Abstract—the objective is this paper is to present a robust content literature review relating to satisfaction models and theories prior to the 21st century with regards to users’ satisfaction/dissatisfaction. It addresses both the theoretical and measurement-related concerns involved in these areas of study. The study is conducted with reference to existing theoretical literature, published and unpublished research. The study is mainly a literature review on the trends and development on customer satisfaction/dissatisfaction study. One of the primary findings that emanated from the review revealed that a number of theoretical approaches have been developed to explain the relationship between satisfaction (positive disconfirmation) and dissatisfaction (negative disconfirmation). But all the approaches are all variants of the consistency theories and focus primarily on the nature of the user's post-usage evaluation process. The study explores the trends in users’ satisfaction study and highlight’s the theoretical and measurement-related concerns involved in much details than in previous studies. The study presents a strong background on the theories of customer satisfaction measurement and interpretation.

Keywords—Customer satisfaction, customer disconfirmation, perception, discrepancy theory

I. INTRODUCTION

This paper presents a critical review of literature relating to satisfaction/dissatisfaction (CS/D) models and theories prior to the 21st century users satisfaction/dissatisfaction. The review of the literature addresses both the theoretical and measurement-related concerns relevant to this body of literature. In addition to presenting a review of the literature of the previous models and theories in the area of customer satisfaction, the paper also addresses the major elements of the most widely accepted models of CS/D.

II. THEORETICAL BACKGROUND

The foundation for satisfaction lies in “mankind’s ability to learn” from previous experiences [1]. Likewise, user's preferences are constantly being updated by way of the learning process. Learning theory posits that “… a given response is strengthened either positively or negatively to the extent that is followed by a reward. Reward, in turn, leads to an evaluation that the purchase or achievement was satisfactory… and hence it can exert an effect on brand beliefs and attitude. The probability of engaging in a similar buying act or continuance in a housing scheme will be increased if there are positive consequences in the act of purchase”, use of the unit and vice versa [2].

The word satisfaction first appeared in English during the thirteenth century. The word itself is derived from the Latin word satis (meaning enough) and the Latin ending -faction (from the Latin facere - to do/ make). Early usage of the word satisfaction focused on satisfaction being some sort of release from wrong doing. Later citing’s of the word emphasise satisfaction as a “release from uncertainty” [3]. Modern usage of the word has tended to be much broader, and satisfaction is clearly related to other words such as satisfactory (adequate), satisfy (make pleased or contented) and satiation (enough). The study on satisfaction grown rapidly in the 1970’s, with over 500 studies carried out on the concept as informed by Hunt [4]. However, despite the overwhelming quantity of literature surrounding the concept even in this present time [5] [6], noted that “certain key issues have either gone unresolved” or have recently been brought into question, with regards to a comprehensive understanding of the constructs that brings determine satisfaction in a typical consumer environment.

Satisfaction is a concept that has appeared in many fields such as in office evaluation by employee satisfaction, hospital evaluation by patient satisfaction, and site evaluation by visitor satisfaction amongst others. However, satisfaction has been fundamental to the marketing concept for over three decades; as the most extensive use of satisfaction has been in literature concerned with customer satisfaction. Wilton and Nicosia [7] informs that several models of satisfaction have emerged over time in this field and in others. Kim [8] argues that the models developed to date all view satisfaction as a “consumer’s or user’s attitude in relation to the consumer’s belief and evaluation about merchandise and buying behaviour”. This broad use of behaviour demonstrates the “appealing validity of the concept” and its utility in explaining the success of a range
of phenomena [6]. Day [9] claims that “while everyone knows what satisfaction means, it clearly does not mean the same thing to everyone”. Initial conceptualization of user’s satisfaction views it as a “single variable which involves a single evaluative reaction from users”, which may or may not be related to pre-evaluation concepts [1]. Further conceptualization of satisfaction, notes that “… satisfaction is a kind of stepping away from an experience and evaluating it… One could have a pleasurable experience that caused dissatisfaction because even though it was pleasurable, it was not as pleasurable as it was supposed to be; so satisfaction is not an emotion, it is the evaluation of the emotion” [10]. However, the most generally acknowledged conceptualization of user satisfaction concept is the expectancy disconfirmation theory [11]. Expectancy disconfirmation theory was developed by Oliver [12], who proposed that a user’s satisfaction level is a result of the difference “between expected and perceived product performance, and expectations as predictions of future performance”. The inclusion of expectations proposes that products satisfying high expectations are predicted to generate greater customer satisfaction than products that meet low expectations. Some other researchers employ perceived performance as an additional predictor of satisfaction [13] [14].

