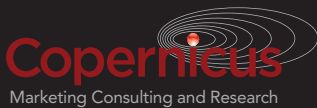


Think.



“Simply put, because of big data, managers can measure, and hence know, radically more about their businesses, and directly translate that knowledge into improved decision making and performance. ”

Harvard Business Review
Big Data: The Management
Revolution by Andrew McAfee
and Erik Brynjolfsson



“You can fool yourself with data like you can’t with anything else. I fear a Big Data bubble.”

Claudia Perlich
Chief Scientist
Media6Degrees

It’s not so much a question of whether to think about big data these days...

It’s NO WONDER talk about the “big data bubble” is on the rise.

The often overwhelming challenge of coordinating so many sources of data, in a variety of formats, governed by multiple departments and agencies, has many in marketing questioning the implicit assumption that it’s even possible to learn “radically more” about their customers using big data.

Every one of the exploding number of customer touchpoints comes with new data points and it stands to reason that there’s an opportunity to grow the brand and build sustainable competitive advantage hidden somewhere in all that mess of data.

Marketers, however, are still trying to figure out how to make sense of the mess to optimize and enhance their programs, to create increased value for customers, and to drive sales and loyalty.

...it’s what to think?

The future of marketing is big data...

IN A MARKETING CONTEXT, “big data” suggests all the incoming information about marketplace performance; the market climate and customer behavior; and marketing and media investments.

<ul style="list-style-type: none">• Market share• Retail sales• .com sales <p>Performance</p>	<ul style="list-style-type: none">• Ad cost data• Search SOV• Brand health• Product experience• Survey data <p>Market</p>	<ul style="list-style-type: none">• TV• Print• Radio• OOH• Digital• Search• Trade• Promotion <p>Bought</p>	<ul style="list-style-type: none">• Brand.com• Facebook• Youtube• Twitter• Pinterest <p>Owned</p>	<ul style="list-style-type: none">• Volume of buzz• Sentiment• WOM <p>Earned</p>
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The “future of marketing,” of course, isn’t in the accumulation of all this information. The future is in organizing it around the customer; analyzing and synthesizing it into actionable insights; and applying these insights to marketing decisions.

The hurdle many marketers still have to get over is identifying the intelligent analytics tools and experienced data interpreters who know marketing from a strategic and tactical perspective to help them connect big data accumulation, organization, and application.

...but what exactly does that mean?

“Big data is the ‘raw material’ for developing, executing, evaluating, and optimizing the performance of your marketing plans.”

Peter Krieg

CEO

Copernicus Marketing
Consulting & Research



“When marketing analytics helps you convert research and data to insights into how to optimize your marketing plan, it delivers a considerable competitive advantage to your brand and business.”

Mike Vitti
Chief Operating Officer
Copernicus Marketing
Consulting and Research



The Natural Evolution of Our Founding Mission...

When we opened the doors to Copernicus in 1993, we had a driving mission to change the way companies think about, practice, and evaluate marketing. We wanted to prove that marketing should be, can be, and is the engine that drives business growth, and quickly set out to help brands around the world develop and launch transformational marketing strategies.

As we close in on 20 years in the research-driven marketing consulting business, we remain as committed as ever to our original mission, and see our expansion into **advanced analytics** as a natural evolution in our quest.

Our new advanced analytics practice complements our strategy expertise with cutting-edge modeling, predictive analytics, and simulation tools. Our rich, cross-industry knowledge of how marketing and media work informs everything we do to help marketers strengthen performance, enhance profitability, and fuel growth.



...To change the way companies think about, practice, and evaluate marketing.

“Interpreting what the data is saying in the context of the ‘big picture’ is critical to making effective and efficient marketing decisions.”

Rolf Olsen
VP, Director,
Marketing Analytics
Copernicus Marketing
Consulting and Research



Think Marketing Planning 3.0

WHEN IT COMES TO CAPTURING THE VALUE of big data for marketing, there's a tendency to jump right into which analytical tool or modeling technique to use. As a result, marketers don't end up with insights they can readily use to increase sales, improve ROI, and deliver a true competitive advantage.

