



## **Lindy Effect and Statistics in Marketing Research**

### **Michael D. Lieberman**

In recent years, there has been a trend of consolidation in the marketing research industry, with larger companies acquiring smaller firms. This is likely due to a number of factors, including the desire for increased scale and access to new technologies and data sources, as well as a desire to broaden product offerings and geographic reach.

This has led to a proliferation of DIY platforms promoted by the huge amount of consolidation in the marketing research industry since the Great Recession. Where did this ideology come from? Pervasive consumer-facing technology allowed individuals to believe that the latest platform company or arrogant tech entrepreneur could change everything. They were wrong.

In this article we are going to use the Lindy Effect, explained below, that traditional statistics continue to be the bedrock of sophisticated marketing research—far more so than DIY platforms—and argue that marketing research professionals, not matter what function they fill, should be well versed in traditional statistical methods and how to use them.

### **The Lindy Effect**

The Lindy effect is a theorized phenomenon by which the future life expectancy of some non-perishable things, like a technology or an idea, is proportional to their current age. Thus, the Lindy effect proposes that the longer a period something has survived to exist or be used in the present, it is also likely to have a longer remaining life expectancy.

Longevity implies resistance to change or competition and greater odds of continued existence in the future. Albert Goldman coined The Lindy Effect in 1964 when discussing the outputs of comedians. He named his law after the now-defunct, famous New York deli where comedians would gather after their shows. He argued that the professional life expectancy of a comedian was inversely proportional to how long they have been telling jokes.

Mathematicians and statisticians have subsequently theorized The Lindy effect. Nassim Nicholas Taleb has expressed the Lindy effect in terms of "distance from an absorbing barrier." Nassim Taleb captured this model well in his seminal tome, *Antifragile*.



*"If a book has been in print for forty years, I can expect it to be in print for another forty years. But, and that is the main difference, if it survives another decade, then it will be expected to be in print another fifty years."*

*"This, simply, as a rule, tells you why things that have been around for a long time are not "aging" like persons, but "aging" in reverse. Every year that passes without extinction doubles the additional life expectancy. This is an indicator of some robustness. The robustness of an item is proportional to its life!"*

### **Modern Example**

Cryptocurrencies are a terrific modern-day example of the Lindy Effect. Whether you are exploring bitcoin versus gold, or electric versus gasoline engines, applying the Lindy Effect will encourage you to 'wait and see' because each year a 'newcomer' survives, it implies a proportionate increase in its longevity. In other words, new initiatives become less fragile with every year they persist.

As Taleb explains, the Lindy effect relates age with life expectancy. For people, every year of life decreases its remaining life expectancy. A 70-year-old is expected to live 14.4 more years, and a 71-year-old is only expected to live 13.7 more years. One year of life reduced life expectancy by 0.7 years.

Conversely, for ideas and technology, every year of life increases their life expectancy.

### **Background**

As an undergraduate mathematics major and as a graduate student of statistics and decision theory, I enrolled in several fascinating courses that I never thought I would use professionally. However, the unforeseen explosion of personal computing power and the advent of open-source, sophisticated statistical software such as the R Project for Statistical Computing (R Stat) is bringing these analyzes into the marketing research mainstream.

The Lindy Effect suggests that these analyzes, which have been around a long time, will remain for a longer period. The challenge now is to bring these sophisticated analyzes into the mainstream. Below is a partial list of old/new analyzes and their functions that sophisticated research firms can place into their analytical quiver.



Class	Function	Analysis
Graph Theory	Network Analysis	Food retail clustering, social influencer analysis, purchase path analysis. Workforce analytics, organizational network analysis.
Game Theory	Consumer/Brand Behavior	Applied Behavioral Economics, Consumer/Brand Behavior, Nash Equilibrium Strategy
Forecast Modeling	Monte Carlo Simulation	Predicting market size, sales penetration of new products
Predictive Analytics	Data Mining, Predictive Modeling, Machine Learning	Coding and scoring large corporate databases, segmentation reclassification typing tools. Ad effectiveness assessment.

