

Evolutionary framework of hierarchy of effects models: exploring relevance in the shifting of customer path

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Abstract

Purpose – The hierarchies of effects models have been perpetually updated across different time period. Ever since the evolution of the primary customer path indicated through the Attention, Interest, Desire, Action model in the 1900s, the hierarchical frameworks have witnessed a significant transformation in context to the present age of Web connectivity. Therefore, the purpose of this study is to understand the transformation in the hierarchy of effects models in the age of connectivity.

Design/methodology/approach – This paper is conceptual in nature and an attempt to provide an overall view of the shifting dimension in the customer path as indicated in the various hierarchies of effects models since evolution up to the age of digitalisation.

Findings – It is observed that in the age of connectivity customer loyalty is expressed in terms of brand advocacy rather than repurchase, and that the customer path has been redefined. This seems pertinent because of the swift exchange of information that occurs among the online customer communities.

Originality/value – This paper identifies a need to provide a contemporary outlook to the customer path in the age of internet connectivity.

Keywords Hierarchy of effects, Customer path, Internet connectivity, Brand advocacy, Online customer communities

Paper type Conceptual paper

Introduction

The digital disruptions have significantly affected the hierarchy models of advertising effects and have generated a paradigm shift in the way customers think and make decisions. The hierarchy models of communication effects prevalent since the 1900s (Barry and Howard, 1990)



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need a reoriented look. Traditionally, marketing was primarily focused on segmenting, which is a process of dividing the entire market into homogeneous groups based on geographic, demographic, psychographic and behavioural profiles, and thereafter targeting the customers in each group based on their needs. However, the emergence of the digital economy has provided a new dimension in the form of online communities of customers who are the contemporary target groups for marketers (Kotler *et al.*, 2016). Such online customer communities are a conglomerate of acquaintances connected with one another in the digital world and are sensitive to any sort of irrelevant and manipulative product or service related information. Over the years, there has been a need-based transformation in the way companies communicate with its new breed of emerging young customers who are connected with one another on a virtual platform. The digital economy has further enhanced an undisrupted flow of information amongst the online customer communities that has led to the delivery of transparent information about products and services from the marketers, so that they can transform a customer into a loyal brand advocate (Kotler *et al.*, 2016). Customers today are better informed about products through the exchange of information that happen in those online communities. However, understanding the customer is a complex process because of the regular shift in their tastes and preferences which has led to constant research on the understanding as well as developing frameworks to describe the customer path, as it is evident from previous literature related on the different hierarchical models of advertising effects (Barry, 1987; Barry and Howard, 1990). Also, according to Barry, (1987), Barry and Howard (1990), the first traditional model of measuring advertising effectiveness was introduced by E. St. Elmo Lewis in the year 1898 which is popularly known as Attention-Interest-Desire (AID). Thereafter several hierarchical models were developed by researchers in their inquisitiveness to understand the transformation that took place in the behavioural pattern of customers due to advertisements (Smith and Swinyard, 1983; Cobb and Hoyer, 1985). However, with the development in the area of information and technology, the hierarchical models of advertising effects underwent significant transformation. Contrary to the earlier models, which were more oriented to gain the attention of the customers, the hierarchical models due to the digital transformation are more inclined towards adding value to the brand so as to gain brand advocates (Kotler *et al.*, 2016). In addition to generating awareness about products and inducing purchases, the new age marketing communication concentrate on building brand value and customer loyalty (Wijaya, 2012). This paper therefore is an attempt to understand the changing dimension in the hierarchy of effect models of advertising through the traditional, modern and the digital era that has eventually witnessed a paradigm shift towards the development of a new customer path. The objectives of this research work have been formulated as under:

- To study the emerging trends in the literature regarding hierarchy models of communication.
- To develop an evolutionary framework of the hierarchy of effects models through phases, namely, traditional phase, pre-connectivity phase and digital phase.
- To comment on the relevance of hierarchy of communication effects models in the shifting of customer path.

Traditional phase

The hierarchy models of communication effects have gone through several modifications ever since the first and most widely used AID model which was an effective framework to describe the customer path (Wijaya, 2011). The model was primarily focused on enhancing sales without much concentration on the need of the customer. However, later in the year

1900 the model was modified by Lewis and included action as an essential step in the path that gained popularity as Attention → Interest → Desire → Action or AIDA (Barry T.E., 1987; Barry, T.E. and Howard, D.J., 1990).

