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Abstract (structured along the lines of background, aim, method, results, conclusion –150 words):

The present study utilised the Expectation Confirmation Theory (ECT) as a theoretical framework to examine the temporal development of customer trust, satisfaction, and repurchase intent. In subsequent phases of the ECT, the significance of expectations in influencing customers' attitudes towards confirmed trust and satisfaction was emphasized. The Trust-based Expectation-Confirmation model was therefore proposed to study trust at the appropriate level of abstraction to capture and analyse the relationships between Expected Trust, Perceived Trust, and the Confirmation of Expected Trust. The evaluation of the proposed ECT Trust-based model was conducted through a web-based survey with 559 participants, aiming to examine the direct and indirect approaches of measuring the Confirmation phase. Both approaches were found to be problematic in terms of the gap between the Perceived and Expected construct measured, which cannot be adjusted by the middle point on the Likert scale

when using the direct approach either. This research article proposes the *Indexed Approach* as a new relevant assessment approach to transform data gathered from participants, which were measured throughout the Expectation and Perceived Performance stages, into a common format that could be used to determine each participant's Confirmation. In order to validate the Indexed Approach, PLS path modelling evaluation and comparison for each approach was conducted, the results indicated that the Indexed Approach was the superior alternative to the direct and indirect approaches for transformation confirmation data to be used in the ECT model.

Introduction

According to marketing research, customers should have reasonable expectations regarding the quality of their interactions with e-commerce websites and the quality of the products or services they purchase (Dwyer, et al., 1987; McKinney, et al., 2002; Alsokkar, et al., 2023). In addition to being able to validate their expectations, customers should also have positive experience (Palvia, 2009; Al Sokkar & Law, 2013; Hammouri, et al., 2022; Al-Gasawneh, et al., 2023). These are regarded as essential factors for ensuring and sustaining customer satisfaction and loyalty (Wen, et al., 2011; Villarin, 2021; Nusairat, et al., 2021). The established methods employed in marketing research have traditionally focused on the measurement and analysis of customer expectations throughout the entire transaction process, encompassing pre-transaction, during transaction, and post-transaction stages (Bhattacherjee, 2001; McKinney, et al., 2002; Wen, et al., 2011; Al Sokkar A. A., 2014; Villarin, 2021). One theoretical framework that can be applied to analyse and predict customers' affective responses towards a specific product or service is the Expectation Confirmation Theory (ECT). According to this theory, the extent to which a customer's expectations are met by a product or service directly influences their level of satisfaction (Oliver R. , 1980; Villarin, 2021; Al-Gasawneh, et al., 2022). It has been observed that customer satisfaction tends to increase when their expectations are fulfilled. The concept of customer satisfaction can be defined as the holistic psychological state arisen when the emotions associated with unfulfilled expectations are combined with the customer's pre-existing beliefs and expectations about the consumption experience (Oliver R. , 1999; Wen, et al., 2011; Al Sokkar & Law, 2013). Taking into account the aforementioned considerations, the ECT model was used for analysing the three phases at which customers' expectations were either met or not met in the studies (e.g., Al Sokkar & Law, 2013; Wen, et al., 2011; Baharum, et al., 2021), and are identified as follows: (1) Expectation formation occurs before a customer makes a purchase; (2) The process of assessing expectations takes place after the customer's purchase, wherein they evaluate their preconceived expectations against their experiential perceptions to ascertain the extent to which their initial expectations were validated; and (3) Expectation-Confirmation, in part, determines customer satisfaction. Consequently, the ECT could provide a valuable conceptual framework for investigating the temporal progression of customer's satisfaction formation and subsequent repurchasing decision (Kim D, 2012; Al Sokkar & Law, 2013; Villarin, 2021), in which the significance of Expectations in shaping customers' attitudes towards subsequent stages of the ECT and their satisfaction is clearly acknowledged.

Furthermore, the literature also suggests that the use of the ECT, the Technology Acceptance Model (TAM), and the Information System Success Model (ISSM) can be supported empirically, ensuring the effectiveness of information systems and website assessments (e.g., Davis, 1989; Al Sokkar & Law, 2013; Alshurideh, et al., 2019; Hammouri, et al., 2021). Consequently, a number of studies tended to adopt TAM or ISSM and integrate it with ECT as a foundation to study the usage behaviour of online customers that underlies their decision making, where the integration of new factors was examined (e.g., Van der Heijden, 2003; Palvia, 2009; Zhou, 2011; Alsokkar, et al., 2023). Trust as a factor to be integrated into these models has received much attention, given its crucial function in online transactions (e.g., Hart & Saunders, 1997; Ratnasingham, 1998; Gefena & Straub, 2004; Kim, et al., 2009). The utilisation of e-commerce as a platform for conducting commercial transactions, particularly in the context of the business-to-consumer (B2C) model, has introduced specific limitations that can potentially influence consumer decision-making processes. Nevertheless, some literature focuses on the temporal progression of online customers' satisfaction and its consequences on their decisions related to repurchase intention. It also recognizes the pivotal significance of customers' expectations in determining their attitudes towards utilisation and satisfaction in the subsequent stages of ECT (Al Sokkar & Law, 2013; Al Sokkar, 2014; Orehovački, et al., 2013; Kim & Ogbanufe, 2020). The main aim of this research study is to develop and validate a pattern for trust as a concept that has garnered heightened scholarly interest over the past ten years by considering the ECT framework. Therefore, the Trust based Expectation-Confirmation (T-ECT) model is proposed in this research study to examine trust at the right level of abstraction to capture relationships among Expected Trust, Perceived Trust, and the Confirmation of Expected Trust at a sophisticated level.

The term "Disconfirmation" was used by McKinney (McKinney, et al., 2002) to describe a customer's reaction when the product's actual performance falls short of their expectations. The study also pointed out that because customers like to repeat their experiences, it might be useful to conduct in-depth studies of internet shoppers' expectations and disconfirmation before making claims about their satisfaction and loyalty. In addition, the two most common approaches to assessing the Confirmation construct were explored. The first method calculates Confirmation by deducting it from actual experience; the second method measures Confirmation directly as a construct apart from the gap in actual experience (by subtracting expectation from perceived performance). A more reliable and well-established method under the Expectation-Confirmation paradigm, would be to simply measure Confirmation directly (McKinney, et al., 2002). However, both direct and indirect methods of assessing Confirmation were used in this study. Nonetheless, it was discovered during data analysis that both methods presented their own unique sets of difficulties and confusions regarding measuring customers' Confirmation as

discussed later in this research study in the Related Work section. To solve these issues on both direct and indirect methods of assessing Confirmation, we developed an Indexed Approach to convert data measured in both Expectation and Perceived Performance phases into a common format that could be used to determine each participant's Confirmation of the measured data. Therefore, this research study aims at validating and studying the accuracy of the proposed Indexed Approach over direct and indirect methods of assessing Confirmation.

In the following sections, the related work and hypotheses development are presented, together with the proposed indexed measurement approach for transforming the Confirmation ratings. Then we present our own model: Trust-based Expectation-Confirmation Model (T-ECT). Subsequently, the design and protocol of this research study are described. Finally, the results and discussion of the main findings and implications are presented.

Related work and hypothesis development.