Satisfaction (positive disconfirmation) is known to occur when product or service is better than expected. On the other hand, a performance worse than the expected results is dissatisfaction (negative disconfirmation). In this theory, expectations originate from beliefs about the level of performance that a product/service will provide, which is the predictive meaning of the expectations concept. In comparison, Kotler [15] defined satisfaction as “a person’s feeling of pleasure or disappointment resulting from comparing a product’s perceived performance (or outcome) in relation to his or her expectations”. Hoyer and MacInnis [16] promotes that satisfaction can be associated with “feelings of acceptance, happiness, relief, excitement, and delight”. Similarly, Hansemrk and Albinsson [17], established that “satisfaction is an overall customer attitude towards a service provider, or an emotional reaction to the difference between what customers anticipate and what they receive, regarding the fulfilment of some need, goal or desire”. Churchill and Surprenant [13] said that “the vast majority of satisfaction studies have used some variation of the disconfirmation model” (p. 491); Oliver [18] found that a variety of scholar’s definitions of satisfaction are consistent with the expectancy disconfirmation model” (p. 72); Tse and Wilton [14] reports that “it is generally agreed that satisfaction can be defined as … the evaluation of the perceived discrepancy between prior expectation … and the actual performance of the product” (p. 204). Thus concurring with the assertion by Iacobucci and Ostro [19] that satisfaction is a function of the discrepancy between a customers’ prior expectation, and the perception regarding the product purchase. From the above, it is clear that the study of satisfaction both in academic and in the real world is to understand determinants and process of customer’s evaluation.

Nonetheless, Parker and Mathews [6] also defined satisfaction as a process of evaluation between what was received and what was expected, which is the most widely adopted description of satisfaction in most current literature. Satisfaction can be viewed as an outcome of a consumption activity or experience; which is also refers to as a process. Currently, there are two principal clarifications of satisfaction within the literatures: satisfaction as a process and satisfaction as an outcome. However, these are complementary classifications as; often one depends on the other. Parker and Mathews [6] further promotes that when satisfaction is viewed as a process, that the definition concentrates on the “antecedents to satisfaction” rather than satisfaction itself. While, when satisfaction is viewed as an outcome, it is perceived as a consumption activity or experience, which is moderated by different variables. To further compound matters, Kourilsky and Murray [20], associated satisfaction with the experience of making a purchase decision. This classification falls outside the above categories. Consequently, much research effort has been directed at understanding the cognitive processes involved in satisfaction evaluations.

III. APPROACHES TO THE STUDY OF SATISFACTION

The theory of satisfaction has its origins in the discrepancy theory [21] and other scholars have over the years, used some “form of comparison” to model satisfaction [6]. A number of theoretical approaches have been developed to explain the relationship between satisfaction or positive disconfirmation and dissatisfaction or negative disconfirmation. According to Oliver [12], these approaches can be seen as variants of the consistency theories and focus primarily on the nature of the “consumer's post-usage evaluation process”. Consistency theory conceptualizes that when expectations and the actual product performance do not match the consumer will feel some degree of dissatisfaction [1]. In order to relieve this dissatisfaction the user will make adjustments either in expectations or in the perceptions of the product's actual performance. This theory informed the Morris and Winter [22] mobility theory of residential satisfaction.