The hierarchy models of communication in the pre-connectivity period can be subdivided into traditional and modern phase (Chakravarty and Sarma, 2018). Over the years, several researchers have modified the AIDA model and interpreted in their own ways. It is however observed that in most of the redefined models – attention, interest and desire were considered because the prime objective of communication through advertising was to gain the attention of the customers and create an interest in the advertised products (Barry T.E., 1987; Barry, T.E. and Howard, D.J., 1990). Even though all the traditional hierarchical models were aimed at enhancing sales yet researchers also recognized that customer satisfaction was an important element in the path. Therefore, in the year 1911, Arthur F. Sheldon had incorporated “Satisfaction” as the last element in his model which was known as Attention → Interest → Desire → Action → Satisfaction or AIDAS (Chakravarty and Sarma, 2018 adapted from Barry, 1987; Barry and Howard, 1990). Thereafter in the year 1915, Samuel R. Hall had felt that customers would purchase a product only when they are confident and convinced to the advertising message and led to the development of a framework with the addition of conviction. Hence, a new framework

Attention → Interest → Confidence → Conviction → Action or AICCA was developed (Chakravarty and Sarma, 2018 adapted from Barry, 1987; Barry and Howard, 1990).

Table 1 highlights the traditional phase of the Hierarchy Models of communication as adapted from the works of (Barry, 1987; Barry and Howard, 1990).

Understanding the customer is a complex process. Whether a customer would follow every path in the different models (highlighted in Table 1) while making a decision is yet to be explored. However, contrary to the customer path as indicated in the traditional frameworks (Table 1) inclining towards sales enhancement, the models developed thereafter in the modern phase were more concentrated on measuring the effectiveness of advertising messages. In this context, the works of (Lavidge and Steiner, 1961; Colley, 1961) could be considered as significant, as they are widely acknowledged in modern advertising. Lavidge and Steiner (1961) had proposed a more elaborative customer path through a six stage framework for measuring advertising effectiveness from generating awareness to ultimate purchase (Awareness-Knowledge-Liking-Preference-Conviction-Purchase). (Colley, 1961) had pioneered the ACCA model (Awareness-Comprehension-Conviction-Action) in his work “Defining Advertising Goals for Measured Advertising Results (DAGMAR)”. According to Colley (1961), in the first stage of the customer path advertising generates awareness among the audiences about the products that is advertised. In the next stage, the audiences are able to comprehend the message that an advertisement generates. In the third stage of the path, they are convinced about the reliability of the advertising message and which persuades them to take an action through purchase.

Pre-connectivity phase

The framework by Lavidge and Steiner (1961) captured the emerging trend in the modern context of wider penetration of print media and advent of audio video media vehicles as indicated in Figure 1.

The Advertising Research Foundation in 1961 had identified and developed a five step hierarchical model of Exposure → Perception → Knowledge → Attitude → Action (Chakravarty and Sarma, 2018). The customer path as reflected in the hierarchical models in pre connectivity phase in Table 2.

| Year | Model | Author/ developer |
|------------|--|-----------------------------------|
| 1898 | Attention, Interest, Desire (AID) | E. St. Elmo Lewis |
| Circa 1900 | Attention, Interest, Desire, Action (AIDA) | E. St. Elmo Lewis |
| 1910 | Attention, Interest, Conviction, Action (AICA) | Printer's Ink |
| 1911 | Attention, Interest, Desire, Action, Satisfaction (AIDAS) | Arthur F. Sheldon |
| 1915 | Attention, Interest, Confidence, Conviction, Action (AICCA) | Samuel R. Hall |
| 1920 | Attracting Attention, Creating Desire, Removing | West Coast Life Insurance Company |
| 1921 | Inhibitions, Inspiring Confidence, Impelling to Action (ADICA) | Robert E. Ramsay |
| 1922 | Attention, Interest, Desire, Caution, Action (AIDCA) | Alexander Osborn |
| 1923 | Attention, Interest, Judgement, Action (AIJA) | Daniel Starch |
| 1928 | Seen, Remembered, Believed, Read, Acted Upon (SRBRA) | Daniel Starch |
| 1938 | Attention, Interest, Desire (Want), Conviction (Solution), Purchase, Satisfaction (AID(W)C(S)PS) | Edward K. Strong, Jr |
| 1940 | Attention, Interest, Desire, Conviction, Action (AIDCA) | Clyde Bedell |
| 1956 | Attention, Interest, Desire, Memory, Action (AIDMA) | Merill DeVoe |