A critical question relevant to our work is "What factors influence shoppers' intentions, actions, and subsequent behaviour in a given online retail setting?". Insights into this question can be gained from the related work in the fields of Management Information Systems (MIS) (e.g., Kim, 2012; Oh & Ma, 2018; Villarin, 2021; Nusairat, et al., 2021; Al-Sous, et al., 2023; Masa'deh, et al., 2023), Human-Computer Interaction (HCI) (e.g., O'Brien, 2010; Al Sokkar A. A., 2014; Alsokkar, et al., 2023), Marketing Research (e.g., Oliver, 1980; Patterson, et al., 1996; Mende & Bolton, 2013; Alnaser, et al., 2020; Al-Gasawneh, et al., 2020, 2022, 2023; Dewi, et al., 2022; Khalaf, et al., 2022), and also in the Hospitality and Health Management (e.g., Liang, et al., 2018; Andreassen, et al., 2021; Al-Gasawneh, et al., 2022; Carvajal, et al., 2023). In the last two decades, scholars have dedicated substantial resources and effort towards examining these domains with the aim of enhancing customers' satisfaction and loyalty. A multitude of theories have been formulated and extended to represent the adoption and utilisation of technology by customers as well as their intention to engage in transactions or purchases, such as Technology Acceptance Model (TAM), Information System Success Model (ISSM), and Expectation-Confirmation Theory (ECT). The literature pertaining to the temporal progression of customers' satisfaction and its consequences on their decisions related to repurchase intention recognizes the pivotal significance of customers' expectations in determining their attitudes towards utilisation and satisfaction in the subsequent stages of ECT (Al Sokkar & Law, 2013; Kim & Ogbanufe, 2020; Kim, et al., 2009; Liu, et al., 2020). According to the discussion on these variables, it was posited that the psychological state of customer satisfaction is the outcome of the emotional response to

disconfirmed expectations, in conjunction with the customer's pre-existing expectations towards the anticipated experience, as presented in Figure 1 below.

Figure 1. Expectation Confirmation Theory ECT, (Dabholkar, et al., 2000).
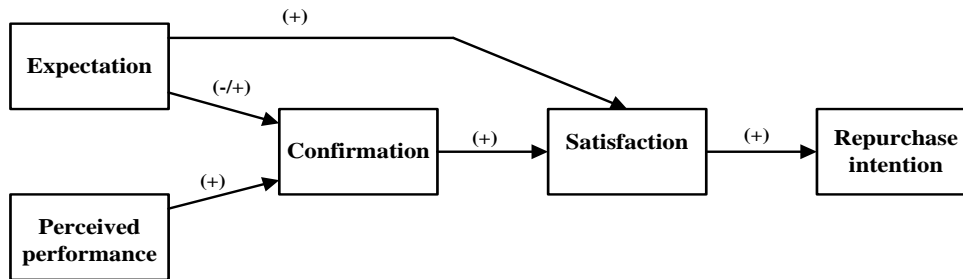
ECT is frequently utilised in customer behaviour research to investigate topics such as customer complaints (Oliver, 1980), customer satisfaction, post-purchase behaviour (such as repurchase; (Dabholkar, et al., 2000; Liu, et al., 2020; Kim & Ogbanufe, 2020; Pakarti, 2022), and service marketing in general. The concept in question has demonstrated a high degree of predictiveness in various scenarios pertaining to product repurchase and service continuation. These scenarios encompass a range of domains, such as restaurants, businesses, car buybacks, and camcorder repurchases. Several studies have attempted to combine the various models with ECT into one cohesive framework. For example, ECT was combined with TAM (e.g., Davis, 1989; Alshurideh, et al., 2019; Hammouri, et al., 2021), and ISSM (e.g., DeLone & McLean, 2004; Alsokkar, et al., 2023) to assess the factors that influence consumers' loyalty and continuing technology use beyond initial adoption (Oliver, 1980; Wen, et al., 2011). Al Sokkar (2014) proposed a theoretical model that combines ECT and TAM models to better explain and predict customers' behaviour in their initial adoption and ongoing use of new technologies. In the same vein, Thomas and colleagues (2019) argued that using an integrative rather than a piecemeal approach to theorising about customers' behaviour and satisfaction yields more fruitful results. Accordingly, the most important factor in determining whether people will keep using a given piece of technology is their level of satisfaction with it (Thomas, et al., 2019; Favero & Kim, 2021).

McKinney and colleagues (2002) constructed a theoretical model for the ISSM-ECT integration, which is often seen in more sophisticated integration approaches. By combining ISSM and ECT, the model investigates how customers' Expectations and Confirmations about information quality (IQ) and system quality (SQ) influence their satisfaction with the service. The study identified three distinct stages of product quality. The first stage is characterised by the quality expected by customers, which is related to their pre-trial beliefs about a product. The quality of Perceived Performance is the second stage, and it describes how customers feel about the product's

performance in relation to their needs and requirements. The third stage is quality disconfirmation, which occurs when customers' expectations of a product's quality are either exceeded or not met.

Two primary methods aimed at assessing the Confirmation construct are proposed by McKinney and colleagues (2002). The first assessment involves subtracting the customer rating of expectations from the perceived quality rating, while the second assessment entails subtracting Expectations from the perceived quality as a distinct construct from the perceived gap. The authors argued that a more reliable and well-established approach within the Expectation-Confirmation paradigm would be to use a direct measurement of Confirmation. Therefore, they developed an eleven-point Likert scale to evaluate it, with the far-left anchor being "much lower than expected", the middle-point "as expected", and the far-right anchor being "much higher than expected." The aforementioned measure has the ability to reveal the extent to which the study's participants are willing to evaluate their level of satisfaction with the website by contrasting their evaluations of the website's expected and perceived attributes (Reichheld & Schefter, 2000; McKinney, et al., 2002; Liu, et al., 2020; Lee, 2009; Lee, 2010; Almajali, et al., 2022). However, both the direct and indirect approaches were identified to have drawbacks after extensive research, which are explained in the next two paragraphs:

Direct measurement for Confirmation; Regarding the customers' satisfaction, it has been found that utilising direct measurement methods can be ambiguous. When examining customers' satisfaction, the direct assessment scale for Confirmation lacks clarity. Participants were able to evaluate the midpoint (4 = "consistent with my initial expectations") when their perceptions aligned with their expectations, irrespective of whether their ratings for Expectation and perceived quality were situated on any of both sides of the scale (leftmost anchor "negative-side", or rightmost anchor "positive-side"). A participant's rating of Confirmation will be neutral (4= as expected) when the participant holds a negative expectation towards a particular quality and rates it accordingly (e.g., 2 which is next to "not likely at all" on the negative side of the scale), and subsequently perceives the exact quality negatively and rates it as such (e.g., 2 which is next to "very poor" on the negative side of the scale). In the event that a different participant was to evaluate both a likelihood of receiving a similar quality (e.g., 6 indicating a high likelihood on the positive side of the scale) and the quality of the Performance, while experiencing the quality (e.g., 6 indicating a very good performance on the positive side of the scale), the rating for Confirmation is problematic for both cases, as it would be situated in the middle (4 indicating that it was as expected- which is not in the positive or negative side of the scale).

Indirect measurement for Confirmation; indirect measuring was found to be puzzling too, especially regarding customer satisfaction generally. As an example presented in Figure 2 below, even though the customer had a generally negative impression of the website, the result of the subtraction would be positive (+1) if the customer had rated his or her expectation for a particular item as 2 out of 7 (where 0 = 'not likely at all'), in addition to that, the rating for that item in the Perceived Performance phase was 3 out of 7 (0 ='very poor'), and vice versa, the result of the subtraction would be negative (-1) if the customer had rated his or her expectation for a particular item with 7 out of 7 (7 = 'highly likely') and the rating for that item in the Perceived Performance phase was 6 out of 7 (the subtraction would be negative (-1) which is misleading the measurement, since 6 is still positive and next to 7 = 'highly likely'). An example below (Figure 2) shows the subtraction misleading issue with regards to Confirmation measured through an indirect measurement.