Over the years, a number of authors have used some form of comparison to model satisfaction. Some theoretical approaches which have been advanced amongst others include: assimilation theory, contrast theory, assimilation-contrast theory, and negativity theory.

A. Assimilation theory

Kurt Lewin [23] originally formulated the theory of cognitive dissonance, which was later developed and refined by Festinger's [24]. The dissonance theory forms the basis of the assimilation theory. The dissonance theory posits that the users of a particular product make some kind of cognitive comparison between expectations about the product and the perceived product performance. If there is a discrepancy between expectations and perceived product performance then
dissonance or negative disconfirmation arises. This view of the consumer “post-usage evaluation” was introduced into the satisfaction literature in the form of assimilation theory by Anderson [25], in his work on consumer dissatisfaction; the effect of disconfirmed expectancy on perceived product performance. According to Anderson [25] consumers seek to avoid dissatisfaction by “adjusting perceptions about a given product to bring it more in line with expectations”. Consumers can also reduce the dissatisfaction resulting from a discrepancy between expectations and product performance either by altering expectations so that they coincide with perceived product performance or by raising the level of satisfaction by minimizing the relative importance of the dissatisfaction experienced (Olson & Dover, 1979). However, the assimilation theory has a number of weaknesses. First, the approach postulates that there is a relationship between expectation and satisfaction but does not specify how disconfirmation of an expectation leads to either satisfaction or dissatisfaction. Next, the theory also postulates that consumers are inspired enough to adjust either their expectations or their perceptions about the performance of the product (Forman, 1986). According to Peyton et al. [1] “if the consumer adjusts either expectations or perceptions about product performance then dissatisfaction would not be an outcome of the post-usage evaluation process”. A number of scholars such as Olson and Dover [26] and Andson [25] have found that controlling for actual product performance can lead to a positive relationship between expectation and satisfaction. Therefore, Bitner [27] argues that it would seem that dissatisfaction could never occur except the evaluative processes were to begin with negative consumer’s expectations.

B. Contrast theory

The Contrast theory was first introduced by Hovland, Harvey and Sherif [28] [1]. However, Cardozo [29] claims that the theory presents an alternative view of the consumer “post-usage evaluation process” in contrast to the assimilation theory that hypothesized that post-usage evaluation leads to outcomes in opposite predictions for the effects of expectations on satisfaction. The contrast theory posits that consumers would exaggerate any contrast between expectation and product evaluation. Dawes, Singer and Lemons [30] define contrast theory as the propensity to magnify the discrepancy between "one's own attitudes and the attitudes represented by opinion statements" validated by persons with opposing views. Whereas assimilation theory suggests that users will seek to minimize the discrepancy between expectation and performance; contrast theory argues that a surprise effect arises leading to the discrepancy being exaggerated [1]. This theory was further developed into the assimilation-contrast theory by Anderson [25].

C. Assimilation-contrast theory

The assimilation-contrast model has been proposed as yet another way to explain the relationships among the variables in the disconfirmation model [28] [1]. This model is a combination of both the assimilation and the contrast theories; the model postulates that satisfaction is a function of the magnitude of the discrepancy between expected and perceived performance. Generally, consumers of any product have “zones or latitudes of acceptance or rejection with respect to their perceptions” [1]. As with assimilation theory, the user will tend to adjust differences in perceptions about product performance to bring it in line with prior expectations, but only if the discrepancy is relatively small. Peyton et al. [1] noted that when there is a “large discrepancy between expectations and perceived performance, contrast effects occur and the consumer tends to magnify the perceived difference”. However, it should be noted that most discrepancies with a given product are not just magnified or exaggerated, but they are simply the true evaluation of the product, based on what the consumers’ have experienced. Some evaluation can be an emotional expression of the user judgement with regards to the functionality of the product. On the other hand, Peyton et al. [1] posit that whether assimilation or contrast occurs depends upon the perceived disparity between expectations and actual product performance.