That's why we take a consultative approach to marketing analytics. Actionability of insights depends on understanding exactly who in the company plans to use the results and how they plan to use them.

Our decades-long history of working with senior marketers, insights groups, and agencies across industries and business models informs our ability to:

- Define the marketing or business problem you are trying to solve
- Determine the data requirements and resources available to address your problem
- Understand how sales occur in your category or industry, and how strategy and tactics contribute
- Deliver valuable informational outputs that help you and your agencies better plan, evaluate, and manage your marketing investments

Working with you, we determine which of our analytic tools will best deliver answers. We draw from a variety of disciplines and methodologies in order to provide customized modeling and simulation solutions to best inform decision-making and optimize results.

“When done well and done right, computational modeling produces never-before-known insights into the drivers of sales and ROI and how marketing plans can be improved in order to enhance both.”

Donald Cozine

Head of Computational Modeling

Copernicus Marketing Consulting and Research

CCM Considers the Effects of Your Target's Media Behavior and Interactions Across the **Bought-Owned-Earned Media Landscape**



Bought

Owned

Earned

Think Copernicus Computational Modeling™

To empower marketers and their communications agencies to optimize the marketing mix for their brands, we developed Copernicus Computational Modeling (CCM).

A cross-disciplinary blend of advanced modeling methodologies and simulation techniques, CCM is a state-of-the-science marketing mix optimization model. In this model, virtual “agents”—consumers and/or businesses—interact with each other, react to marketing and other events, and make purchases just like real customers do.

Using this virtual marketplace, you can test current and potential marketing strategies and tactics—even ones you have never tried before—among different market segments to identify the plan that maximizes ROI.

To take advantage of all the relevant market data available today, our big data solution Market DNA™ aggregates and harmonizes the array of data sources and inputs that drive CCM.

Disciplines and methodologies integrated into CCM:

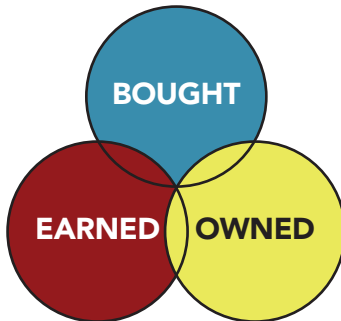
- Agent-based modeling
- Bayesian analysis
- Complexity science
- Econometrics
- Game theory
- Machine learning
- Monte Carlo simulations
- Network theory

Powered by an array of data sources and inputs including:

- Consumer insights
- Brand insights
- Economic data
- Digital, social and mobile media data
- Media data
- POS data
- Econometric estimates
- Derived probabilities

Questions CCM can help answer...

- How and when do “agents”—consumers and/or businesses—make decisions, and when can my brand influence them?
- What changes should I make to my marketing strategy to maximize ROI?
- Have I selected the market segment that will yield the highest return for my brand?
- Which messages drive sales and brand equity most effectively?
- How can I improve the efficiency of media planning and performance?
- What happens to sales if I use a different mix of media channels?



CCM answers big picture questions and delivers guidance across key strategic and tactical decision areas, including targeting, messaging, and media.

TARGETING STRATEGY

- Evaluate the contribution from segments and identify the **most impactful targeting strategy**
- Connects advertising performance to the segment level, which allows clients to connect segmentation to **outcome-based ROI analysis**



MEDIA PERFORMANCE EVALUATION

- Evaluation of the impact and role of advertising, across the entire **Bought, Owned, and Earned ecosystem** — in the **same** currency
- **Optimize media performance**, across **both** brand equity and sales objectives



MESSAGING STRATEGY

- Identify the **most powerful message strategy** and which ads/channels are most effective in driving key brand attributes and benefits
- Includes a powerful **analysis of consumers' social networks...**and how you can activate them



