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# The Online Customer Decision-Making Styles as Marketing Innovation Strategies for the New Normal

# La Toma de Decisiones del Consumidor en Línea como Estrategias de Innovación por Mercadotecnia para la Nueva Normalidad

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**Keywords:** profile online customer; online customer decision-making styles; marketing innovation strategy; new normal

Palabras Clave: toma de decisiones del consumidor en línea; estrategias de innovación; mercadotecnia; nueva normalidad

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# ABSTRACT

**Purpose.** This research contributed to the customer decision-making style (CDMS) theory in the online framework (eCDMS) to unravel new orientations and segmentation to generate marketing innovation strategies for the new normal firms.

**Methodology**. It is based on a literature review designing a model and questionnaire applied to 400 Mexican online customers (May-Aug, 2021). The dataset is analyzed under Covariance-Based Structural Equation Modelling (CB-SEM), Cluster Analysis, and one-way-ANOVA multivariate methods.

**Findings and Originality.** The obtention of an empirical model with 9 factors, 24 indicators as new online customer decision-making styles orientations (eCDMS orientation), being quality, brand, and customer experience the most relevant. Besides, we obtained four new online customer groups (eCDMS Segmentation) that we called: marketing followers, price searchers, convenience shoppers, ethics& reputation keepers. The originality is based on a framework proposal about the discussion of new online consumers after the COVID-19 pandemic as the first insights to conform to an online customer decision-making style (eCDMS) theory.

#### **RESUMEN**

**Objetivo.** Esta investigación contribuye a la teoría del estilo de toma de decisiones del consumidor (CDMS) en línea (eCDMS) para descubir nuevas orientaciones y segmentaciones de los msmos y generar estrategias de innovación de marketing para las empresas, en la nueva normalidad.

**Metodología**. Se basa en una revisión de la literatura diseñando un modelo y un cuestionario aplicado a 400 consumidores mexicanos en línea (Mayo-Agosto de 2021). El conjunto de datos se analiza bajo el modelado de ecuaciones estructurales basado en covarianza (CB-SEM), elanálisis de conglomerados y el métodos multivariados ANOVA de un factor.

**Resultados.** Se obtiene un modelo empírico con 9 factores, 24 indicadores como nuevas orientaciones de estilos de toma de decisiones del cliente online (orientación eCDMS), siendo la calidad, la marca y la experiencia del cliente los más relevantes. Además, se obtuvo cuatro nuevos grupos de clientes en línea (segmentación eCDMS) a los que denominamos: seguidores de marketing, buscadores de precios, compradores de conveniencia, encargados de la ética y la reputación.

La **originalidad** se basa en una propuesta marco, basada en consumidores en línea después de la pandemia COVID-19, como primeros hallazgs para conformar una teoría de toma de decisiones del consumidor en línea (eCDMS).

#### 1. Introduction

Nowadays, a large digital evolution influences all the senses of life, especially during and after a time of crisis. After the prolonged COVID-19 lockdown, has been produced new behaviors in online customer decision-making styles (eCDMS) have elicited new online customer groups

(Ozturk, 2020). Today more than ever, the firms need new and innovative marketing strategies to understand the online customers who are constantly changing, developing themselves, changing preferences in a short time and going through behavioral modifications (Francis & Hoefel, 2018). The firms must anticipate the online customer behavior to maintain a competitive edge (Koch et al., 2020). Hence, we afford the question what are the Online Customer Decision-Making Styles (CDMS) as Marketing Innovation Strategies for the New Normal?

In this regard, the study's novelty is to identify the underlying factors and indicators involved in the new online customer decision-making style (eCDMS orientation) and the new groups of online customers (eCDMS segmentation) as a consequence of new habits and behaviors produced after a prolonged quarantine and lockdown of COVID-19 pandemic in Mexico as predictors for the new normal conditions. The predictors are gathered by designing a conceptual framework proposal as a generation of marketing innovation strategies. The framework's design is explained in the following sections to relate the results and contributions.