The assimilation-contrast theory also argues that Cardozo's [29] attempt in the assimilation theory at reconciling the two earlier theories was methodologically weak; Anderson [25] presented his adaptation of an earlier work. He asserted that consumers possess a "noticeable difference disconfirmation threshold". Assimilation-contrast theory attempt demonstrate that both the assimilation and the contrast theory models have applicability in the study of consumer satisfaction. The approach makes it possible to "... hypothesize variables other than the magnitude of the discrepancy that might also influence whether the assimilation effect or the contrast effect would be observed... when product performance is difficult to judge, expectations may dominate and assimilation effects would be observed... contrast effects would result in high involvement circumstances. The strength of the expectations may also affect whether assimilation or contrast effects are observed" [27].

Attempt by researchers to empirically test the assimilation-contrast model have met with varied results. For instance, Anderson [25] and Olson and Dover [26] found some evidence to support the assimilation theory approach. In debating both of these studies, Oliver [31] argues that Anderson [25] and Olson and Dover [26] findings cannot be accepted because they only measured expectations and supposed that there were perceptual differences between disconfirmation or satisfaction. This criticism is of some significance because researchers do not actually measure satisfaction or dissatisfaction; instead, researchers usually assumed that it is the perception of disconfirmation that leads to satisfaction or dissatisfaction [28] [1]. In contradiction to the findings supporting the assimilation theory, Cadotte, Woodruff and Jenkins [32] reported negative correlation between expectation and disconfirmation. They therefore resolved that satisfaction is truly an “additive function of the two concepts". Further, Peyton et al. [1],
asserts that uncertainty was created by results of studies from the works of Oliver [33] [34] [35], which found no relationship between expectation and disconfirmation. Moreover, Olshavsky and Miller [36] in “consumer expectations, product performance and perceived product quality” supported the assimilation-contrast theory. However, it has been found that if the discrepancy was too large to be assimilated, then the contrast effect occurs.

D. Negative theory

Similar to the three previous models, negativity theory also has its foundations in the disconfirmation process. This theory was first introduced into the consumer satisfaction literature by Anderson [25]. The theory postulates that when expectations are strongly held, users will respond negatively to any disconfirmation. Therefore, dissatisfaction will occur if perceived performance is less than expectations or if perceived performance surpasses expectations [37] [25].

IV. FURTHER APPROACHES TO THE STUDY OF SATISFACTION

Aside the foregoing, the most well-known descendent of the discrepancy theory is the expectancy disconfirmation paradigm [38]. This theory states that, if performance exceeds expectations, users will be positively disconfirmed or satisfied. On the other hand, if performance fails to meet expectations, consumers will be negatively disconfirmed or dissatisfied. Hence, positive disconfirmation leads to increased satisfaction, with negative disconfirmation having the opposite effect, while zero disconfirmation occurs when performance matches expectations (no effect on satisfaction). Kotler, Siew, Swee and Chin [39] informs that this is because user’s expectations are formed on the basis of past experience, statements made by friends and associates. Oliver [18], proposed that expectations could be exceeded in two different ways: the level of performance is within a normal range (product was better than expected); the level of performance is surprisingly positive (one would not expect that the product would have performed so well) and delight.

