

Scientific Inquiry: The Philosophical, Methodological and Theoretical Debates to the Study of Digital Marketing

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Abstract: *The ubiquitous adoption of technological devices and the attendant inquiry of how these devices influence consumer behavior have given prominence to the emerging discipline of digital marketing. Unfortunately, the integration of this discipline in the curriculum has remained a daunting task among curriculum planners in the developing countries. Part of the reason is that the philosophical pillars and methodological approaches are not well understood. Accordingly, the purpose of this study is to provide a conceptual explication of the philosophical, methodological and the theoretical characterizations of the digital marketing research stream. The study also highlights the theory building process and gave examples of dominant theories in the discipline.*

Keywords: digital marketing, ontology, epistemology, quantitative, qualitative, realism, relativism

1. Introduction

Digital marketing constitutes one of the fastest emerging disciplinary leanings that has attracted strident intellectual debates about its philosophical, methodological and theoretical contextualization (Zwick and Dholakia, 2004). This is quite understood because it is a cross breed of many disciplines encompassing marketing, management, computer science, sociology and psychology. The ubiquitous diffusion of digital channels has opened different purchase options to consumers with the attendant massive revenue to firms (Khan and Siddiqui, 2013). Interestingly, even governments at all levels also benefit from the use of digital marketing in their delivery of social services (Zavattaro and Sementelli, 2014).

However, the adoption and use of digital marketing by both firms and government differ greatly between the developed and developing countries (Zhang, 2013). While developed economies have embedded digital marketing in their political, economic and social activities, developing countries still struggle with the innovative channels it offers. Fundamentally, the absence of sound curriculum on the subject is the major reason why developing countries have not reaped the best from digital marketing. Practically, successful curriculum development of any discipline is based on the sound knowledge of the philosophical, methodological and theoretical characterization of that discipline (Sloan and Bowe, 2014). Unfortunately, digital marketing has lagged behind in the developing economies particularly Nigeria, because majority of the curriculum developers lack the necessary knowledge, nay, the philosophical foundations of the research stream (Eze, Awa, Okoye, Emecheta and Anazodo, 2013). Accordingly, the aim of this study is to provide clarification on these issues. Specifically, this study aims to:

- Evince knowledge on the philosophical foundation of the digital marketing research stream.
- Explain the use and application of the different methodological approaches in the study of digital marketing.

- Provide examples of the dominant theories used in adoption of digital marketing at both individual, firm and government levels.

To this end, this study makes key contribution to literature in the following ways. (1) It will demystify the philosophical concepts shaping the digital marketing research stream. (2) It will provide a solid ground for the teaching of digital marketing in Nigerian Schools. (3) It will help digital marketing educators in understanding the different methodological and theoretical perspectives to the study of digital marketing.

2. Brief Background on Digital Marketing

The Financial Times postulate that digital marketing entails ...the marketing of products or services using digital channels to reach consumers. The key objective is to promote brands through various forms of digital media. Digital marketing extends beyond internet marketing to include channels that do not require the use of the internet. It includes mobile phones (both SMS and MMS), social media marketing, display advertising, search engine marketing, and any other form of digital media (FT, 2018).

Digital marketing was traditionally thought to be the use of internet for the promotion of goods and services (Wymbs, 2011). This understanding limited the scope of the discipline until recent emergence of other channels such as social media, mobile devices, robotics and artificial intelligence. Digital marketing has been used by both firms and governments to reach their target audience. For government, reaching the people has been made easier through government websites, mobile devices, social media, etc., while firms have more creatively used the platform for the maximization of profit.

Unfortunately, the developing countries are not at par with the developed world on the concept. While it is acknowledged that website and social media have witnessed increasing adoption in recent times in the developing

countries, it is on record that these channels are underutilized (Niehaves and Plattfaut, 2014), due mainly to government policies.

2.1 Philosophical Foundations of Scientific Inquiry: Ontology and Epistemology

A researcher's beliefs about the world affect his views about the world, the methodology of his research and also the process of data collection (Hussey and Hussey, 1997). The underpinning factor in human activity is dependent on which of the world views one holds (Easterby-Smith, Thorpe, and Jackson, 2008). For this reason, knowledge and a firm grasp of these philosophical foundations are very imperative, especially to those who undertake research activities. Ontology is the theory or science of being which also concerns how the world is built and whether social entities should be considered as external from the social actors (Poetschke, 2003). The philosophy of ontology has its foundation in the physical sciences as physics, biology, and so on. Within this are realists and the relativist.

According to the realists, part of reality is ontologically independent of the human mind. Again, they posit that truth is a semantical relation between language and reality which its best indicator is given by the systematic inquiry through the method of science. According to the relativist, some central aspect of experience, thought, evaluation and even reality is somehow relative to something else. Again, they posit that concepts, beliefs, perception, epistemology, ethics, semantics, practice, truth, reality, etc. is/are relative to culture, language, historical period, cognitive architecture, choice, etc.