Table 1.
Traditional phase of
the hierarchy models
of communication

Sources: Chakravarty and Sarma (2018) adapted from Barry T.E. (1987); Barry, T.E. and Howard, D.J. (1990)

Digital phase

All the previous hierarchical models have been developed during the pre-connectivity period when the unlimited capability of the internet was still unexplored. The digital disruption created by the evolution of the internet has made both researchers and management practitioners to look at the hierarchical framework from a different perspective. The internet has significantly influenced the society and transformed the process of communication (Cappo, 2003). The emergence of the social media has provided a new dimension in the form of online communities of customers who are the contemporary target groups for marketers. The customer paths demonstrated in the previous hierarchical models are not sufficient in this current age of digitalization that has transformed the way people socialize and communicate with one another (Wijaya, 2012). It is observed that the customer path in the previous hierarchical models did not indicate follow up action which is essential to understand the level of satisfaction of the customers and measure their post-purchase behaviour. To this have commented that the previous hierarchy of effect models and also the one proposed by (Lavidge and Steiner, 1961; Colley, 1961) had illustrated a suitable customer path that might end in ultimate purchase of the advertised product (Weilbacher, 2001). However, there was a lack of any empirical evidence to justify that the customers actually passes through each stage before taking a decision. Such gaps identified in the literature had

| Related behavioural dimensions | Movement towards purchase | Examples of types of promotion or advertising relevant to various steps |
|--|---|--|
| CONATIVE -the realm of motives | <pre> graph BT A[AWARENESS] --> B[KNOWLEDGE] B --> C[LIKING] C --> D[PREFERENCE] D --> E[CONVITION] E --> F[PURCHASE] </pre> | <ul style="list-style-type: none"> • Point of purchase • Retail store ads • Last chance offers • Price appeals • Testimonials |
| AFFECTIVE -the realm of emotions | | <ul style="list-style-type: none"> • Competitive ads • Argumentative copy • Image ads • Status, glamour appeals |
| COGNITIVE -the realm of thoughts | | <ul style="list-style-type: none"> • Announcements • Descriptive copy • Classified ads • Slogans • Jingles • Sky writing • Teaser campaigns |

Figure 1. Emerging trend in the pre-connectivity phase

Sources: Chakravarty and Sarma (2018) adapted from Lavidge and Steiner (1961); Barry and Howard (1990)

necessitated the development of an evolutionary framework of hierarchy of effects models. Considering that the customer path as indicated in the AIDA framework was the earliest and widely used in several studies related to advertising and a popular model used by practitioners therefore the authors of this study have adopted this as the base model.

In the current context, information travels at the speed of light and customers neither have the time to evaluate the advertising messages in the pre-purchase stage nor the advertised products at the post-purchase stage. They exhibit a tendency to rely on online references for advice. Online communities exchange the information about products that are advertised online and thereafter arrive at a decision. It prompts the companies to provide information that are reliable and worthy of being considered by the communities. This highlights the importance of updating the customer path in this connectivity period. In this age of internet when people are socially connected with one another, the role of advertising has extended

