in which the respondents are shown a series of choices.

The choices can be powered by heuristics, and respondent behaviors during the research can be tracked to study the underlying heuristics.

Using decision heuristics science for message testing

Decision heuristics science is a great tool to test messages with respondents in a new "behavioral" way to optimize messages AND message bundles, based on how they make treatment decisions.

Before Research

a. Use language in each message as a signal for decision heuristics and tag each message in the inventory with the "best-fit" decision heuristic.

b. Develop alternative versions of each message using the best-fit heuristic and test both the alternatives and the originals in research.

During Research

a. Test not just the appeal of messages, but also the appeal of underlying heuristics embedded in the language of each message.

b. Customize messages to each respondent based on their heuristic preferences, forcing them to provide greater distinction between choices.

After Research

a. Feed data from respondents into advanced machine learning algorithms that identify the best combination of any number of messages based on heuristics.

b. Go beyond a Message Hierarchy and a TURF analysis and optimize the precise message bundles and story flow for all messaging channels.

Benefits of the Heuristics-Based Approach

Heuristics-based message testing overcomes many of the limitations that plague traditional methodologies:

A Large number of messages can be tested without a large sample because heuristics can be used to create the design of experiments.

Choices are presented to respondents based on how they make decisions using specific decision heuristics, which means their exposures are much more relevant.

Heuristic preferences can provide real-time intelligence on respondents during the survey that can be used to make real-time predictions.

Drivers of message appeal can be estimated through the language that talks to decision heuristics in each message, eliminating the need for asking stated diagnostics survey questions that can also be very time consuming.

CMO (Choose Message Optimizer)
Message Testing for the Future of Marketing

CMO is the first and only message testing algorithm that combines the power of behavioral science and artificial intelligence to test messages with customers in a way that can propel the future of marketing in pharma.

Designed with 3 years of pure R&D, CMO is built exclusively to test messaging in the pharma industry and offers benefits that every pharma marketer and market researcher will need in the future.

Faster

CMO cuts the time it takes to go from the 1st draft of messages to campaign development by 65% and save up to 15 weeks.

a. CMO can test 100s of messages, which eliminates the need for your team to spend time prioritizing messages before research.

b. CMO creates "heuristicized" alternative versions of your messages before research, and tests both the original and heuristicized versions with respondents.

c. CMO delivers optimal message bundles that are campaign ready for omni-channel use, saving time needed for execution.

Cheaper

CMO cuts the total cost of testing messages by 50% or more.

a. CMO can potentially eliminate all qualitative message testing because the heuristics-based design of CMO provides the WHY behind the appeal of each message without having to ask respondents.

b. CMO can even eliminate draft paper vis-aid testing because data from the CMO study can identify the optimal message bundle for every page of the vis-aid.

Better

CMO is proven superior to even the most advanced message testing methodologies in identifying the optimal message bundle from the same inventory of messages.

a. CMO message bundle was preferred by 1.5x more people.

b. CMO message bundle had 25% higher Utility Scores.

c. CMO message bundle had statistically higher scores for diagnostics like Believability, Relevance, Uniqueness and Likelihood to Use.

Easier

CMO simplifies the process of testing and optimizing messages before launch.

a. Turnkey: all you need to provide is the draft inventory of messages for testing.

b. Minimal project management is needed from your team.

c. CMO eliminates rounds of unproductive meetings and workshops needed to review, refine and prioritize messages.

CMO (Choose Message Optimizer) Head-to-Head Superiority vs. Other Methodologies

The objective of the study was to compare the effectiveness of CMO (Choose Message Optimizer) vs. an Evolutionary Algorithm-based methodology for message testing in head-to-head research.

The superiority of a heuristics-based message testing approach has been established through multiple head-to-head studies in which CMO (Choose Message Optimizer) was compared to other advanced message testing methodologies.

The best way to compare CMO to other non-heuristics based message testing methodologies is to use the same set of inputs.

Step 1 Prepare an inventory of messages for testing

- A total of 84 consumer messages were developed for a new hypothetical Type 2 diabetes drug.
- Messages were organized into 8 attributes like Efficacy, Safety, MOA, etc.

Step 2 Test messages using Evolutionary Algorithm (EA) methodology and identify the optimal message bundles

- Messages were tested with N = 400 T2D patients in an online research study that utilized an Evolutionary Algorithm methodology that was originally developed at MIT and subsequently commercialized by Affinnova.
- The output of this research study produced a series of Optimal Message Bundles using a non-heuristics approach.

Step 3 Compare optimal bundles generated from the two methodologies (CMO vs. Evolutionary Algorithm) in a quantitative market research study

- The same set of messages were tested again with a different sample of N = 400 patients, but this time using a heuristics-based testing methodology.
- This study produced another set of Optimal Message Bundles, which featured many different messages from the inventory.

Step 4 Step 4: Compare optimal bundles generated from the two methodologies (CMO vs. Evolutionary Algorithm) in a quantitative market research study:

- Optimal bundles identified by the two different methodologies were compared H2H in a new quantitative concept test type study with N = 250 T2D patients.
- Message bundles from the two methodologies were compared in a variety of ways

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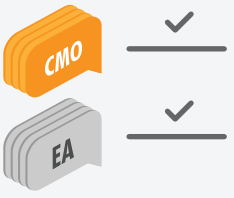
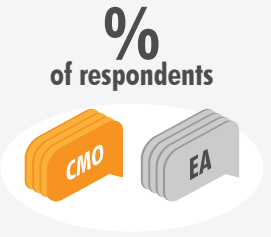
CMO (Choose Message Optimizer)
Head-to-Head Superiority vs. Other Methodologies

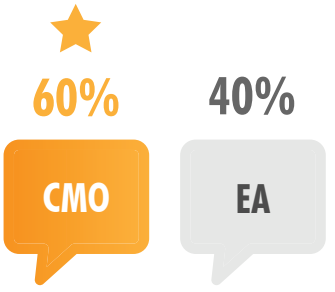
	Bundle Evaluation	Respondent Exposure	Result Metrics
Pairwise Comparison		CMO Bundle vs. EA Bundle Preference	 What % of respondents chose each
Discrete Choice		Choice exercise – 2 bundles per choice set X 12 choice sets	 Aggregated utility scores for each bundle
Sequential Monadic Diagnostic Questions			

Interest in learning more	% of respondents Extremely/Very interested
Likelihood to try	% of respondents Extremely/Very likely to try
Believability	% of respondents who find bundle Extremely/Very believable
Persuasiveness	% of respondents who find bundle Extremely/Very Persuasive

CMO (Choose Message Optimizer) Head-to-Head Superiority vs. Other Methodologies

Results

The optimal message bundle identified by CMO using a heuristics-based methodology outperformed the optimal bundle identified by the evolutionary algorithm methodology across all measures in the H2H research.

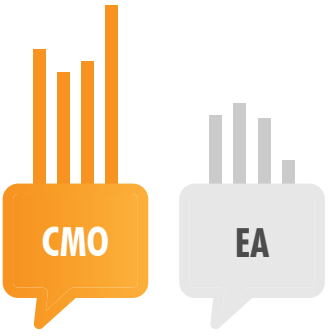


Pairwise Comparison

CMO bundle was chosen by **1.5X** more people.

Choice Utilities

CMO bundle had a **25%** higher aggregated utility score based on the discrete choice exercise.



Diagnostics

CMO bundle had significantly higher **Top 2 box scores** on all diagnostic criteria.

CMO identified a superior message bundle because it utilizes heuristics to test messages more intelligently with respondents and generates more differentiated data on messages from each respondent.

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