From the consumer behavior perspective which is the root focus of digital marketing, the viewpoints of the realist have been subjected under severe criticism. Anderson (1988) argues that there is no universal criterion for absolute truth especially as human behavior is highly context dependent. Though human measurement has been subjected to scientific method of inquiry, however, culture, environment, religion, etc. have been found to be important moderating variables. In the marketing science, studies have been conducted with all the modeling, reliability, validity checks in place, yet different results have been recorded between the developed and developing world. According to Peter (1992, p.73), 'the assertion that knowledge claims can be critically evaluated and tested with the 'fit' between knowledge claims and reality with reality as the adjudicator is an example of the fallacy of (scientific) realism whereby 'unless' science can know with certainty what truly is the real world, it is impossible to judge the extent to which knowledge claims can truly represent or correspond to that world'.

From the foregoing, it is clear from the consumer behavioral sciences to believe that there is nothing like absolute truth. This has given rise to the postmodern research methodologies in which the underlying behavioral influences to consumer choice has been the preoccupation rather than the codification of numbers that shallowly summarize data. This leads to the recent popularity of qualitatively based research. Though the realist viewpoint held sway in decades past, but suddenly, marketers are

beginning to realize the uniqueness of the development stage of the market, culture, education, language, exposure and social-political circumstances.

Epistemology, on the other hand seeks to explain how humans know the world. It is therefore the theory of knowledge. There are two things here. One is that we have a world that is not interfered with by human activities and another is that the world is shaped by the activities and actions of social actors. This leads us into another realm of the argument, positivism. This holds that it is possible to observe everything without interference. This belief originated from the natural sciences and has been adopted into the social sciences to mean that a researcher can only observe without interfering with his process of observation. Here, there is the generation of hypothesis to which observation is tested, and answers gotten from the process forms the conclusion of the research. At the opposite end of positivism is relativism which has been treated above. Methodologically, it is also known as interpretivism or phenomenology. The ontological position here holds that the world is socially constructed and for this, it is not possible for a demarcation to be made between the observer and the observed. That the interpretation of the observer affects that being observed.

Analytically, both positivism and interpretivism have their strengths and weaknesses. On the debit side of positivism is that "theoretical terms that are not directly amenable to observation are not considered genuinely scientific; they must be susceptible to the rigours of observation" (Bryman and Bell, 2011:15). On the credit side is the fact that knowledge is gotten through gathering of facts which forms the basis of laws. One of the weaknesses of interpretivism is that the conclusion of the research process is the brainchild of the researcher and its strength lies in the fact that the researcher can draw some opinion from the process of observation which helps to shape the study.

3. The Thorny issues of Methodologies

At this point, it is necessary to begin to narrow down the discourse to substantial elements of the research methodology: Quantitative and Qualitative methodological approaches. The quantitative methodology aligns with the positivist school. This ideology borrows the steps of that obtained in the natural sciences. Here, the researcher sees himself/herself as distinct and separate from the research process. In management sciences, the use of hypothesis, numbers, surveys and statistics are paramount in the quantitative research approach.

On the other hand, the qualitative research aligns with the relativist or interpretivist ideology. The focal point is on the epistemological position that the world is socially constructed and all knowledge is through observation and interaction. They employ the use of interviews, focus groups and a descriptive approach. Closely related to this ideology is constructionism. Constructionists believe that "the categories that people employ in helping them to understand the natural and social world are in fact social products. The categories do not have built-in essence; instead, their

meaning is constructed in and through interactions” (Bryman and Bell, 2011:22).

3.1 Is Digital Marketing a Science?

However, demarcating science from pseudoscience is important because it practically guides and enhances appraisal of human activities and institutions. One, medical science ensures good medical practice while medical pseudoscience may breed dangerous interventions. In the courts, scientific evidence must be seen to be a fact other than pseudoscientific evidence which can be made-up. Environmental policy makers also need scientific evidence to handle environmental hazards. Finally, in education, demarcating science from pseudoscience makes educationists and parents to guide and protect their children from ‘swallowing’ some religious claims that are wrapped as evidence. From all the studies conducted on digital marketing, elaborate scientific processes have been followed. To this end, one can infer that digital marketing is a science.

3.2 The Relevance of Theories and Models in Digital Marketing

Marketing, as often been said, is a discipline that is quite recent. For that reason, many of the theories and models were borrowed from economics, psychology and sociology. However, there are many streams of research in marketing that are developing theories of their own. For instance, relationship marketing, sustainable marketing, business networks. Research in these areas often comprises a multi-disciplinary approach. By that, many researchers use and borrow theories and models from those disciplines to test and explain their propositions.