Figure 2: Indirect measurement approach for Confirmation

In light of the aforementioned challenges and the need for more reliable outcomes, a straightforward method known as *the Indexed Approach* was developed in order to transform data related to the trust level of participants as measured throughout the Expectation and Perceived Performance stages into a common format that could be used to determine each participant's Confirmation for trust as presented in Table 1 below. In accordance with the overarching objective of this study, a preliminary investigation in a form of pilot study was undertaken involving a sample of 24 participants in order to qualitatively and quantitatively test ECT together with testing and refining the Indexed Approach in an B2C retailer website setting, more specifically "ikea.com". The pilot study was grounded in the ECT model and traditional frameworks such as TAM and its variants, and ISSM. The empirical findings of the pilot study are consistent with the cited literature, indicating the necessity of adopting the proposed Indexed Approach to transform data obtained from participants throughout the Expectation and Perceived Performance stages into a common format that could be used to determine each participant's Confirmation. More specifically, when participants' Expectation equals the Perceived Performance rating, the difference is zero; hence,

the index points to the same rating of both Expectation and Perceived Performance rather than the midway point, which is the case with the direct measurement technique. In terms of the indirect technique, the indexing strategy involves turning calculated Confirmation data into a standard format, taking into account both measures (Expectation and Perceived Performance). As mentioned above, if participants' ratings for both are identical, then the indexed Confirmation is equal to both ratings. At this point, the difference between Expectation and Perceived Performance, which is the indirect way of evaluating Confirmation, is considered. If the difference is positive, one positive point will be added to Perceived Performance to shape the indexed Confirmation.

Table 1: The proposed indexed measurement approach for transforming Confirmation ratings.

Expectation Rating (E)	Perceived Performance Rating (P)	Confirmation $(C) = (P) - (E)$	Indexed Confirmation (C)
1	7	+6	7
	6	+5	
	5	+4	6
	4	+3	5
	3	+2	4
	2	+1	3
	1	0	1
2	7	+5	7
	6	+4	
	5	+3	6
	4	+2	5
	3	+1	4
	2	0	2
	1	-1	1
3	7	+4	7
	6	+3	
	5	+2	6
	4	+1	5
	3	0	3
	2	-1	2
	1	-2	1
4	7	+3	7
	6	+2	6
	5	+1	5
	4	0	4
	3	-1	3
	2	-2	2
	1	-3	1
5	7	+2	7
	6	+1	6
	5	0	5
	4	-1	3
	3	-2	2
	2	-3	1
	1	-4	
6	7	+1	7
	6	0	6
	5	-1	4
	4	-2	3
	3	-3	2
	2	-4	1
	1	-5	
7	7	0	7
	6	-1	5
	5	-2	4
	4	-3	3
	3	-4	2
	2	-5	1
	1	-6	

For example, if the participants' ratings for Expectation are 2 and for Perceived Confirmation are 3, then the indirect Confirmation rating will be +1, and the indexed Confirmation rating will be 4 to signify and confirm the

positive impact of Perceived Performance on participants' ratings. When the indirect evaluation of Confirmation is negative, one negative point is deducted from Perceived Performance to affirm the negative influence of Perceived Performance on participants' Confirmation. This might be applicable to all Expectation and Perceived Performance ratings, but when the Expectation rating is in the centre (in our case 4, as indicated in Table 1), the indexed Confirmation value will be comparable to the Perceived Performance rating. Furthermore, when the difference between the two is significant and close to the leftmost or rightmost anchors, the highest or lowest rating is assigned to indexed Confirmation and merged with the second highest or second lowest rating, as this may bridge the gap of adding one more positive or negative rating (mentioned above). For example, if the Expectation rating is 1 and the Perceived Performance is 6 or 7, the indexed Confirmation is 7. Accordingly, the following hypothesis emerged:

> **Research Hypothesis 1:** *When compared to direct and indirect approaches to measuring participants' Confirmation, the proposed indexed approach yields more valid and reliable measurement for Confirmation.*

Based on the established ECT model, this research aims to validate the indexed method of assessing Confirmation by conducting a comprehensive analysis of an extended ECT, namely *Trust-based ECT Model* (T-ECT), that is applied to an online shopping environment, involving the notion of Online Shopping Decision-Making (OSDM), which is related to the behaviour of procuring goods or services online (Li & Zhang, 2002; Abuaddous, et al., 2018; Almajali & AL-Sous, 2021; Al-Sous, et al., 2023). Numerous studies have been conducted with the aim of identifying novel factors that may influence or facilitate the online purchasing decision-making process. Many of these investigations have also endeavoured to construct a comprehensive structural and measurement model that accounts for the interplay among these various aspects, especially Trust (e.g., Pakarti, 2022; Zhu, et al., 2023). Due to its importance in e-commerce and OSDM advancement, the relevance of trust in expanding opportunities for both technology adoption and information exchange was also established (Ratnasingham, 1998; Kim, et al., 2009; Al Sokkar & Law, 2013; Kim & Ogbanufe, 2020). As a result, the trust emerged was deemed as a pivotal component for the success of many of B2C e-commerce transactions (e.g., Kim, et al., 2009; Pakarti, 2022; Zhu, et al., 2023).

Several studies have been conducted to include trust as a newly recognized component in the established theoretical frameworks (e.g., TAM and ISSM). To give an example, a centralized structural framework for the interchange of e-commerce links was put up by Pavlou (2009), which was based on the original TAM. Three elements were identified as having a direct impact on consumers' usage attitudes: the perceived usefulness of the

website, its simplicity of use, and the online vendor's credibility. In particular, the model maintained the traditional TAM while adapting it to the e-commerce setting, and it added trust as a component that had a dual impact on consumers' attitudes and their intentions to make purchases or otherwise engage with the market. In addition, the model demonstrated the results of its mediating influence on the customer's perceived qualities and their purchasing decision together with their desire to use (e.g., Satisfaction). As per the research conducted by McKinney and colleagues (2002) and the work proposed by Oh and Ma (2018) it is beneficial to investigate the expectations and disconfirmation of web customers at a more advanced level in order to ascertain their level satisfaction towards their experience, as customers tend to repeat it as a loyal customer. E-Commerce success, which may result in a purchase, may, therefore, be ensured by merging IS and marketing ideas of web-customer satisfaction. Consequently, as shown in Figure 3 below, the present study proposes a theoretical model, named T-ECT, that is grounded in the concepts of Trust and ECT. The model seeks to explore the intricate connections between Expected Trust, Perceived Trust, and Confirmation of Trust by adopting an appropriate level of abstraction.

Figure 3: The Research Model: Trust-based Expectation-Confirmation Model (T-ECT).
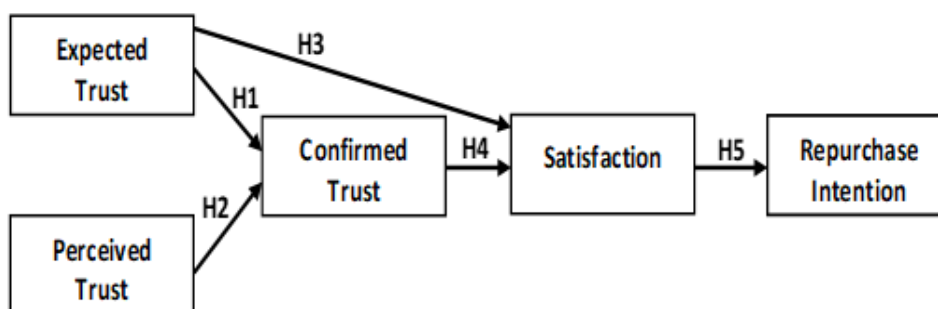
In further details, the concept of Expectation within the ECT model has emerged as a significant area of investigation in its own regard. It has been discovered that once customers establish their expectations and initiate their transactional process, they proceed to evaluate the Perceived Performance in relation to the transactional level (Oliver R. , 1980; Dwyer, et al., 1987; Kim D. , 2012; Eid, et al., 2020). Confirmation is observed when customers assess the performance of a transaction to be either equal to or beyond their very own expectations. Conversely, disconfirmation arises when customers find the performance of a transaction to be inadequate in meeting their expectations (Oliver R. , 1980; McKinney, et al., 2002; Al Sokkar & Law, 2013; Kim & Ogbanufe, 2020). Regarding our model that aims to investigate Trust at a suitable level of abstraction, and considering the aforementioned comparisons, it can be inferred that both Expectation and Perceived Performance play a role in

influencing Confirmation. In turn, both Expected Trust and Perceived Trust are likely to impact customers' confirmation in relation to trust. Consequently, the very first two hypotheses were formulated:

Model Hypothesis 1 (H1) *Customers' Expected Trust influences their Confirmation towards trust.*

Model Hypothesis 2 (H2) *Customers' Perceived Trust positively affects their Confirmation towards Trust.*

In the field of marketing research, it has been customary to employ the concept of expectation as a means of examining the post-purchase satisfaction and behaviour of customers (Bhattacherjee, 2001; Kim D., 2012; Al Sokkar A. A., 2014). Dabholkar and colleagues (2000) as well as Oliver (1980) conducted research on the impact of consumer expectations on satisfaction within the context of e-commerce companies. Based on these research studies in e-commerce settings, the notion of satisfaction can be defined as a cognitive and emotional state that encapsulates the consumer's overall evaluation of their e-commerce experience with a specific online business. In the same vein, Kim's (2012) previous studies suggested that satisfaction is a consequential state encompassing the consumer's emotional response to the entirety of an e-commerce transaction conducted through an online selling organization, and that customer satisfaction is also a direct result of customer expectation together with their confirmation. According to the findings of Szajna and Scamell (1993), expectations played a crucial role in determining an individual's level of satisfaction. These expectations, along with confirmation, were considered as significant sources of information. Furthermore, the research suggested that individuals tend to exhibit a bias towards aligning their satisfaction level with their prior expectations. Furthermore, it was observed that when a consumer's perceived performance exceeded their initial expectations, sometimes referred to as a positive confirmation, it tended to result in a comparatively elevated sense of satisfaction (Szajna & Scamell, 1993). In turn, both expected trust and confirmed trust were likely to impact customer satisfaction in relation to trust. Consequently, the next two hypotheses were formulated:

Model Hypothesis 3 (H3) *Customers' Expected Trust influences their Satisfaction.*

Model Hypothesis 4 (H4) *Customers' positive Confirmation positively influences their Satisfaction.*

Customer Repurchase Intention is the final endogenous construct of the proposed T-ECT model, and it has its roots in the consumer behaviour literature. Clearly, the behaviour of Repurchase Intention holds significant desirability and financial value for e-tailers. Multiple research projects have demonstrated that customer satisfaction has a favourable impact on customer repurchase intention (Oliver R., 1980; Oliver R., 1999; Kim D., 2012; Al Sokkar & Law, 2013). When customers are satisfied with the service they received from an online retailer during a previous transaction, they are more inclined to conduct future business with that retailer online. Hence, it

is unsurprising that those who express satisfaction with a certain service have a greater propensity for utilising said service compared to those who do not (Gross & Bongartz, 2012; Al Sokkar & Law, 2013). Additionally, satisfied consumers are more likely to engage in word-of-mouth advertising, as supported by (Anderson, 1998) and (Zalloum, et al., 2019). Thus, the final hypothesis of the T-ECT model is formulated:

Model Hypothesis 5 (H5) *Customers' Satisfaction positively influences their Repurchase Intention.*

The present research study utilises items that are pertinent to the constructs and qualities outlined in Table 1 to evaluate participants' expectations and the impact of interaction experiences on their perceived performance and confirmation of expectations. The items listed above have been derived from various research studies that are grounded in theoretical models, as cited in (Dabholkar, et al., 2000), (McKinney, et al., 2002), (Palvia, 2009), (Kim, 2012), (Al Sokkar & Law, 2013), (Al Sokkar, 2014), (Chae, et al., 2016), (Sullivan & Kim, 2018), (Sullivan & Kim, 2018), (AL-Sous, et al., 2022), (Al-Gasawneh, et al., 2022), (Dewi, et al., 2022), (Pakarti, 2022), and (Zhu, et al., 2023). Our study presents an organized list of Trust (three items), Satisfaction (four items), and Repurchase Intention (four items).

Table 2: The Study Measurement Constructs and related Items

Construct	Items
Trust	T1: I may put my trust in this website.
	T2: There is confidence in this website vendor since it appears to meet its obligations
	T3: In my opinion, this website has my best interests in mind.
Intention to repurchase	IR1: I'm interested in making a web-based purchase of the item.
	IR2: I will be recommending this site to my friends
	IR3: If I end up needing the items I want to buy, I will shop here again.
	IR4: I intend to continue using this website rather than discontinue its use
Satisfaction	S1: Using this website made feel Pleased
	S2: Using this website made feel Delighted
	S3: Using this website made feel Content
	S4: Using this website made feel Satisfied

Research Methodology

To evaluate the above described research and model hypotheses, an online survey was created using the open-source application (Limesurvey). The authors' personal connections and many mailing groups (e.g., Digital Analytics, Conversion Optimization, Online Marketing, and E-commerce, British Computer Society HCI, and The Marketing Network) predominantly comprised of HCI and Marketing researchers were sent a link to the survey. A total of 559 (42.7% Females) valid responses were gathered in the data collection phase that lasted almost a month. With regards to their age, 19% of the total participants are under the age of 24 years, 59.5% are between 25-34 years, 12% are between 35-44 years, 7.5% are between 45-54, and 2% are 55 years old or above. Most of

the participants were highly educated, since 65% of the total participants had a master's or Ph.D. degree as the highest educational level attained, and 7.8% collage or high school, and 28% had bachelor's degree as their highest educational level. The majority of the participants were from the U.K. 61%, 12% from USA, 11% from Jordan, and 16% from the rest of the world. All Information about the participants is listed in Table 3. All participation was voluntary. On average, the survey participants spent 11 minutes completing the survey.

**Table 3:** General Demographics of the Participants.

		N	**%**
Gender	Male	315	56.4%
	Female	244	43.6%
Age	18 - 24 years	106	19%
	25-34 years	332	59.4%
	35-44 years	67	12.1%
	45-54 years	42	7.5%
	$\geq$ 50 years	12	2 %
Education	High school	21	3.7%
	College	23	4.1%
	Bachelor	158	28.2%
	Master	276	49.4%
	Doctorate	81	14.5%
Country	U.K.	341	61%
	USA	66	12%
	Jordan	61	11%
	The rest of the world	91	16%
Total		**559**	**100%**

Study Protocol

Participants were requested to provide responses to each of the survey's four phases, as presented in Figure 3 below:

The Pre-Test Phase: information regarding the participants' demographics, previous online shopping experiences, and level of familiarity with the website that was used for this research study "ikea.com".