| Year | Author/developer | Model |
|------|--|--|
| 1961 | Robert J. Lavidge and Gary A. Steiner | Awareness, Knowledge, Liking, Preference, Conviction, Purchase |
| 1961 | Russell H. Colley | Awareness, Comprehension, Conviction, Action (ACCA) |
| 1961 | Advertising Research Foundation | Exposure, Perception, Communication (Knowledge), Communication (Attitude), Action (EPC(K)C(A)A) |
| 1962 | Harry D. Wolfe, James K. Brown and G. Clerk Thompson | Awareness, Acceptance, Preference, Intention, Provocation of Sale (AAPIS) |
| 1962 | Everett M. Rogers | Awareness, Interest, Evaluation, Trial, Adoption (AIETA) |
| 1964 | Leo V. Aspinwall | Acceptance, Preference, Insistence (API) |
| 1967 | Sandage and Fryburger | Exposure, Preference, Integration, Action (EPIA) |
| 1969 | David A. Schwartz | Exposure, Attention, Retention, Attitude, Change, Purchase (EARACP) |
| 1969 | John Howard and Jagdish Sheth | Attention, Comprehension, Attitude, Intention, Purchase (ACAIP) |
| 1969 | William J. McGuire | Presentation, Attention, Comprehension, Yielding, Retention, Behaviour (PACYRB) |
| 1971 | Thomas S. Robertson | Awareness, comprehension, Attitude, Legitimation, Trial, Adoption (ACALTA) |
| 1971 | Kenneth A. Longman | Exposure, Attention, Perception, Comprehension, Belief, Motivation, Action (EAPCBMA) |
| 1974 | Andrew S.C. Ehrenberg | Awareness, Trial, Reinforcement (ATR) |
| 1975 | Morris B. Holbrook | Attention, Perception, Memory, Attitude, Intention (APMAI) |
| 1980 | Richard Vaughn | Stated that "thinking model"-the traditional hierarchy model of cognition, affect, conation-not adequate; added three additional models in different sequencing, e.g. affect-cognition-conation; conation-cognition-affect; Conation-affect-cognition |
| 1981 | Michael L. Rothschild and William C. Gaidis | For low involvement purchases; advertising acts as stimuli for awareness and knowledge; leads to trial; product becomes stimulus, satisfaction may lead to increased probability of repeat purchasing behaviour |
| 1982 | Robert E. Smith and William R. Swinyard | The learning hierarchy may not be appropriate for low order belief and affect; suggest three models: traditional of cognition-affect-commitment; low involvement of cognition-trial-affect-commitment; and brand switching of cognition-trial-trial-trial |
| 1982 | Ivan L. Preston | Presents more comprehensive consumer information processing model stating lack of this in previous models: Distribution, Vehicle Exposure, Ad Exposure, Ad Awareness, Ad Elements Awareness, Association Evaluation, Product Perception, Integrated Perception, Product Evaluation, Prior Evaluation, Integrated Evaluation, Product Stimulation, Prior Stimulation, Integrated Stimulation, Action; states traditional hierarchy valid in spite of low involvement theory |
| 1983 | Ivan L. Preston | Defends traditional hierarchy models and adds to the Association Model of 1982 with: Search, Search Perception, Search Evaluation, Search Stimulation, Trial, Trial Perception, Trial Stimulation, Adoption, Adoption |

Table 2.
Contemporary
Hierarchical models
of communication in
the modern path

(continued)

| Year | Author/developer | Model |
|------|------------------------------------|--|
| 1983 | Sandra Ernst Moriarty | Perception, Adoption Evaluation and Adoption Stimulation Reviews and challenges traditional hierarchy models; presents a Continuum Domain Model with the domains being perception (no awareness to recall), education (learning to generalization and discrimination), persuasion (reinforce old attitudes to changing old ones) and behavior (inquiry to repurchase) |
| 1984 | Ivan L. Preston and Esther Thorson | Adds three Action Steps (Search, Trial, Adoption) |
| 1986 | Richard Vaughn | Recognizes that there are multiple hierarchies used in responding to advertising messages |

Sources: Chakravarty and Sarma (2018) adapted from Barry T.E. (1987); Barry, T.E. and Howard, D.J. (1990)

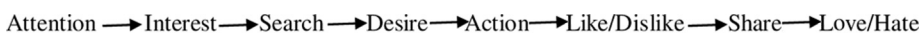
Table 2.

beyond the boundaries of enhanced purchase alone and should be more focused on customers' preference and brand development (Wijaya, 2011). In this context, a new customer path along a hierarchy has been developed as indicated in Figure 2:

The above model is an extension of the AIDA hierarchy where the author has included S (Search), L (Like/Dislike), S (Share) and L (Love/Hate) which indicates that after generating interest in the advertised product, the customer will search for information about the product from various sources. In context to online advertising, such sources could be the online community of customers who may exchange their opinions about the products. The stages after action denotes the post purchase effects of the customer based on his level of satisfaction. However, the author has not clearly indicated whether the customer will follow the entire path in the proposed hierarchy. According to Kotler *et al.* (2016), the digital age has provided a shift in the customer path and it is indicated through the Five A's framework as shown in Figure 3.