### The Flip Side

The flip side of the Lindy Effect questions the longevity of emerging analyzes. In my opinion, the growing number of social media strategies is most at risk. Why? As the Lindy Effect suggests, killer apps such as the wheel and electricity will remain for a long time. New, sexy stuff, not as much.

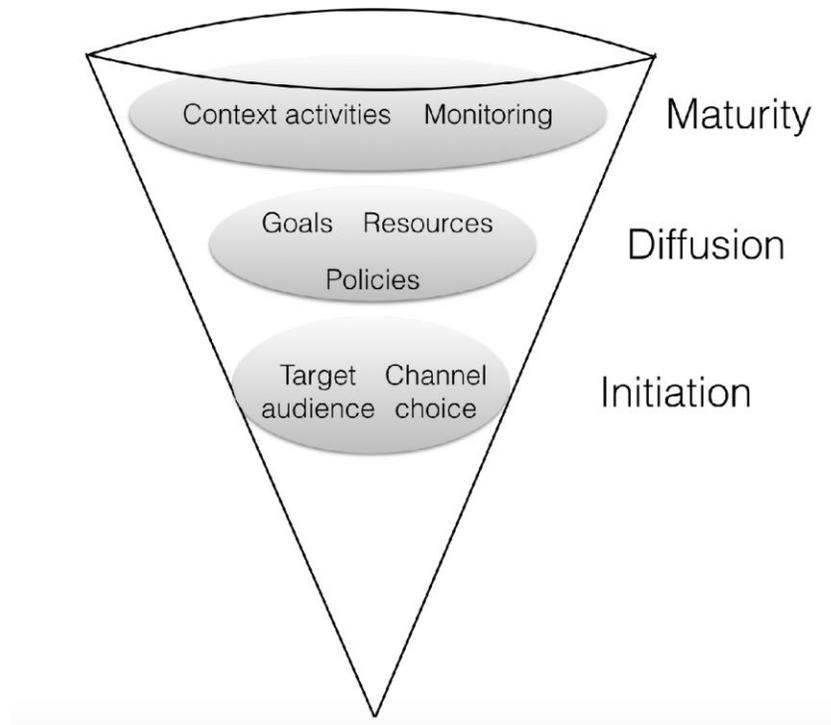
The ever-changing landscape of social media strategy and the fragmentation of micro-targeting will make many ‘sexy’ tools obsolete almost as quickly as they emerged. Below is a list of analyzes that need to change and adapt constantly, making them fragile.

Analysis	Lindy Effect Longevity Risk Factors
Cost Per Click	Ever changing dynamic of internet costs/speed.
Sentiment Analysis	Evolving use of dominant internet languages (e.g. English, Chinese)
Behavioral Economics	Evolving acceptance of once common terms that are employed to sway behavior

Another illustration of the fragility of newer analyzes is the Social Media Cone. Defined by *ScienceDirect.com*, the social strategy cone was developed for evaluating social media strategies. This framework comprises seven key elements of social media strategies.



### *The Social Media Cone*



The issue? The time between Initiation and Maturity can be extremely short. Many examples litter the product and technology highway. Here are some examples, shown in reverse order of the speed of them becoming obsolete. The ice box, Gimbels Department Store, the Pet Rock, Radio Shack, Netscape, MySpace, Grooveshark—the list goes on.

### **Conclusion**

There are several potential weaknesses that may arise when a marketing research firm relies on a DIY statistics platform. Some are listed below in order of importance.

1. **Lack of expertise:** If the person using the platform is not familiar with statistics and data analysis, they may not be able to properly interpret the results or use the tools correctly.
2. **Limited functionality:** DIY platforms may not have all of the advanced features and functionality of more professional software, making it difficult to perform more complex analyses.



3. Inaccurate results: Without proper understanding of the methods and tools, the user may produce inaccurate or misleading results.

Among the many problems brought out by DIY To my students and the upcoming professional class of marketing researchers, I offer these thoughts. Learn the math. Our industry has gone through an era of 'better-faster-cheaper'. This is passing. What's old is in.

*Michael Lieberman is the Founder and President of Multivariate Solutions, a statistical and market research consulting firm that works with major advertising, public relations, and political strategy firms. He can be reached at +1 646 257 3794, or [michael@mvsolution.com](mailto:michael@mvsolution.com).*