Figure 3: The Research Protocol for the Study Phases.
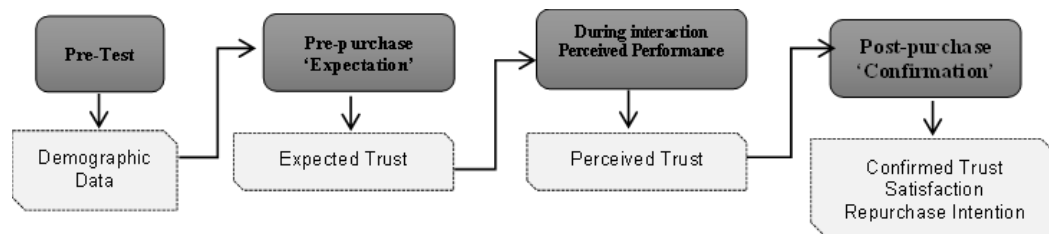
Pre-Purchase "Expectation" Phase: Before making a purchase decision, many online shoppers look to their own past purchases, the opinions of others, and reports of reviews of the product or retailer's website (e.g., McKinney, et al., 2002; Kim, et al., 2009; Al Sokkar A. A., 2014; Kim & Ogbanufe, 2020). A brief, neutrally phrased summary

of the website was written. Participants were given this information before being asked to rate their expected levels of trust on a 7-point Likert scale with "not likely at all" and "very likely" serving as the leftmost and rightmost anchors, respectively.

During interaction "Perceived Performance" Phase: Participants in this study were instructed to search for a specific product on the study website and record how long it took them to do so (mean = 6.1 minutes; SD = 4.7). After gaining some familiarity with the site, participants were required to respond to the same set of items used in the expectation phase. There was some variation in the words used on the 7-point Likert scale with "very poor" and "very good" serving as the leftmost and rightmost anchors, respectively. They were also asked whether they had any prior experience with the product and if the price was a factor in their final decision.

Post-purchase 'Confirmation' Phase: The two primary techniques for measuring the Confirmation construct are covered in the Related Work section. This can be done in two ways: The first involves deducing Confirmation by calculating the difference between Perceived Performance and Expectation. The second approach involves directly measuring Confirmation as a distinct construct, separate from the perceived gap. For this reason, the Confirmation measurement was taken directly to validate the **Research Hypothesis 1**. Hence, the identical set of questions used in the previous 2 phases of the online survey was used. The descriptions on the 7-point Likert scale were varied, the leftmost and rightmost anchors are characterized by a significant discrepancy between the expected and actual values, as expressed by the phrases "much lower than I thought" and "much higher than I thought," respectively. The midpoint was identified as " consistent with my initial expectations " Subsequently, the subjects were requested to evaluate their degrees of Customer Satisfaction and their probability of consenting to a future transaction through employment of a 7-point Likert scale, wherein "strongly disagree" and "strongly agree" were employed as the scale's leftmost and rightmost anchors, correspondingly.

Data Analysis and Results

The survey items utilised in this study had been validated in the preceding research. However, in this study we conducted extra tests to assess their reliability and validity; it was deemed necessary as the Indexed Approach for evaluating Confirmation was introduced. To accomplish this objective, the researchers employed IBM SPSS Statistics (Version 29.0). For *Constructs Reliability* Table 4 presents a comprehensive overview of the items tested and categorised according to the type of question. All items exhibited Cronbach's alpha reliability coefficients exceeding 0.70, suggesting a substantial level of internal consistency (Chin, 2009; Henseler, et al., 2015). For *Construct Validity* assessment, an exploratory factor analysis using Direct Oblimin rotation was conducted on all

items belonging to each construct. The results presented in Table 4 indicated that all constituent components of each construct were successfully loaded onto a singular factor, and the cross-loadings for all components were determined to be far below the maximum allowable threshold of 0.4. In addition, an assessment was conducted to evaluate the convergent validity and Composite Reliability (CR) of each component. All item loadings for the constructions surpassed the threshold of 0.5, and furthermore, the eigenvalue exceeded the value of 1.00.

Table 4: Construct Validity and Reliability for the Measurement Model (T-ECT)

Constructs	Item	Loading	Eigenvalue	AVE	CR	Cronbach α
Expected Trust	ET1 ET2 ET3	0.908 0.922 0.920	2.527	0.832	0.931	0.906
Perceived Trust	PT1 PT2 PT3	0.903 0.948 0.920	2.556	0.852	0.945	0.911
Confirmed Trust- Direct	CT1 - Direct CT2 - Direct CT3 - Direct	0.914 0.948 0.923	2.598	0.865	0.950	0.921
Confirmed Trust- Indirect	CT1 - Indirect CT2 - Indirect CT3 - Indirect	-0.849 0.921 0.835	2.268	0.750	0.950	0.953
Confirmed Trust- Index	CT1 - Indexed CT2 - Indexed CT3 - Indexed	0.889 0.930 0.896	2.458	0.822	0.933	0.889
Repurchase Intention	RI1 RI2 RI3 RI4	0.936 0.926 0.914 0.938	3.569	0.892	0.975	0.936
Customers Satisfaction	CS1 CS2 CS3 CS4	0.937 0.940 0.923 0.922	3.379	0.845	0.966	0.938

Multiple Regression Analysis of Constructs

In this part of research results, the direct and indirect methods of measuring the post-purchase Confirmation are examined, and compare each of them to the indexing approach, which is grounded on ECT. As a result, in the Confirmation phase of ECT, both Expectation and Perceived Performance of the measured construct may explain the construct. Multiple regression analyses were utilised in the study to investigate whether the same construct assessing "Trust" during both the Expectation and Perceived Performance stages could account for the variance in Confirmed Trust, as measured through the direct, indirect, and indexed approach.

The results of the multiple regression analysis indicate that both Expected and Perceived Trust significantly contributed to the explanation of 29.8% of the variance observed in the direct assessment of Confirmed Trust. According to the data presented in Table 5, significant statistical variations in construct values were observed across the three measured phases (F=117.609, p <0.001). Whereas findings revealed a lower percentage of explanation (13.2%) for the indirect assessment of Confirmed Trust by the identical related measures and revealed notable variations in the construct's values across the three phases, as indicated by the statistical analysis (F = 42.145, p <0.001). For the Confirmed Trust measured by the Indexed Approach, the results of multiple regressions showed a higher percentage than both direct and indirect approaches that could be explained at 96.2% by the

similar corresponding measures. The results suggest that there were notable variations in the construct values across the three phases, as evidenced by the statistical analysis (F = 7039.800, $p <0.001$).

Table 5: Multiple Regressions of Confirmed Trust Measured by Direct, Indirect, and Indexed Approach.

Dependent Construct (*Confirmed Trust*)	Independent Constructs (Predictors)					
	Expected Trust			Perceived Trust		
	β	R^2	*p*	β	R^2	*p*
Confirmed Trust – Direct Approach	0.107	0.013	<0.004	0.497	0.280	<0.001
Confirmed Trust – Indirect Approach	-0.011	-0.001	<0.610	0.164	0.098	<0.001
Confirmed Trust – Indexed Approach	0.192	0.032	<0.001	1.072	0.892	<0.001

When the findings computed using direct and indirect measures were compared to those computed using the indexing technique, the latter demonstrated to be more valid and the indexed method is a viable replacement for the Confirmation measurement used in this study and proposed in (McKinney, et al., 2002; Kim, et al., 2009; Kim & Ogbanufe, 2020), which requires to be reviewed, updated or replaced. And still, Trust measured in the perceived quality phase had a stronger unique contribution to Confirmed Trust for all approaches than Expected Trust. As presented in Table 6, the result of statistical test found that Perceived Trust made a significant and distinct contribution to Confirmed trust as measured by the Indexed Approach. The beta coefficient, the R-squared value, and the p-value are as follows (β =1.072, R^2 = 0.892, $p < 0.001$). Conversely, it was observed that the expected Trust exhibited a comparatively lower level of significance (or insignificance in the case of the Indirect Approach) in terms of its distinct impact on the confirmed Trust (β = 0.192, R^2 = 0.032, $p < 0.001$).