3.3 Levels of Theory Building and Modeling

In the digital marketing body of knowledge, theoretical foundations have often comprised those from the information systems and consumer behavior. For instance, the Theory of reason action (TRA) (Fishbein and Ajzen, 1975), Theory of planned behavior (TPB) (Ajzen, 1991), Unified theory of acceptance and use of technology (UTAUT) (Venkatesh, Morris, Davis, and Davis, 2003), Expectation confirmation theory (Oliver, 1977). These are general conceptions that result from the rational or intellectual activity. Many research streams that deal with technology adoption and consumer behavior have adopted the above theories. Additionally, each of the theories contains concepts that schematically represent relationships which are measured and tested to justify and reject research hypotheses.

Besides theories, models have also been extensively used. Predominantly, most of the models are borrowed from the information systems field. Generally, among the groups of models in use in this research stream are the theoretical models. These are ‘sets of assumptions about some objects or system (especially about its internal structure).’ Some of the frequently used models in this area includes technology acceptance model (TAM) (Davis, 1989).

Thus, theory building in the digital marketing body of knowledge follows thus:

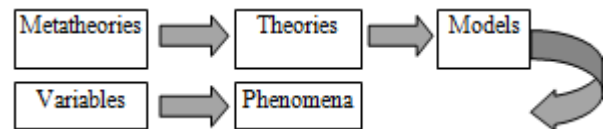


Figure 1: Flowchart of theory building in digital marketing

From figure 1 above, levels of theory building follow the five processes. First is the meta-theory. At this stage, theories are devised to explain an existing theory. Secondly, theories are used. These constitute the foundation stones for any scientific inquiry. Third, models which constitute the combination of constructs to explain phenomena. Fourth, variables are composed which are concepts that are used to test a proposition, while lastly phenomena which entails an observation or scientific fact.

3.4 Inferences and Explanations used in Digital Marketing

Inferences play a major role in digital marketing research. Prominently, the **hypothetico-deductive model** of inference has been mostly used. This type of inference comprises a research problem and a hypothesis which is supposed to resolve the research problem. Hypotheses generally explain the facts and regularities that serve as starting point for investigation; are logically consistent, precisely formulated and compatible with previous theories; testable; informative and as simple as possible. Explanation in the digital marketing research follows the **functional explanation model**. In this case, the function of the research subject is underpinned in the overall study.

3.5 Measurement issues in Digital Marketing

While there are many theories and models in use in the digital marketing body of knowledge, the technology acceptance model (TAM) (Davis, 1989) is the most dominant. The TAM model investigates the impact of technology on user behavior, using two key constructs: perceived usefulness (PU) and perceived ease of use (PEOU). In addition to the original TAM model, other constructs have been added to deepen consumers’ intention to purchase products and services online. For instance, online purchase of tourism and hospitality. The ontological and epistemological assumptions imply that each of the concepts is measured in a scale in order to understand different user’s behavior in adopting a new technology. Other additional constructs that can be used for this online purchase of tourism and hospitality are as shown below.

a) Attitude (Independent variable)

This implies the user’s disposition to act in a certain way. Applied in our example (e-tourism adoption), it means the favourable disposition to adopt and use information technology for tourism purposes.

b) Perceived usefulness (Independent variable)

This is an element of the TAM model. It means the belief that adopting the technology will increase the user’s performance. Applied in our example, it stands for the benefits the tourist stands to gain by using e-tourism. By browsing and checking possible information, blogging

and sharing content, the tourist is able to get the destination image of the organization.

c) Perceived Ease of Use (Independent variable)

This is the degree to which the user believes that using the system will be free of effort. Applied at the individual level, it means the time, effort and cost the user stands to gain by using e-tourism. The website provides information that makes the online purchase easy and less of stressful mental effort.

d) Subjective Norm (Independent variable)

This implies the social pressure the user goes through which influences the need to perform the action. The tourist's use of technology because of others using it or those he/she considers important encourages him/her to use it.

e) Privacy Concern (Independent variable)

This is the concern users have in the web concerning sharing their personal information to marketing companies for advertisements and newsletter. It also means the user's non-consent before his/her data is shared.

f) Interactivity (Independent variable)

This is the ability of the user through social media, blogs, etc. to share opinions and content. The provision of Frequently Asked Questions (FAQ) that answer the user's questions.

g) Trust (Independent variable)

This is the degree of confidence that users have in the online exchange or channel. The believe that the information provided on the webpage are true and believable.

h) Purchase Intention (Dependent Variable)

Purchase intention is seen as the possibility that consumers will plan or be willing to purchase a certain product or service in the future. It implies that an increase in purchase intention means an increase in the possibility that consumers will buy the product in the future.

4. Conclusion

Digital marketing is still an evolving research stream. As a matter of fact, the understanding of the philosophical, methodological and theoretical pillars is of immense benefit for the furtherance of the discipline. It is hoped that this study has shed more light on these assumptions especially as it relates to its efficient take off in the Nigerian context.

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