MARKETING SIMULATION AND OPTIMIZATION

- CCM Scenario Planner forecasts via **forward-looking scenarios**...looking beyond what has happened in the past
- Test the unknown, **simulate multiple “what if” scenarios**, validate, and quantify alternative plans

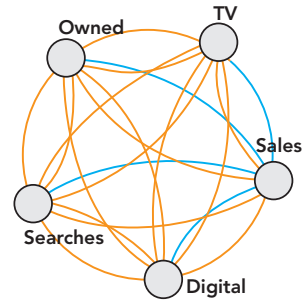
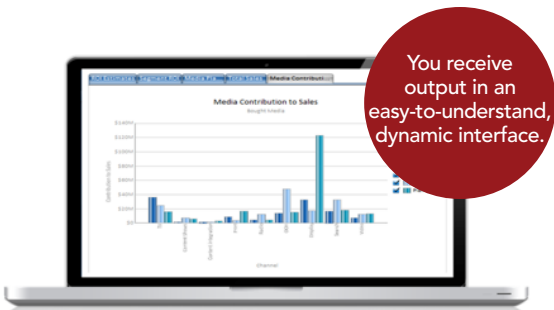


In addition, the **CCM Agile Scenario Planner™** gives you a user-friendly desktop interface from which you can quickly simulate, assess, and estimate the potential of various **future-looking media and marketing strategies** across regions, campaigns, and budgets.

We customize the Agile Scenario Planner based on your needs and preferences to deliver the data visualization, simulation, and marketing management resources that will help you share insights across your organization and maximize your marketing ROI.

CCM provides you with an **understanding and quantification of:**

- How changes to different strategic and tactical elements influence sales, brand equity, and buyer behavior
- Which marketing and media plans will produce the highest ROI
- How to better prepare for competitive response by simulating different marketing and media scenarios



Think Better Inputs and Informational Outputs

Copernicus also offers other advanced analytics tools that you can use as stand-alone services to inform strategy and planning and/or as inputs to a CCM.

Media Ecosystem Analysis

Media Ecosystem Analysis uses non-linear regression techniques to disentangle the true impact of all media channels across the entire Bought, Owned, and Earned marketing environment.

Questions **Media Ecosystem Analysis** can help answer...

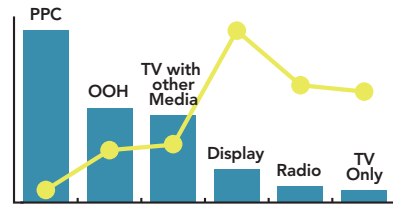
- How do the various media touchpoints work together and build off each other?
- How do changes to paid media impact owned and earned media?
- Which channels should "get credit" for a sale?
- What synergistic effects do different media channels have on each other and how can I use this information to improve overall performance?

Media Ecosystem Analysis uses advanced econometrics to model how all channels work in concert with each other to estimate the direct and indirect/“halo” impact on sales.

Like CCM, the output of this analysis includes a scenario planning tool with a desktop interface that allows you to project how changes to one channel affect other channels and, ultimately, sales.

Media Ecosystem Analysis will provide you with an understanding and quantification of:

- The benefits of an integrated approach to advertising, across Bought, Owned, and Earned media
- The synergistic performance of all media touchpoints and how to optimize it
- The direct and indirect contribution of each channel on ROI and sales



METAMedia™ – Media Response Modeling

METAMedia uses regression techniques on daily media and response data to establish the impact of each channel on short-term response rates, such as visits, clicks, likes, or even direct sales.

Questions METAMedia can help answer...

- What is the effect of my media on response?
- How can I improve the efficiency of my media plans in the short run?
- How can I maximize my owned assets, such as my website?

METAMedia quantifies the immediate impact of different media on response rates over a short-term period (e.g. 6–12 months), while holding many macroeconomic variables and other long-term effects constant.