Table 6: The Unique Contribution of Expected and Perceived Trust on Confirmed Trust Measured by Direct, Indirect, and Indexed Approaches.

| Dependent Construct (*Confirmed Trust*)	Independent Constructs (Predictors)					
	Expected Trust			Perceived Trust		
	β	R^2	*p*	β	R^2	*p*
Confirmed Trust – Direct Approach	0.107	0.013	<0.004	0.497	0.280	<0.001
Confirmed Trust – Indirect Approach	-0.011	-0.001	<0.610	0.164	0.098	<0.001
Confirmed Trust – Indexed Approach	0.192	0.032	<0.001	1.072	0.892	<0.001

Structural Paths and Hypothesis Testing

This section of the analysis further compares the suggested indexed method to direct and indirect methods of assessing participants' confirmation. With this in-mind, three different structural models, one for each strategy, were developed. All research model's hypotheses for all constructed models were evaluated using Partial-Least-Squares (PLS) path modelling because it has the ability for defining the linkages between latent variables and their manifest ones as well as the links between latent variables in the structural path modelling. Additionally, it has

been suggested that Partial Least Squares (PLS) has the capacity to enhance and optimise the explication of variance in response variables, thereby simplifying the calculation of intricate models (Chin, 2009; Henseler, et al., 2015). Path modelling using PLS presents a viable alternative to Structural Equation Modelling (SEM) based on covariance. PLS allows for the evaluation of both reflective and formative constructs and is less restrictive in terms of variable distribution and error term assumptions. Additionally, PLS requires a smaller sample size in contrast to SEM. The research model and its associated scales were tested using the Smarts 4 software, as recommended by Chin (2009). In accordance with the recommendation of Hensel et al. (Henseler, et al., 2015), a bootstrap procedure with a sample size of N = 5000 was employed to evaluate the potential exclusion of paths that were rendered insignificant by the presence of other factors during the assessment of each measurement model. The statistical significance of the predicted structural paths for each measurement model was assessed through the β-weights assigned to each path.

The PLS path modelling findings for each Confirmational approach are shown in Figures 4, 5, and 6. All the hypothesized relationships held up, and the significance level of the correlations was set at 0.05:

With regards to the Direct Confirmation structural model, Figure 4 and the summary of the path analysis reported in Table 7, the results indicated that the customers' Expected Trust (ET) had a significant impact on their Confirmed Trust (CT- Direct) (β = -0.147, t = 4.075, p <0.001), where the strongest impact came from their perception towards trust "Perceived Trust (PT)" (β = 0.599, t = 16.251, p <0.001). Hence **Model Hypothesis 1 (H1)**, and **Model Hypothesis 2 (H2)** are supported. The R^2 for Confirmed Trust with the direct measurement approach (CT- Direct) was 0.303, implying that Expected Trust (ET) and Perceived Trust (PT) could predict 30.3% of the total variance of Confirmed Trust (CT-Direct). **Model Hypotheses 3 (H3)** and **4 (H4)** were also supported: customers' Expected Trust (ET) positively influences their Satisfaction (CS) (β = 0.200, t = 4.751, p <0.001), and customers' Confirmed Trust (CT- Direct) positively influences their Satisfaction (CS) (β = 0.366, t = 8.576, p <0.001). Furthermore, Expected Trust (ET) and Confirmed Trust (CT- Direct) could predict 19.2% (R^2) of the total Satisfaction (CS) variation. Finally, the results also showed that Customer Satisfaction (CS) positively influences their Repurchase Intention (RI) (β = 0.962, t = 219.609, p <0.001). Hence, **Model Hypothesis 5 (H5)** was supported, and 92.5% of the Customers' total Repurchase Intention (RI) variation could be explained by their Satisfaction (CS).

Figure 4: Trust-based Expectation-Confirmation Model (T-ECT) with the Direct Confirmation Measurement.
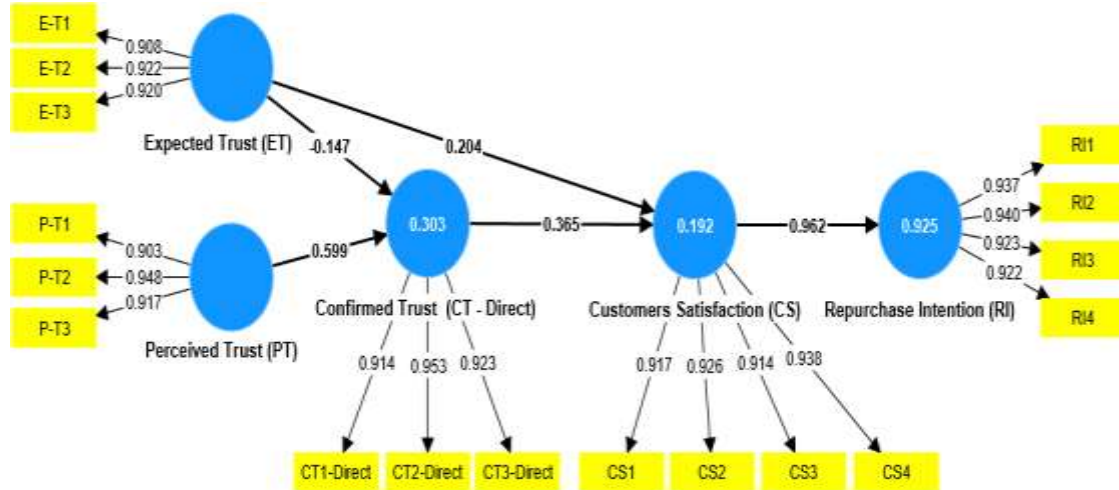
Table 7: Summary of Hypotheses Testing for T-ECT with the Direct Confirmation Measurement.
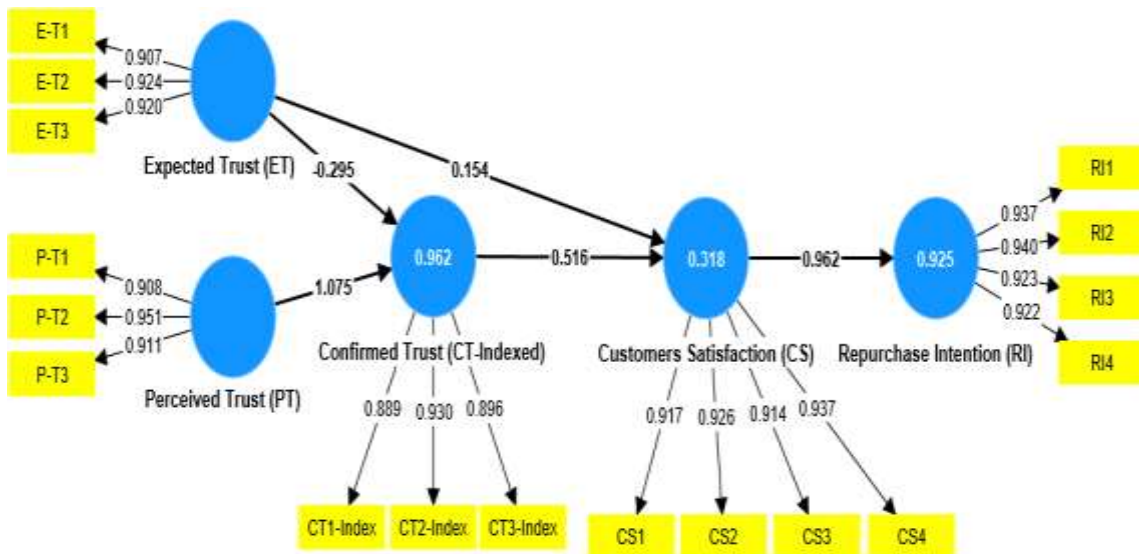
Model Hypothesis	Path	β	Std. Dev	t-Value	p-Value	VIF	Decision
H1	(ET) → (CT-Direct)	-0.147	0.036	4.075	0.000	1.243	Supported
H2	(PT) → (CT-Direct)	0.599	0.037	16.251	0.000	1.243	Supported
H3	(ET) → (CS)	0.204	0.042	4.814	0.000	1.014	Supported
H4	(CT-Direct) → (CS)	0.365	0.043	8.576	0.000	1.014	Supported
H5	(CS) → (RI)	0.962	0.006	219.609	0.000	1.000	Supported