The expectancy disconfirmation model not only explains satisfaction with product performance, but also service satisfaction, as is the case of the government being responsible for the provision of low-income houses to the poor. There has been a strong support for the disconfirmation paradigm as a measurement of satisfaction, however, Churchill and Surprenant [13] found some inconsistencies in the model whereby neither disconfirmation nor expectations have any effect on user satisfaction with durable products. Satisfaction, according to Churchill and Surprenant [13] is determined exclusively by the performance of the durable good. This puts the burden of a genuine evaluation result for example, the evaluation of a typical low-income building or any other in the building in the hands of the user’s; because they are the ones that can determine if the building is durable on how the different aspects of the building meet their needs. In their review, Poisz and Van Grumbkow [40] Parker and Matthews [6] view satisfaction as a discrepancy between the observed and the desired. This was found to have been consistent with the value-percept disparity theory which was developed in response to the problem that users could be satisfied by aspects for which “expectations never existed” [41]. The value-percept theory views satisfaction as an emotional reaction caused by a “cognitive-evaluative process”, which is the comparison of the “object” to one's values rather than an expectation [6]. What consumers want is a no disparity level between their values: needs, wants and desires, and the object of their evaluations. Recent developments of this study include the concept of desire congruency [42].

Besides discrepancy theories, Equity theory has also been applied to model satisfaction [6]. Equity Theory holds that individuals compare their input/output ratios with those of others [41] and that the consumer will be satisfied if the net gain is perceived to be fair. More recently, according to Parker and Mathews [6], renewed attention has been focused on the “nature of satisfaction”. Due to the wide variance in the nature and meaning of satisfaction, many associations and firms are using different reference points as a standard to compare their own consumer satisfaction figures. To resolve this, a number of organizationally harmonized national customer satisfaction indices have been developed [43]. For example the American Consumer Satisfaction Index (ACSI) and the European Customer Satisfaction Index (ECSI) represent the two major customer satisfaction indices for the United States and the European countries respectively; from which the South African Satisfaction Index is based (SAS Index). The American Customer Satisfaction Index (ACSI) in Fornell et al. [44] defines satisfaction as a “weighted average of three survey ratings; perceived quality, perceived value, and customer expectations”. The ACSI index has been used to measure satisfaction in the manufacturing / nondurables, manufacturing / durables, transportation, communications and utilities, retail, finance and insurance, services, public administration, and even in government. Although the ACSI index has an accepted satisfaction evaluation methodology, it has not been found suitable for the construction industry and it is the lowest with the rating of government and public agencies [45]. This is because the evaluation result for customer satisfaction is highest for competitive products, lower for competitive services and retailers, and lowest for government and public agencies. In the ACSI model, consumers’ expectations influence the evaluation of quality and predicts how well the product or service will perform. Perceived quality in the model is the extent to which a product or service meets the consumer expectation and this normally have the greatest impact on consumer satisfaction. Lastly, satisfaction has an inverse relationship to customer complaints, which is measured as the percentage of respondents who reported a problem with the measured product or service within a specified time frame.

Another theoretical description of satisfaction is the GAP Analysis Model developed by Parasuraman et al. [46], which is also referred to as the “disconfirmation paradigm” in the customer satisfaction literature. The main theme of the gap
analysis is the fact that gaps between user expectations and user experiences lead to consumer dissatisfaction. Consequently, measuring gaps is the first step in enhancing consumer or service satisfaction, which results, in a better understanding of consumers’ perceptions; that is important to an establishment and policy performances. Aziani [47] informs that the gap analysis model is used as a tool to narrow the gap between perceptions and reality, thus enhancing consumer’s satisfaction. Parasuraman et al. [46] posits that “quality is a comparison between expectations and performance” (p. 42) and recently reiterated service quality as “the discrepancy between consumers’ expectations and perceptions”. They further developed a [service] quality model based on the gap analysis theory, which informs that the measurement of the product quality gap is attained in the same manner as service quality gap.

V. CONCLUSION

From the critical literature review, it is evident that different scholars have used a number of different definitions for satisfaction. Also, there is an agreement that satisfaction involves a set of inter-related variables rather than a single variable. Also, despite a number of theoretical approaches that have been developed to explain the relationship between positive disconfirmation and dissatisfaction negative disconfirmation, the review of literature revealed that all theories are all variants of the consistency theories and have all been focused on the nature of the users’ post-usage evaluation process, while they have all viewed satisfaction as a responsive reaction to a product experience by the users.

REFERENCES