In this connectivity age, the path from awareness to advocacy need not be in a sequence as indicated in the above figure. Understanding the buyer attitude is a complex process because it is a "learned predisposition" that makes a buyer to behave either in a favourable or in an unfavourable manner towards an advertisement (Schiffman and Kanuk, 2004; Assael, 2008). Also if the advertisement is able to generate a favourable impression in the mind of the customer about the advertised product the customer may directly take a decision and may skip the appeal towards a purchase decision. In connectivity era, customer loyalty is defined as the willingness of the customer to generate strong recommendation in favour of the advertised brand or the product (Kotler *et al.*, 2016). Thus a satisfied customer may resort to brand advocacy and recommend it to others. Derek Rucker in Kotler *et al.* (2016) had offered the 4A's of hierarchy of effect model as a modification to the already existing AIDA framework as indicated in Figure 4.

According to this model, the customers learn and become aware about the products through the communication generated by the advertisements. They develop liking and



Source: Wijaya (2011)

Figure 2. AISDALSLove model

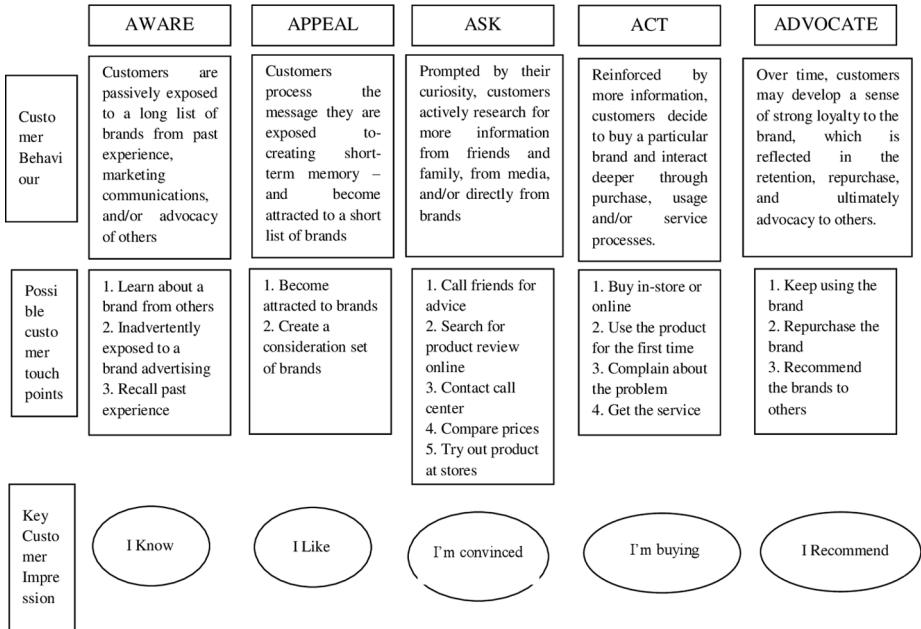


Figure 3.
Shifting customer path in digital era

Source: Kotler *et al.* (2016)

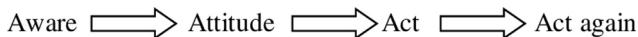
disliking towards the advertised products which shape their attitude and induce them to act by either accepting or rejecting the advertised product. Thereafter, the act again stage has been added in order to understand the post purchase effect.

The hierarchical models developed during the traditional phase were inclined towards enhancing sales while those developed during the pre-connectivity phase concentrated more on the attitude formation of the customer and the models developed during the digital phase were focused on the behavioural aspect of the customers either in the form of repurchasing the advertised brand or by being loyal brand advocates. Thus an evolutionary framework of the hierarchy of effects models has been clearly depicted across the different phase that signifies a transformational shift in the customer path as indicated in [Figure 5](#).

