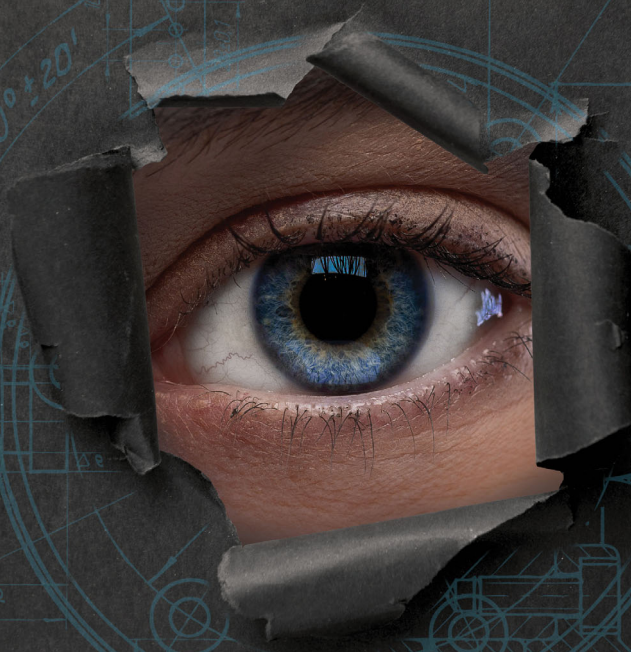


THE ATTENTION ECONOMY

A Category Blueprint



The Attention Economy

Karen Nelson-Field

The Attention Economy

A Category Blueprint

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Karen Nelson-Field
Amplified Intelligence
Adelaide, SA, Australia

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Foreword

It has been over five years since Karen first embarked on the exploration of human attention measurement in advertising, and the journey has been nothing short of transformative. As we dig deeper into the follow-up to her groundbreaking first book, it's remarkable to witness that the foundational knowledge laid out in the initial exploration has not only stood the test of time but has become the cornerstone upon which an entire category has been erected—an intricate edifice of insights, learnings, and paradigm shifts.

In the world we inhabit today, the noise has not diminished; if anything, it has become more intricate, demanding a level of sophistication in our approach to capturing and retaining the precious commodity of human attention. Karen's pioneering work has been a guiding light for marketers navigating the dynamic landscape of data abundance and attention scarcity.

This second installment looks deeper into the now-established domain of human attention measurement in advertising. Karen invites us to explore the ramifications of rapidly changing technology on businesses striving to thrive in the attention economy. In a world where misinformation can eclipse truth, her voice emerges as a beacon—steadfast in its dedication to objective theory grounded in scientific measurement and methodological rigor.

The pages that follow are a testament to Karen's unwavering commitment to uncovering the truths that lie at the intersection of data-driven insights and human-centric perspectives. Her work provides not just answers but evidence-based revelations that distill the complexities of modern media challenges into simple, yet powerful truths.

This book is not just a sequel; it is a testament to the enduring relevance of Karen's contributions in a landscape where the pursuit of attention is both an art and a science. As we consider the findings that she has illuminated, we are reminded that the quest for attention is not just about capturing moments but about understanding the very essence of what captivates us all.

Brussels, Belgium
February 2024

Laurent Larguinat

Preface—An Adventurer’s Log

*We’re very simple people at Apple.
We focus on making the world’s best products and enriching people’s lives.*
Tim Cook, CEO Apple



Mapping the Past and Charting the Future

It has been four years since the release of the first Attention Economy book, where we explored pivotal moments that transformed our industry, like the advent of hyperscaling and the ‘Like’ button, as well as the arrival of programmatic trading. A period that I said brought chaos to the CMO like no other time in marketing history. Well dear friends, I stand corrected. The last few years has seen a reckoning of ad fraud, the imminent collapse of third-party cookies, a movement towards sustainability plus our entire currency constitution called to account with industry bodies driving advanced plans for transparency and change. And if that’s not enough, a period that (due to many things notwithstanding the pandemic) has brought chaos up the food chain to the CEO, who is currently interrogating down the food chain to the

CMO on the discrepancy of increased advertising costs yet diminished results for the bottom line. A period where a whole marketing industry swooped on attention economics seizing it as an opportunity to address the questions posed by their CEO.

