

A Few More Minutes for Sale: Why Attention Is A Scarce Resource And How Media Organizations Can Use Neuroeconomic Wisdom To Buy More of It

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Abstract

Neuroeconomics seeks to explore economic decisions and understand the mechanisms of decision-making and action. The classic economists lucklessly view such a complex undertaking as not a conscious composition of value judgment but instead of surface computational processes. This lack of appreciation of the humanistic approach to conjure the neurological and psychological impact of decision-making brings us to the crossroad of understanding what is going on in the minds of consumers of multimedia. Could it be attention problems, or is it that we have sifted through what matters and found a niche for what suites our test?

At the centre of all the hubris behaviour among economists, neuroeconomics, behavioural psychologists and the common 'wana be' is the survival and continued existence of a field that started as a form of daily notice in the 59BCE. The thesis that transcends the debate for survivals is, how can we buy a few more minutes of attention through multichannel multimedia and journalism to save an industry of great importance from digital annihilation and complete obliteration?

This paper takes neuroeconomics and the general business dimension to inform and contribute to an appreciation of the consumer of media products and services. It speaks to how decision making and pays particular attention to media productive outputs such as news, advertising from traditional formats in the wake of the mighty digitization, and accessible media sources can impact.

Keywords: Media, Consumer, Neuroeconomics, Digitization, Decision, Attention

Introduction

The debate concerning the origins of Economics and its standards being grounded in the thinking of Adam Smith¹ (1776) is almost non-negotiable. However, Neuroeconomics has come in as a ‘disruptor of thought’, considering the work of the godfather, as the more psychological thought process of decision around choice and behavioural outcomes (Glimcher, Camerer, Fehr, & Poldrack, 2009) than anything else. This paper uses the development of neuroeconomics to appreciate human decision-making and subsequent behaviour to peer into media attention.

For purposes of context; in the words of (Atli & Yilmazata, 2016), ‘neuroeconomics is the question of how the brain and not “the enlightened consumer” makes economic decisions and seeks to explore the mechanisms of decision-making which classic economists view not as conscious value judgments but merely computational processes.’ In this discourse, we use several neuroeconomics concepts to inform the submissions and debates on what could be at play in the media consumers mind.

To begin with, one asks, is it this lack of appreciation of the humanistic approach to conjure the neurological and psychological impact of decision making that brings us to the crossroad of understanding what is going on in the minds of consumers of multimedia? Could it be attention drifting away, or it is just the battle for who can be heard while making sense of what to ignore?

Purpose

The paper aims to inspire conversation on consumers’ attention to news and information from the media’s journalistic productive output vehicle. The paper situates an opportunity to use neuroeconomics to study the consumer’s attention; be it in media or broadly any consumer receiving information, i.e. news, advertising and how they engage in decision processing and subsequent action. More broadly, the paper’s application is peered in appreciating the dynamic

¹Wealth of the Nations was published in 1776 and became a standard for understanding the economic behaviour, choice and decision making of citizens; even though this thinking was considered economic, its widely debated that it is a considered opinion that Smith’s discourse was more of psychological insights (Glimcher et al., 2009).

consumer in an overly overloaded information-driven environment; it speaks to management and business decision making as aided by neuroeconomic methodologies.

Design/Methodology/Approach

The paper takes the form of an exploratory research approach. It takes a slant that moves a motion of relevance in a multidimensional and cross-disciplinary field of consumer behaviour and decision-making in the precarious area of consumer attention through their decision processing.

The Media and Its Markets: Could They Be Under Siege from The Unidentical Demons Of Relevance, Reliability And Credibility?

The practical understanding of how markets and industries work is held together by business & commercial models and customer satisfaction (Lawson-Borders, 2009); the media industry is not exempt from business landscape developments. It is also clear that journalism and media, like any other business, face challenges as presented by the constant shift in macro and microeconomic landscapes of nations, markets and industries. The media landscape in the traditional sense has been confined to print (newspapers & books), digital media (television and film), radio and so on; Beam (2016) contends that the field stretches to as far as telecommunications and digital communications, along with associated industries such as advertising. The media industry is complicated. Its play with economics is just as relevant as its meddles with politics.

The pontification of journalism and media being under threat cannot be substantiated yet; however, could this be a threat of relevance, or could the industry be under siege from the unidentical demons of relevance, reliability and credibility?