Managerial implications concluding remark and future scope

Every model from the early part of the previous century till date is relevant in respect of the time when that was propounded. The models could provide insight for a customer path. The new age models have changed to capture the emerging trends. Not only capturing the time specific trends, the hierarchy of communication effect models provides scope for marketers to develop their

Figure 4.
Derek Rucker's 4A hierarchy of communication effects



Source: Kotler *et al.* (2016)

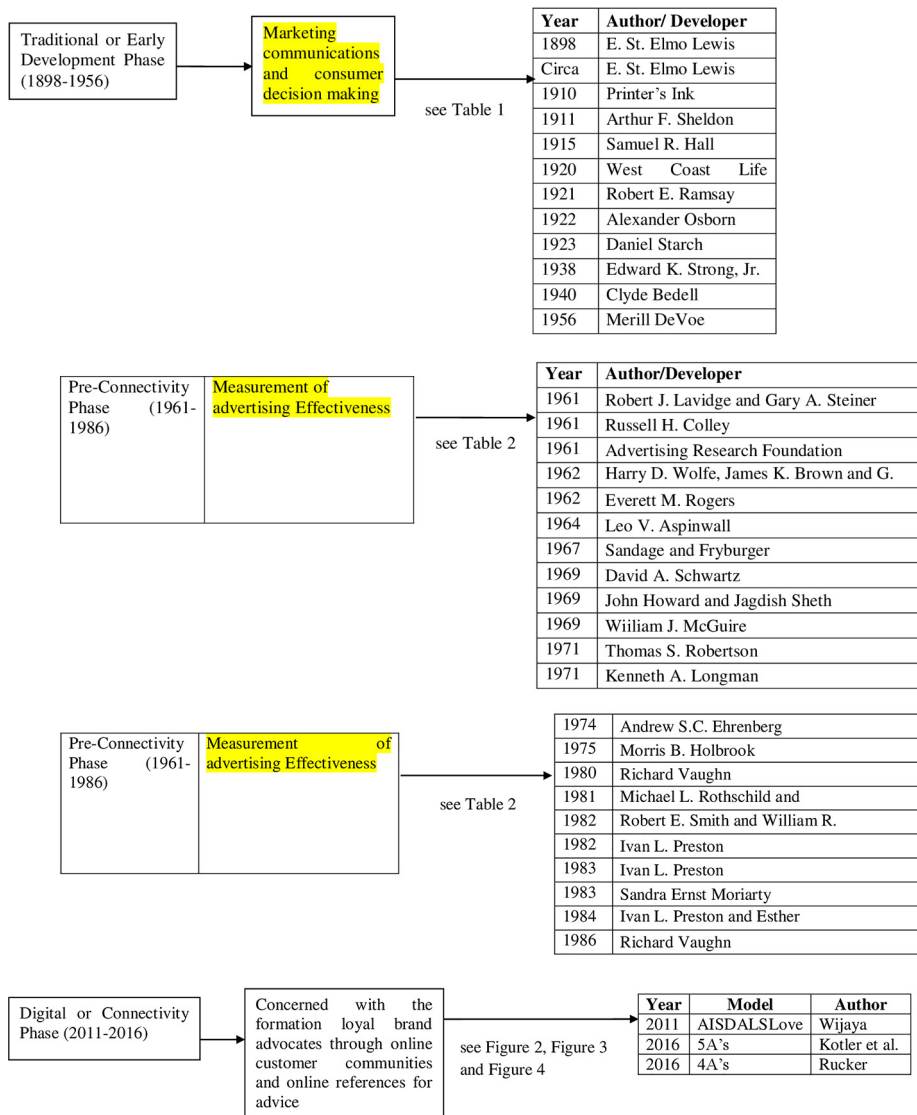


Figure 5. Evolutionary framework of hierarchy of effects model

advertising strategies to sustain in the respective marketing environment. However, with the growth and development of the internet, the hierarchical models have been updated and new customer path has been developed. Marketers need to be honest and truthful in communicating to the online group of customers as such groups are very much sensitive to misleading information and a wrong message from the marketer may open the door for its competitors to enter. The pioneer advantage and sustaining the same will create the entry barriers for the prospective competitors.

However, whether the customer will follow the entire path as indicated in the different hierarchy models will have to be further established through investigation as previous researchers did not focus much on this aspect.

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