This book serves as a comprehensive guide, chronicling the lessons learned since the first book's release and providing a clear blueprint and point-of-view for initiating change now and outlining the changes required for the future. It aims to provide coherence to a domain that previously lacked it, covering topics such as the birth of the category, the value and monetization of attention, with updated research and stories to illustrate key concepts. It discusses rogue reach and rogue measurement, category generation and the generation of outcomes, ethical practices and practicing change. As well as relationship breakdowns and makeups, unlearning and relearning, the perfect storm and the perfect response.

To make the reading experience a bit more enjoyable and informative, the book includes breakouts with quick tips for practical use, explanations of complex concepts, amusing industry anecdotes and more, these include:

- **TAKE IT TO WORK** (quick tips for the readers to use attention in practice)
- **QUICK EXPLAINER** (where a concept needs more explanation but not to interrupt the main copy flow)
- **RAPID RECAP** (where the concept needed to be included but had already been written about in the first book)
- **MEANWHILE IN THE REAL WORLD** (funny stories about somewhat relevant situations in industry)
- **EXPERT INSIGHT** (serious stories from serious industry legends that add value to the context)

These pages are supposed to be both fun and serious at the same time, so you might encounter a diverse cast of characters that help tell the attention story including Kim Kardashian, Moira Rose, a professional thief, Han Solo, a Harvard Professor, a famous tech entrepreneur, an Emmy Award winner and a bit of 70's glam.

But above all this book is designed to get your attention so you can understand attention.

On the Shoulders of Others

But this book isn't just my story; it celebrates industry giants who embraced innovative thinking and pushed boundaries to drive progress. These pioneers recognized the potential of innovation and played a pivotal role in the historical change in measurement. So, much like a blueprint, this book offers different views and perspectives on attention measurement and economics from multiple angles, showcasing their trials, tribulations and their invaluable contributions to the most significant shift in measurement in 30 years.

Though I owe a debt of gratitude to many more, this book spotlights these exceptional individuals (full bios at the end of each chapter).

The Promise

So dear readers, as you step into this journey with me, I promise to bring you scientific facts and provide you with memorable benchmarks that will guide your work. Above all else I promise to simplify the complex, to bring calm to your chaos, to bring rigor to the laxity and to bring a dash of humor to an otherwise boring subject.

Together, we'll explore The Attention Economy in both its inception and its development, and emerge on the other side with a clearer blueprint for restoring equilibrium to an industry lost.

Happy reading.

Adelaide, SA, Australia

Karen Nelson-Field

Acknowledgements

For my Family

Boys. When I wrote my first book you were tiny, when I wrote my second you were teenagers. And now here I am thanking you again with you as young adults. Life goes so fast. Now you cook me dinner, while I am stuck in the office finishing yet another book. I know you still don't actually know what your mum does for a living, except now you think it is cool that I work with some of your favorite media brands.

Pete. Your husband skills are, without a doubt, best in class. Thankyou for being so supportive while I lived in this office for months to get this book done. And thankyou for trying to coax me out of the office on occasion to ensure I don't miss the entire Australian summer. Oh and thankyou for letting me get a cat.

Thank you family, much love to you.

For the Amplified Team

Team. As I pen this final acknowledgement, I'm reminded of the remarkable team we've become. We are such a diverse group with varying expertise, yet our unique blend is pure gold, consistently delivering outstanding work. Our rapid progress and global recognition fill me with pride. Every Town Hall meeting I am in shock how much progress we make. Equally, the fun we

have in the office, the moments of uncontrollable laughter, are sources of joy. Fun is an essential ingredient of our success, and an essential ingredient in happiness.

I am profoundly grateful to each of you.