Those are elementary questions to the lay mind, but the contextual arguments to how journalism and media corporations would survive digitalization deserve attention. If there exists an industry that has stood the test of time, it is the journalism and media industry. From the historical perspective, It is reported that the earliest known journalistic product was a precise news sheet of the Acta Diurna, which was circulated in Rome before 59 BCE; this was a daily publication containing a daily roster of essential events and public speeches from the elite and compelling comforts of the palace of Rome (The Editors of Encyclopaedia Britannica, 2020).

Journalism & Media is Big Business: How Strategy Can Help Media Businesses to Rethink Survival

Research in the media business is typically aligned to concepts and theories within the domain of management (+30%), economics (+10%), more broadly together with related fields accounted for 77% indicates a longitudinal study conducted from 1988 to 2003 (Mierzejewska & Hollifield, 2006). Of critical importance to the array of strategic management theories and the media is that of the resource-based view (RBV).

The RBV takes on the deliberation that each business or industry remains a collection of unique yet exceptional resources that enable it to conceive and implement strategies (Schmid et al., 2001).

As we look at the components of the media businesses and their subsequent percolation in digitization and hard news, we need to pay attention also to the resource capacity of firms and their ability to serve a very complex and fragmented market.

Success or failure in any industry is beneficial only when an understanding of the resources available to firms. That focuses on utilizing assets, skills, capabilities and public image ‘reputation’ (Deephouse, 2000) and using them to create competitive and comparative advantage through the products they put out in the market (Deephouse, 2010).

Strategy is responsible for bringing together the resources (tangible, intangible & human), the capabilities and success factors, lessons and insights from the marketplace to develop (i.) competent human resources (ii.) products with a strategic fit for the market, (iii) respond to competition and create a sustained niche or marketwide advantageous business (Grant, 2006).

Neuroeconomics And Media Disruptions: The Reshaping Of An Industry

Having identified, taken inventory of the available strategic resources, it is clear there is digital disruption in the media industry. However, we can now run to Neuroeconomics to understand what is happening in the depths of human behaviour and economic decision making, which can affect the sector and subsequent developments.

In terms of industry development, we have consistent technological disruption on our hands. Research focusing on technology and innovation has brought that the media are not excluded from industries experiencing the surge of ‘disruptive’ technologies (Schmid et al., 2001).

Conceptually, disruptive technologies are defined as “science-based or science-driven in-

novations which have the potential to create a new industry and or transform existing ones (Day & Schoemaker, 2000, p. 2).

Looking To Neuroeconomics and Something The Media Can Learn About Their Consumers

Principally, we look to neuroeconomics because of its ability to facilitate the conception and building of models which go beyond market structures and answer more complex cognitive and behavioural dispositions of consumers. Based on Neuroeconomic research and submissions of (Camerer, Colin, Cohen, Ernst, Glimcher & Laibson, 2016), this paper substantiates that the media industry can be helped by Neuroeconomics in the following ways:-

1. *'Neuroeconomics catalyzes model development. Neuroscientific data and neuroscientific models have inspired economists to develop many new economic models'* (C. Camerer et al., 2016):- seeing as neuroeconomics focuses on theoretical modelling and empirical measurement; that is, it encompasses the complexities of building on the outcomes of research and models such as the resource-based-view and randomized pragmatic measures of decisions in the market place. Through this process, models that reveal deep cognitive insights and support research on how human beings behave and act during media stimuli can be studied using frequency magnetic resonance imaging (fMRI) to understand how to pitch and position media corporations their products in the marketplace. Technologies such as fMRI help measure brain activity during such activities as problem-solving, choice, consumption, information revelation, and almost any conceivable type of economic activity (Kable & Glimcher, 2009; Redmond, 2003). With such evidence generated, we further learn that the value of reducing empirical doubt is one at decision processing and subsequent implementation is critical here (Glimcher, 2005; Glimcher & Rustichini, 2004).
2. *'Neuroeconomics provides a new, powerful way to test economic models which ambitiously specify both how choices depend on observables, and what computational mechanism leads to those choices'* (C. Camerer et al., 2016):- decisions are made in different contexts, we are aware of the social, risk and flight contexts. Through magnetic resonance imaging (fMRI), research (Hampton, 2007; Park et al., 2019) has revealed that the brain through the ventromedial prefrontal cortex expects rewards as an individual utility while the lateral frontopolar cortex encodes group utility (i.e., pending rewards of alternative strategies beneficial for the group), this exposition is key to understanding

what kind of media the media corporation should focus on, amid attention withholding consumers.