With regards to the Direct Confirmation structural model, Figure 5 and the summary of the path analysis reported in Table 8, the results of PLS modelling supported **Model Hypothesis 1 (H1)** where customers' Expected Trust (ET) had a significant impact on their Confirmed Trust (CT- Indirect) ($\beta = -0.273$, $t = 6.256$, $p < 0.001$), where the positive influence came from their perception towards trust "Perceived Trust (PT)" ($\beta = 0.613$, $t = 17.162$, $p < 0.001$). Hence, **Model Hypothesis 2 (H2)** was also supported. Furthermore, Expected Trust (ET) and Perceived Trust (PT) could predict 30.2% of the total variance of Confirmed Trust (CT- Indirect). Model **Hypotheses 3 (H3)** and **Hypotheses 4 (H4)** were also supported: customers' Expected Trust (ET) positively influences their Satisfaction (CS) ($\beta = 0.249$, $t = 5.551$, $p < 0.001$), and customers' Confirmed Trust (CT- Indirect) positively influences their Satisfaction (CS) ($\beta = 0.230$, $t = 6.800$, $p < 0.001$), and Expected Trust (ET) and Confirmed Trust (CT- Indirect) could predict 11.5% (R^2) of the total Satisfaction (CS) variation. Finally, the results also showed that Customer's Satisfaction (CS) positively influences their Repurchase Intention (RI) ($\beta = 0.963$, $t = 224.295$, $p < 0.001$). Hence, **Model Hypothesis 5 (H5)** was supported, and 92.7% (R^2) of the Customers' total Repurchase Intention (RI) variation could be explained by their Satisfaction (CS).

Figure 5: T-ECT with the Indirect Confirmation Measurement.
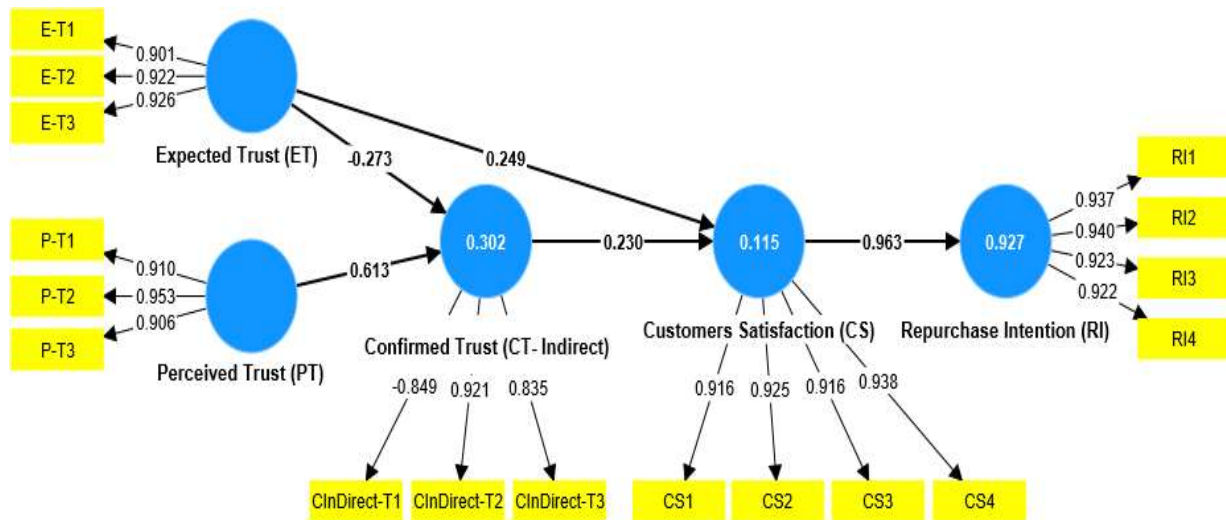
Table 8: Summary of Hypotheses Testing for T-ECT with the Indirect Confirmation Measurement

Model Hypothesis	Path	β	Std. Dev	*t*-Value	*p*-Value	VIF	Decision
H1	(ET) → (CT-Indirect)	-0.273	0.044	6.256	0.000	1.244	Supported
H2	(PT) → (CT-Indirect)	0.613	0.036	17.162	0.000	1.244	Supported
H3	(ET) → (CS)	0.249	0.044	5.551	0.000	1.000	Supported
H4	(CT-Indirect) → (CS)	0.230	0.036	6.800	0.000	1.000	Supported
H5	(CS) → (RI)	0.963	0.006	172.961	0.000	1.000	Supported

Finally, for the last structural model in this research (Figure 4.3) where the proposed Indexing approach was used to measure the CT-Indexed, the results of the PLS modelling supported **Model Hypothesis 1 (H1)** where customers' Expected Trust (ET) had a significant impact on their Confirmed Trust CT-Indexed (β = -0.295, t = 14.309, p <0.001), where also the positive influence came from their perception towards trust "Perceived Trust (PT)" (β = 1.075, t = 53.904, p <0.001). Hence **Model Hypothesis 2 (H2)** was also supported. Furthermore, Expected Trust (ET) and Perceived Trust (PT) could predict 96.2% of the total variance of Confirmed Trust (CT-Indexed). **Model Hypotheses 3 (H3)** and **Model Hypotheses 4 (H4)** were also supported: customers' Expected Trust (ET) positively influences their Satisfaction (CS) (β = 0.154, t = 3.853, p <0.001), and customers' Confirmed Trust (CT- Direct) positively influences their Satisfaction (CS) (β = 0.516, t = 14.688, p <0.001). Furthermore, Expected Trust (ET) and Confirmed Trust (PT- Indexed) could predict 31.8% of total Satisfaction (CS) variation. Finally, the results also showed that Customers' Satisfaction (CS) positively influences their Repurchase Intention (RI) (β = 0.962, t = 217.494, p <0.001), Hence, **Model Hypothesis 5 (H5)** was supported, and 92.5% (R^2) of the Customers' total Repurchase Intention (RI) variation could be explained by their Satisfaction (CS).

Figure 6: T-ECT with the Indexed Confirmation Measurement.