For Laurent Larguinat, the writer of the Foreword

Laurent Larguinat is VP Mars Horizon for Mars Inc. Mars Horizon lives at the intersection of Sciences, Technology and Business. This intersection is where the magic happens. We collaborate with world-class academic partners, research organizations and start-ups to incubate, develop and deploy solutions to Mars' marketing and sales challenges.

For our Customers

Attention Advocates. You have written this book with me. Without you there would be no second edition. You have not merely been spectators, you have been active participants in the research and innovation that has literally brought change to an industry. Your willingness to step out of the ordinary has played a pivotal role in shaping the content of this book. So this book is a testament to you and the commitment you have all made to innovation.

Thank you for thinking differently.

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1

The First Episode

Children, keep an eye on these bags. Apparently in hell, there's no bellman!
Moirra Rose. Schitts Creek. Season 1, Episode 1 (2015)



Every story, much like the debut episode of a multi season Netflix series, needs initial context. While the first episode may not be quite as funny or lovable as found in later episodes, and sometimes it needs greater attention to understand the context, it serves a crucial purpose—the stage needs to be set, the key characters introduced and laying the foundation for the plot. This is the reason for this chapter—we need some plot setting.

In the first chapter of the first Attention Economy book, we went on a tour through two transformative decades—a pivotal 20-year span marked by technological upheaval, chaos, and societal adaptation. These were the years that forever altered our media landscape, gave us the Like button, programmatic and virality, and in turn reshaped our relationship with advertising forever. In these plot setting pages you will find less about the moments that mattered in media, rather the moments that mattered to seeking, researching and defining attention. These moments are important in a category blueprint.

Rest assured though, just because this chapter is plot setting it doesn't mean it's boring. Sure there is a bit of research theory in here, but it is sprinkled

with memorable fails, flying Teslas, elephants and even the Kardashians make an appearance.

So in echoing the wisdom of Moira Rose, who once aptly declared, “One must become their own champion and declare, ‘I am prepared for this!’”—should you choose to dig into this chapter, rest assured that the ultimate reward will be even more satisfying (plus the rest of the book will make more sense).

1.1 A Journey Through Advertising’s Attention-Seeking History

Happy Birthday Google

On September 27, 2023, Google marked its 25th anniversary, commemorating a quarter-century of transformative changes in the media landscape. Gone are the days when brand managers had to rely on phone calls to local newspapers and radio stations, competing for limited advertising space or airtime to convey geographically restricted, one-dimensional messages.

Today, brand managers enjoy an array of tools for creating personalized narratives and capturing global attention. Brands can effectively stand out in the crowded digital space, connecting with a broader audience than ever before. Google, and other online publishers, has opened up exceptional opportunities for audience engagement, allowing brands to build deeper connections and enhance brand recognition.

Or do they?

Amidst this seemingly limitless potential, a darker issue looms—the prevalence of unclear and unreliable measurement. Ironically, contemporary measurement methods provide little insight into human engagement or the true effectiveness of brand visibility. This leads to the question: How does this lack of transparency affect the realization of brand goals? Does this unreliability hinder or facilitate a brand’s ability to attract attention in the first place? And what impact does this have on brand recognition?

But before we dive into this Pandora’s box, let’s take a look at the historical journey of attention research across decades, and how the changing nature of inquiry has sparked fresh questions and ushered in new phases.

The History of Attention Experiments

To spare you from a lengthy and potentially dull account of the entire history of attention research, this section offers a concise compilation of some of the most influential and seminal papers in the field of attention research up to this point. It aims to emphasize the evolving focus of attention inquiry, transitioning from traditional media to digital, from basic to advanced research methodologies, and spanning industries from advertising to computer science.

While there are many more noteworthy papers that could be included, these selections have been chosen due to their widespread recognition within academic and research circles, their frequent citations, their lasting relevance, and their historical significance in shaping the field of advertising effectiveness. The following list serves as a foundation for the rest of the book.

If you're interested in a more comprehensive review of attention literature and case evidence, you may want to delve into the 2023 ARF Attention Validation Initiative, which includes a detailed literature review.