Further, (Park et al., 2019) suggests that in a group setting, individuals act via the reinforcement of what others believe and thus make decisions by switching between strategies, the news is never consumed in isolation of what others would feel about it; that is, when it is required to change one's strategy or switch attention, the brain switches to adaptive collective mode, which takes into account attention, options and most viable option: this is processed in the anterior cingulate cortex and the temporoparietal junction.

Broad Findings

Neuroeconomics can study brain activity and mechanisms in the moment using fMRI and build models that engage in understanding cognitive and behavioural outputs. Besides, fMRI is the foremost of technicism developments available for appreciating special devices which peer into understanding human behaviour, i.e. focus, and decision engagement. Despite the availability of empirical evidence of neuroeconomics approaches, there is little uptake of the advantageous and robust models which can be developed to benefit business leaders and, more specifically, those within the media industry.

Conclusions, Discussions and Recommendations

The arrival of the digital age presents both opportunities and challenges beyond the media industry; the media landscape has indeed encountered some tabulate yet opportunistic times. They have had on their hands the rise of the portable technology gadgets as enabled by technology disruptions, the push of information and news to the hands of people as encouraged by the growth in internet and virtue media distribution.

Do we know whether the media industry has used these opportunities wisely or not? That we may not be able to answer, but we know for sure that through the understanding of various economic models of information, the strategic, innovative and market-oriented corporations have cashed in.

According to (Zhu et al., 2012), decision-making in the presence of competitive intelligent agents 'consumers' is fundamental for social and economic behaviour and survival. We are aware that information, much of it generated by the media houses and corporations, presents a competitive advantage for the one who has it; this justifies that credible news and information

are still relevant to society, but the market landscape will only listen to the one who can buy just about enough attention from them.

The media is big business, and it is the media owners' job to understand that through Neuroeconomics, they can peep into the minds of their consumers to appreciate how the decision process works in the face of multiple information options. They need to pay attention to purchasing the watch by Neuroeconomic building models and pragmatic computation ability, which assures how the production and dissemination can capture this attention and retain to winning business ways.

In conclusion, (C. F. Camerer, 2003)) states that '*attention is the ultimate scarce cognitive resource*'. This scarce resource needs to be understood from the neurological, economic, management, and psychological dimensions to win the battle of survival and growth. We can only understand attention in the face of economic decision making through Neuroeconomics; that is, the long and agonizing journey to finding solutions for the industry may be cut short if the decision-makers in the media industry have the time to turn an ear to this new field.

Practical and Managerial Implications

Insight into what a consumer is thinking and how they will make decisions based on their thoughts based on their social-economic environmental awareness (group behaviour depending on social class) will continue to shape how consumers are viewed in the face of decision making in different industries. Consequently, media and generally other sectors need to move from a mechanical way of understanding how they shape consumer attention and their industry preservation to a more specific and psychological driven approach that provides more full-bodied results upon which they can base their strategic points of departure and decisions which ambit their industries.

Originality and Value

Acknowledging the complexity of consumer attention and subsequent decision making, this paper provides a starting point to understand the ever-dynamic consumer. The paper also introduces the first steps in how management and business researchers and practitioners can use neuroeconomics in a more practical yet authoritative way to aid strategy, business decision-making and develop attention-grabbing offerings when it comes to their communicative offerings.

Limitations: The research does not undertake a real-time scientific observation of activity and could have been over-reliant on secondary data, limiting the extent to which it can promote

the agenda of attention in the broader context of the use of fMRI how it could be applicable in practicable situations. More Real-time observations of brain activity

Future Research: The opportunity for research in areas studying attention spans in consumers, especially with the constant development of communication channels and the reduction in attention span due to information and communication overload and evolution, is crucial. On the other hand, business and management studies can use strategic approaches to form communication and marketing efforts with the aid of neuroeconomics to create market offerings. Lastly, the unexplored area of internal communication and attention within organizations, i.e. staff meetings, training and conferences, could benefit from research in this area. A plethora of further empirical and operational studies/research could be developed from where this paper has ended; this is an introduction to what could develop into multidisciplinary research for academics and researchers and practical tools for managers and business leaders.