Table 9: Summary of Hypotheses Testing for T-ECT with the Indexed Confirmation Measurement

Model Hypothesis	Path	β	Std. Dev	*t*-Value	*p*-Value	VIF	Decision
H1	(ET)→ (CT-Indexed)	-0.295	0.021	14.309	0.000	1.244	Supported
H2	(PT) → (CT-Indexed)	1.075	0.020	53.904	0.000	1.244	Supported
H3	(ET) → (CS)	0.154	0.039	3.853	0.000	1.034	Supported
H4	(CT-Index) → (CS)	0.516	0.039	14.688	0.000	1.034	Supported
H5	(CS) → (RI)	0.962	0.006	217.494	0.000	1.000	Supported

Discussion

All ECT-related hypotheses were supported by the results of multiple regression analysis and PLS modelling for the three models. The results indicated that customers' Expected Trust had a significant impact on Confirmed-Trust **Model Hypothesis 1 (H1)** of all measured approaches where the highest impact was noted on the Indexed Confirmed Trust structural model ($\beta = -0.295$, $t = 14.309$, $p < 0.001$). The **Model Hypothesis 2 (H2)** was also validated for all measured approaches, in which customers' Perceived Trust positively affects their confirmation, and the higher effect was also observed on the Indexed Confirmed Trust structural model ($\beta = 1.075$, $t = 53.904$, $p < 0.001$). With regards to the influence of both Customers' Expected Trust and Confirmed Trust on their Satisfaction, the influence was positive and significant for all measured approaches **Model Hypothesis 3 (H3)** and **Model Hypothesis 4 (H4)** in which the Indexed Confirmed Trust structural model has the highest significant influence; Customers' Expected Trust positively influences their satisfaction ($\beta = 0.154$, $t = 3.853$, $p<0.001$); Customers' positive Indexed Confirmed Trust positively influences their satisfaction ($\beta = 0.516$, $t = 14.688$, $p < 0.001$). **Model Hypothesis 5 (H5)** was also validated and supported for all the measured approaches which also have almost similar β and t values; ($\beta = 0.962$, $t = 217.494$, $p <0.001$), ($\beta = 0.963$, $t = 224.295$, $p <0.001$), and ($\beta

= 0.962, t = 219.609, p <0.001), for the Indexed Confirmed Trust structural model, Indirect Confirmed Trust structural model, and Direct Confirmed Trust structural model, respectively.

Rather than the construct Satisfaction in the second model "T-ECT with the Indirect Confirmation Measurement.", all the other results showed R^2 values that met the 0.19 threshold value suggested by Chin (2009). In addition, R^2 values for both Confirmed Trust and Satisfaction were explained the highest on the third structural model "T-ECT with the Indexed Confirmation Measurement". Where the model indicated that Expected Trust and Perceived Trust can account for 30.3%, 30.2%, and 96.2% of the total explained variance of Direct Confirmed Trust, Indirect Confirmed Trust, and Indexed Confirmed Trust, respectively. Furthermore, the results indicated that Satisfaction in the "T-ECT with the Indexed Confirmation Measurement" was explained by Expected Trust and Indexed Confirmed Trust at 31.8% which is higher than other models. And with regards to Repurchase Intention (RI) the results of all structural models were almost the same and Satisfaction can account for 92.5% of its total explained variance.

The findings described above indicate that the theoretical framework of ECT is applicable to the study of temporal Customer Trust, given its potential to fluctuate over time and be influenced by touchpoints that reflect consumers' decision-making process regarding repurchasing intentions. However, in comparing the direct, indirect and the indexed approaches for measuring Confirmation, the later Indexed Approach proved to be more valid and powerful and yielded for more reliable measurement for Confirmation, therefore the **Research Hypothesis 1** is supported.

Conclusion

The present study employed the Expectation Confirmation Theory (ECT) as a theoretical framework to investigate the temporal process of customer trust and satisfaction development, as well as repurchase intention ((Al Sokkar & Law, 2013); Lee & Kwon, 2011; Baharum, et al., 2021; Kim, 2012; Kim & Ogbanufe, 2020). The study explicitly recognized the significance of expectations in influencing customers' confirmed trust and satisfaction in subsequent phases of ECT. Therefore, the Trust based Expectation-Confirmation model was proposed to study trust at the right level of abstraction to capture and study relationships among Expected Trust, Perceived Trust, and the Confirmation of Expected Trust at a sophisticated level. The proposed model underwent evaluation through a web-based survey that involved 559 participants, with the aim of examining the direct and indirect approaches of measuring the post-purchase Confirmation phase, where both approaches were found to be problematic with regards to the measured gap between the Perceived measurements and the Expected ones, which also cannot be

shaped by the middle-point on the Likert scale while applying the direct approach for the Confirmation measurements. For solving these identified problems, this research article proposed the Indexed Approach as a new relevant measurement approach to overcome and address the Performance-Expectation gap while using the indirect approach, and the middle-point issue while conducting a direct approach. The evaluation revealed the validity and originality of the Indexed Approach to transform Confirmation data to be utilised in the ECT modelling. Each approach was subjected to PLS path modelling and compared against other methods, with the Indexed Approach emerging as a viable substitute for both direct and indirect approaches.

Theoretical Implications

With the aim of providing greater precision regarding the significance of Trust as a subjective attribute that may hold relevance across various phases of participation within an e-commerce setting, this study presented and validated a trust-based model that goes beyond the traditional ones, especially by the procedures followed to accomplish the main aim of it, which also may offer new insights and contribute to the fields of online purchasing decision making (OSDM), digital marketing models, and user experience (UX). This is essential, since it has been noted that customer satisfaction, decision making, loyalty, word of mouth, and the entire UX may be influenced by the evolution of Trust (Al Sokkar & Law, 2013; Gross & Bongartz, 2012; Alsokkar, et al., 2023). Similarly important, the relationships between both constructs Expected Trust and Perceived Trust with Confirmed Trust, and the relationships between both constructs Expected Trust and Confirmed Trust with Satisfaction can be generalisable and applied to any B2C e-Commerce contact scenario or interaction experience. However, the interaction's results may vary depending on the nature of the task at hand. (e.g., online booking or online shopping, etc.). Furthermore, the Indexed Approach offered an entirely novel approach for transforming confirmation data for the ECT model's implementation. In particular, the primary techniques for quantifying the Confirmation constructs were found to be inadequate during the process of verifying the T-ECT model. As a result, the indexing approach was created to fix this problem; study of the three methods side-by-side demonstrated that the newly developed method is more reliable and effective.

Practical Implications

B2C e-Commerce merchants prioritize accessibility and related factors when making changes to their websites and online stores. The study's results indicate that e-commerce businesses could gain advantages by examining the emotional responses of their customers towards prominent design features, such as their expected trust in order to

provide more comprehensive design recommendations and possibly improve their marketing strategies, which can lead to a more satisfied customer, therefore, a more loyal customer.

Limitations and Suggestions for Future Research

While this study has achieved its overarching objective, it has a few noticeable limitations in terms of its traits or executions. The accuracy of the T-ECT model was evaluated through an online survey. The present methodology exhibited superiority over conventional paper-based survey techniques in terms of accuracy, efficiency, and its ability to access individuals who would have been difficult to reach otherwise. It is impossible to know how individuals truly behaved in the experiment, so we don't know, for example, if there are significant variations in how well different people perform on the same search task. For this reason, while the collected quantitative data characterised the correlations between trust in the expected, observed, and confirmed stages of interaction, it did not provide any insight into the processes or reasons underlying these stages. In addition to that, further expansion of the validated model is required. The proposed modification to the T-ECT model entails the inclusion of a fourth phase, namely the post-purchase phase. This phase would allow customers to reassess their experience and the value of their purchase after an extended time of product usage. (e.g., weeks or months).

There are various potential implications for future research endeavours aimed at advancing the findings of this particular study: As previously stated, the applicability of the T-ECT model is limited. Hence, additional research investigations pertaining to the B2C e-Commerce domain are deemed necessary. It is recommended that research studies be undertaken to authenticate the model across diverse B2C e-Commerce settings that encompass varying scopes and offer distinct products or services. Furthermore, it is recommended that forthcoming studies contemplate expanding the T-ECT framework to encompass a phase following the purchase. This stage entails an extended duration of engaging with the acquired product, which could potentially trigger a reevaluation of customers' encounter and appraisal of their procurement judgement. A longitudinal investigation may be carried out by establishing a prolonged partnership between the researcher and the e-commerce enterprise to acquire legitimate customers, their experience alterations, and purchase decision evaluations. Furthermore, the T-ECT model has the potential to incorporate important aspects and experience appraisals such as customer word-of-mouth generated from their experience and related satisfaction, to assess the establishment of a long-lasting and sustainable bond between them and the e-commerce vendor.

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