1. 1960s–1970s—Early Exploration of Attention to Print Advertising and Setting the Foundation

In the 1960s and 1970s, academic research marked the inception of attention study and set the groundwork for its connection with consumer behavior. This period yielded substantial insights into measuring and forecasting advertising effectiveness, forming the basis for comprehending attention in advertising. The study of attention was undeniably initiated by David Broadbent during this era.

a. Perception and communication (1958) by Broadbent, D.

Main Contribution: Broadbent is credited with pioneering the modern study of attention by consolidating various experiments in information theory and psychology. His groundbreaking work introduced the concept that attention functions as a filter, enabling the selection of certain information for deeper processing while filtering the rest out. Additionally, he was also the first to apply this to learning theory, specifically implicit and explicit learning.

b. A Model for Predictive Measurements of Advertising Effectiveness (1961) by Lavidge, R & Steiner, G.

Main Contribution: These authors introduced the Hierarchy of Effects model, which underscores the sequential stages that consumers typically experience when exposed to advertising: Awareness, Knowledge,

Liking, Preference, Conviction, and Purchase. Their model established the foundation for forecasting and assessing advertising effectiveness.

c. Visual Imaging Ability As a Mediator of Advertising Response (1978) by Rossiter, J & Percy, L.

Main Contribution: Rossiter introduced the groundbreaking concept of “visual imaging ability” as a pivotal factor in advertising response. This concept highlights an individual’s capability to mentally create images from visual stimuli, emphasizing its significant impact on their reactions to advertising messages. It asserts that visual imaging ability plays a vital role in shaping the link between exposure to advertising and subsequent consumer responses.

2. 1980s–1990’s Transition to Television Attention

During the late 1980s and throughout the 1990s, academic research witnessed a significant shift towards the examination of attention, particularly in the context of television advertising. These studies placed a considerable emphasis on assessing advertising effectiveness and the ability to predict viewer responses.

a. Television and Its Audience (1988) by Barwise, T & Ehrenberg, A.

Main Contribution: Barwise and Ehrenberg delivered a substantial contribution by questioning conventional assumptions about TV audiences and advertising. It offers valuable insights into audience behavior, uncovering that viewers are not as deeply engaged as previously believed. Many viewers engage in multitasking or channel surfing during commercials, challenging the notion of a captive and highly attentive audience.

b. Attention, Attitude, and Action: How Commercials Affect Television Viewers (1991) by Heath, R.

Main Contribution: In this paper, Robert Heath looks into the intricate relationship between television commercials, viewer attention, and their subsequent influence on attitudes and behaviors. The study explores how commercials succeed in both capturing and sustaining the attention of television viewers. It emphasizes that the effectiveness of advertising is not solely determined by reach but also by its capacity to engage the audience’s attention.

3. 2000s—Rise of Attention Studies in Digital Advertising

The 2000s marked the rise of digital advertising, catalyzing a shift in academic research towards the examination of attention in online environments. This period represented a pivotal stage in evaluating the effectiveness and fairness of the expanding array of online formats. It was also a time when the initial inquiries into advertising fraud began to surface.

a. High-Cost Banner Blindness: Ads Increase Perceived Workload, Hinder Visual Search, and Are Forgotten (2005) by Burke et al.

Main Contribution: The study investigates the influence of banner advertisements on visual search and cognitive workload. It aims to resolve the apparent contradiction between “banner blindness,” where users tend to overlook banner ads, and users’ complaints about distracting advertisements.

b. First attention then intention: Insights from computational neuroscience of vision (2008) Milosavljevic, M & Cerf, M.

Main Contribution: The paper underscores the importance of considering attention as a two-component construct, involving both bottom-up and top-down processes, to gain a better understanding of how attention operates. Additionally, it highlights the significance of investigating attention within the intersecting fields of marketing and neuroscience, introducing computational neuroscience to the marketing discipline.

c. An Empirical Analysis of Search Engine Advertising (2009) by Ghose, A & Yang, S.

Main Contribution: This study examines sponsored search advertising, with a specific focus on metrics such as click-through rates, conversion rates, cost per click, and ad rankings. Notably, it is one of the early studies to challenge the prevailing assumption of equal value among different ad formats, highlighting the inequities that exist.