METAMedia will provide you with **an understanding and quantification of:**

- The contribution each medium has on response rates (visits, likes, or clicks)
- The relative cost per response of each medium
- Lags and flighting of media

METAsearch™ – Search Driver Modeling

METAsearch uses regression statistics on daily media and search data to establish the short-term impact of each medium on paid and/or natural branded searches.

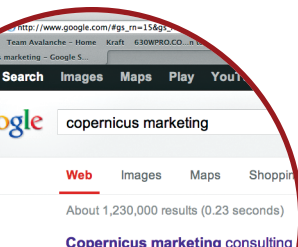
Questions METAsearch can help answer...

- Is search a key leading indicator of business performance?
- If so, what is the effect of my media on driving search?
- How can I optimize my media for search in the short run?

By facilitating an integrated approach to advertising and search, **METAsearch** pinpoints the most cost-effective brand search strategy.

METAsearch provides you with **an understanding and quantification of:**

- The contribution by medium on brand search volume
- Cost per search for each medium
- Which keywords are most driven by advertising and how to improve keyword grouping and phasing
- How to optimize media to increase brand search drivers



Data2Decisions Marketing Mix Modeling

Copernicus partners with Data2Decisions, an established marketing effectiveness consultancy, to provide custom marketing mix models and user-friendly tools to help you measure, monitor, and optimize your marketing investment.

These custom marketing mix models employ a variety of econometric and analytical techniques to turn data into actionable insight for marketing strategy. Data2Decision's solutions include assessment of pricing, promotions, and return on media investment.

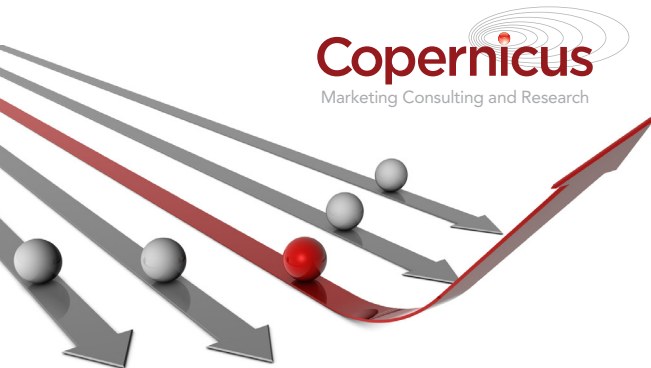
Questions Marketing Mix Modeling can help answer...

- Which factors have historically contributed to sales?
- What has been the sales effect of the various marketing mix activities including marketing communications?
- What was the ROI from marketing activities?
- What is my optimal marketing budget?

Marketing Mix Modeling will provide you with **an understanding and quantification of:**

- The historical ROI of different marketing mix and communications elements
- The marketing investment decisions that will help drive sales





Think Experience

When it comes to using advanced analytics for marketing planning, expert interpretation of informational outputs is as essential to success as the technical sophistication of the algorithms and technologies used to generate them. Maybe even more so.

Our dynamic team of former marketing practitioners and media planners; marketing strategists; sociologists and psychologists; and statisticians and data strategists recognize that the results generated by our models require clear explanation, framed in the context of your marketing and business situation. They work with you to help you understand the data, its implications, and what you can do about it.

Copernicus Advanced Analytics Team Leaders

MICHAEL VITTI, COO

A 20-year veteran in data and analytics, previously the Chief Data Officer at Repucom International.

ROLF OLSEN, VP, DIRECTOR, MARKETING ANALYTICS

A quantitative marketing specialist with 13 years of experience in marketing science and a leading thinker on marketing analytics within our corporate parent Aegis Media.

DON COZINE, HEAD OF COMPUTATIONAL MODELING

A seasoned econometric and computational modeler highly adept at creating specialized solutions for clients.

We are part of Aegis Dentsu, the world's leading focused media and digital communications group. Our sister companies Carat, iProspect, and Roundarch Isobar keep our thinking and services on the forefront of all things media, digital, social, and mobile.

Think Copernicus.

We want to transform your ability to use **big data** to improve marketing and grow your business.

Talk.

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