References

- Atli, D., & Yilmazata, M. (2016). *Neuroeconomics and Media Economics* (pp. 33–44). <https://doi.org/10.4018/978-1-4666-9989-2.ch002>
- Beam, R. (2016). *Media Economics - Communication - Oxford Bibliographies*. Media Economics - Communication - Oxford Bibliographies. <https://doi.org/10.1093/OBO/9780199756841-0069>
- Camerer, C., Cohen, J., Ernst, F., Glimcher, P., & Laibson, D. (2016). The Handbook of Experimental Economics: Neuroeconomics. In *The Handbook of Experimental Economics, Volume Two*. <https://doi.org/10.1515/9781400883172>
- Camerer, C. F. (2003). Behavioural Game Theory. Experiments in Strategic Interaction. *The Journal of Socio-Economics*, 32(6), 717–720. <https://doi.org/10.1016/j.socec.2003.10.009>
- Day, G. S., & Schoemaker, P. J. H. (2000). Avoiding the pitfalls of emerging technologies. *California Management Review*. <https://doi.org/10.2307/41166030>
- Deephouse, D. L. (2000). Media Reputation as a Strategic Resource: An Integration of Mass Communication and Resource-Based Theories. *Journal of Management*, 26(6), 1091–1112. <https://doi.org/10.1177/014920630002600602>

- Deephouse, D. L. (2010). Media Reputation as a Strategic Resource: An Integration of Mass Communication and Resource-Based Theories. *Journal of Management*, 26(6), 1091–1112. <https://doi.org/10.1177/014920630002600602>
- Glimcher, P. W. (2005). Indeterminacy in brain and behaviour. In *Annual Review of Psychology*. <https://doi.org/10.1146/annurev.psych.55.090902.141429>
- Glimcher, P. W., Camerer, C. F., Fehr, E., & Poldrack, R. A. (2009). Introduction: A brief history of neuroeconomics. In *Neuroeconomics*. <https://doi.org/10.1016/B978-0-12-374176-9.00001-4>
- Glimcher, P. W., & Rustichini, A. (2004). Neuroeconomics: The consilience of brain and decision. In *Science*. <https://doi.org/10.1126/science.1102566>
- Grant, R. M. (2006). Cases to Accompany Contemporary Strategy Analysis (5th ed.). In *R&D Management*. https://doi.org/10.1111/j.1467-9310.2006.00453_1.x
- Hampton, A. N. (2007). Model-based decision making in the human brain. In *Thesis*.
- Kable, J. W., & Glimcher, P. W. (2009). The Neurobiology of Decision: Consensus and Controversy. In *Neuron*. <https://doi.org/10.1016/j.neuron.2009.09.003>
- Lawson-Borders, G. (2009). Logo Theories of Media Economics. *Communication*, 1–19. <https://www.oxfordbibliographies.com/view/document/obo-9780199756841/obo-9780199756841-0118.xml>
- Mierzewska, B. I., & Hollifield, A. C. (2006). Theoretical Approaches in Media Management Research. In *Historical Trends and Patterns in Media Management Research*. <https://doi.org/10.4324/9781410615589.ch3>
- Park, S. A., Sestito, M., Boorman, E. D., & Dreher, J. C. (2019). Neural computations underlying strategic social decision-making in groups. *Nature Communications*. <https://doi.org/10.1038/s41467-019-12937-5>
- Redmond, W. H. (2003). Decisions, Uncertainty, and the Brain: The Science of Neuroeconomics. *Journal of Economic Issues*, 37(4), 1196–1198. <https://doi.org/10.1080/00213624.2003.11506658>
- Schmid, B. F., Glotz, P., Gomez, P., Mierzejewska, B. I., Albarran, A. B., Bates, B. J., Chan-olmsted, S. M., Collins, R., Compaine, B. M., Dowling, M., Eisenmann, T. R., Hollifield, A. C., Picard, R. G., & Wirth, M. O. (2001). The International Journal on Media Man-

agement Editorial. *Jmm*.

The Editors of Encyclopaedia Britannica. (2020). Journalism | Definition, History, & Facts | Britannica. In *Encyclopaedia Britannica*. <https://www.britannica.com/topic/journalism>

Zhu, L., Mathewson, K. E., & Hsu, M. (2012). Dissociable neural representations of reinforcement and belief prediction errors underlie strategic learning. *Proceedings of the National Academy of Sciences of the United States of America*. <https://doi.org/10.1073/pnas.1116783109>