4. 2010s—Neuroscientific Methods Arrive

The 2010s witnessed a notable shift in the exploration of advertising attention. Academic research began incorporating neuroscientific approaches to delve into the physiological aspects of attention concerning responses to advertising stimuli.

a. Predicting advertising effectiveness by facial expressions in response to amusing persuasive stimuli (2014) by Lewinski, P., et al.

Main Contribution: Lewinski makes a substantial contribution to marketing research by showcasing the connection between facial expressions of happiness and viewers' attitudes and perceptions of advertisements. It provides insights into the role of specific emotions in advertising effectiveness. Additionally, it bolsters the credibility and reliability of computer science methodologies in contrast to traditional self-reported methods.

b. Predicting Advertising Success Beyond Traditional Measures: New Insights from Neurophysiological Methods and Market Response Modeling (2015) by Venkatraman, V. et al.

Main Contribution: Venkatraman and colleagues employed neuroscientific techniques, such as fMRI and skin conductance, to explore the cognitive and emotional dimensions of consumer attention when exposed to advertising stimuli. Their research unveiled the activation of distinct brain regions in response to different advertising elements, providing valuable insights into the neural processes governing consumer attention, emotional responses, memorability, and desirability.

5. 2020s—Attention Research and Advanced Methods

In the contemporary era, researchers started to more deeply consider the impact of attentional switching in media on memory and everyday life. This period has also witnessed a blurring of boundaries between the social sciences and computer sciences, facilitating greater interdisciplinary collaboration, particularly in the field of computational neuroscience.

a. Memory failure predicted by attention lapsing and media multitasking (2020) by Madore, K. P., et al.

Main Contribution: This paper explores the connection between attention lapses and memory within the context of the contemporary digital age. It specifically investigates how instances of inattention, whether spontaneous lapses or as a consequence of media multitasking, are inversely related to an individual's capacity to remember. Their findings indicated that increased engagement in media multitasking is linked to a higher likelihood of experiencing attention lapses and subsequently forgetting information.

b. Attention in Psychology, Neuroscience, and Machine Learning (2020) by Lindsay, G.

Main Contribution: Lindsay's research highlights the pivotal role of attention in shaping the content of memory, thereby influencing the

learning process. Moreover, attention and learning are closely interconnected; attention serves as a guide for acquiring knowledge about the external world, and these internal world models, in turn, direct attention. The research shows that while conscious attention is essential for acquiring complex skills, like mastering a musical instrument, once fully learned, these processes can eventually become automatic.

MEANWHILE IN THE REAL WORLD

Apparently opening Pandora's Box is good for sustainability.

Pandora's Box is a phrase derived from Greek mythology often used as a metaphor to describe a situation where a seemingly innocent or simple action leads to a 'no turning back' moment filled with unexpected and harmful consequences. In the myth, Pandora was given a box and instructed not to open it. However, her curiosity got the better of her, and she opened the box, releasing all 'the evils', diseases, and troubles of the world (funnily enough according to some mythology literature, the target of all the evils were men). On a brighter side, the one item left in the box was 'hope'. Hope remained in the box as a gift to help those targeted by the evils during hardships and challenges that were now part of their existence.

A set of researchers in Germany wrote a paper in the *Journal of Psychology of Sustainability and Sustainable Development* titled; *Why We Should Empty Pandora's Box to Create a Sustainable Future*. According to the authors, motivation for action for climate change practices is inhibited largely by the perception of it being 'insufficiently probable'. In other words, humans are not motivated to act more sustainably in their daily lives due to lack of hope that their efforts are worth it. The authors studied the construct of 'hope' in more than 2500 people and found that indeed hope is a key ingredient for making positive changes in our world, especially when it comes to actioning sustainable development. Without it people become cynical and take on a passive stance.

This is good news for all men who are both targeted with the evils and live under the effects of climate change.

AIDA was the Kardashian Moment

When there is contention for attention, those who seek it turn to the most reliable attention getters: sex, hierarchy, calamity, and so forth. (Thomas H. Davenport & John C. Beck, 2001)

The Kardashian name has become synonymous with the art of attracting and commanding attention. If you could pinpoint a pivotal (family friendly) moment that launched them into the mainstream, it would be the premiere of their reality TV series ‘Keeping Up with the Kardashians’ airing in October 2007. Over the years, the family’s fame grew meteorically, and they became influential figures in the world of entertainment and popular culture.

Now, let’s rephrase that in the context of attention economics. When did professionals begin to recognize the significance of capturing attention in advertising, marking the pivotal moment that popularized attention attraction as a crucial phase in the marketing process? This pivotal moment can be attributed to the evolution of the Hierarchy of Effects model, known as AIDA.

AIDA, as likely 99% of you know, stands for Attention (creating awareness), Interest (generating interest), Desire (stimulating desire or want for the product), and Action (promoting a purchase or other response).

First developed by Elmo Lewis in the late nineteenth century, the ‘Hierarchy of Effects Model’ in advertising is a theoretical framework to explain how advertising can impact a consumer’s choice to buy, or not buy, a product or service. It outlines sequential ‘stages’ or ‘steps of learning’ that consumers reportedly go through in the lead up to a sale. The theory is that when advertisers understand these stages they can build structured advertising messages around the user stages to improve the odds of action.

In a nutshell the Hierarchy of Effects Model attempts to explain how advertising works.

Though it originated in the early 1900s, more than a century later, these models continue to undergo refinement and adaptation. This ongoing evolution closely aligns with the natural progression of technology and shifts in the media landscape, as well as how people engage in communication and social interactions in the post-connectivity era. The table below (Table 1.1) shows a timeline of the critical papers in the field, and highlights the evolutionary modifications.

What is the shared characteristic among these models? Attention.

Among the papers listed, approximately 65% either include the term “attention” in their titles or incorporate stages related to attention in their

Table 1.1 A summary of the incremental development of hierarchy of effects models

Date	Model	Stages	Author	Modification
1898	AID	Attention, Interest, Desire	E. St Elmo Lewis	Original guide for salesmen to be successful in moving a prospect to buy
1900	AIDA	Attention, Interest, Desire, Action	E. St Elmo Lewis	Added the Action stage to complete the selling process
1911	AIDAS	Attention, Interest, Desire, Action, Satisfaction	Arthur F. Sheldon	Added ' Favorable Attention ' and ' Permanent Satisfaction ' as a necessary part of the persuasive selling process
1921	AIDCA	Attention, Interest, Desire, Caution, Action	Robert E. Ramsay	Introduced Caution to contend direct response advertising push back
1921	AIDCA	Attention, Interest, Desire, Conviction, Action	Harry D. Kitson	Introduced Conviction as related to how the mind of the buyer works
1922	AIJA	Attention, Interest, Judgement, Action	Alexander Osborn	Introduced Judgment as a component of the creative process
1938	(AID(W)C(S)PS)	Attention, Interest, Desire (Want), Conviction (Solution), Purchase, Satisfaction	Edward K. Strong, Jr	Introduces three different stages of Attention and interest before 'want' can occur
1956	AIDMA	Attention, Interest, Desire, Memory, Action	Merrill DeVoe	Referred to the importance of Memory in constructing advertisements
1961	ACCA	Awareness, Comprehension, Conviction, Action	Russell H. Colley	First consideration of Comprehension as it relates to advertising goals. Introduced DAGMAR related to goals.
1961	CAN	Cognitive, Affective, Conative	Robert Lavidge and Gary Steiner	Introduced ' Realm of Cognition ' being important to successful advertising
1961	EPC(K)C(A)A	Exposure, Perception, Communication (Knowledge), Communication (Attitude), Action	Advertising Research Foundation	First supported model for Practitioners
1962	AIETA	Awareness, Interest, Evaluation, Trial, Adoption	Everett M. Rogers	First to report Trial as an important part of the process

(continued)