#### 1.1. The Customer Decision Making-Styles (CDMS) and its evolution

Customers are highly sensitive while making decisions and marketing stimuli provide the necessary information and knowledge about the product or service; they are also influenced by social and psychological elements like society, family, personal, motivation, and learning. Indeed customers use a variety of decision-making styles (CDMS). Today modern companies have adopted the CDMS techniques to understand the thinking and decision-making standards. The cognitive learning helps the buyer to remember the previous purchase each time when similar arise buyer will use own experience to make decision. Satisfied consumer will not go for information search which comes after problem recognition and other steps in decision making. Marketers can influence post purchase decision by positive learning. The first model of CDMS was developed in 1963 by Howard and Seth (1969) integrating several psychological, social, and market pressure on the buyer's choice and information issues. However, the literature on CDMS generally follow the seminal work of Sproles and Kendall (1986) whom conceptualized a framework with 8 basic characteristics of these styles and develops a Customer Styles Inventory to measure them empirically. Since 1986 we have a series of different frameworks that trying to explain such issue. See Table 1.

Author	Year	Factors
*Sproles and Kendall	1986	Perfectionistic, High-Quality Conscious Consumer; Brand Conscious, Price Equals Quality Consumer; Novelty-Fashion Conscious Consumer; Recreational, Hedonistic Consumer; Price Conscious, Value for Money Consumer; Impulsive, Careless Consumer; Confused by Over-choice Consumer; Habitual, Brand-Loyal Consumer
*Hafstrom et al.	1996	Perfectionist; Recreational/ Shopping Conscious; Careless Consumers; Time-Energy Conserving; Impulsive; Habitual/ Brand-Loyal, Price/Value Conscious
* Fan & Xio	1998	Brand Aware; Time Conscious; Over-Choice Quality; Price Conscious; Information Utilization
*** Blackwell & Minaird	2001	Input (Stimuli); Information Process; decision Process; Environmental; Individual Differences
*Canabal	2002	Brand Conscious; Perfectionist; Confused by Over Choice Consumers; Impulsive/Brand Indifferent; Time Conscious; Recreational Shopper; Price/ Value- Conscious; Dissatisfied/Careless
***Bagozzi, Gurhan-Canli et al.	2002	The Theory of Trying: Attitude toward Success; Expectation of Success; Attitude toward Failure; Expectation of Failure; Attitude toward Process or Means; Frequency of Past Trying and/or Past Behaviour; Intention to Try; Recency of past Trying and/or Past Behaviour; Trying
*** Leone Perugini et al.	2004	The Model of Goal-Directed Behaviour: Attitude, Positive Anticipated Emotions; Negative Anticipated Emotions; Subjective Norms; Desires; Frequency of Past Behavior; Intentions; Action; Perceived Behavioural Control; Recency of Past Behaviour
*** Ajzen	2006	The Theory of Planned Behavior as extension of Theory of Reasoned Action: Behavioural Beliefs; Normative Beliefs; Control Beliefs; Attitude; Subjetive norm; Perceived Behavioral Control; Intention; Behavior; Actual Behavior Control
** Bakewell & Mitchel	2006	Perfectionist; Brand-Conscious; Novelty-Fashion Conscious; Recreational Shopping; Impulsive; Confused by Over-Choice; Habitual, Brand Loyal; Store-Loyal; Time Energy Conserving; Bargain Seeking; Imperfectionism
** Lysonsky et al.	2009	Perfectionist; Brand-Conscious; Novelty-Fashion Conscious; Recreational Shopping; Impulsive; Confused by Over-Choice; Habitual, Brand Loyal
*Safiek	2009	Novelty; Perfectionist; High-Quality Conscious; Confused by Too many selection to choose Conscious; Recreational, Hedonistic Conscious; Impulsive, Careless Consumer; Variety-Seeking; Habitual Brand-Loyal; Financial, Time-Energy Conserving
Saleh et al.	2017	Perfectionistic, High-Quality Conscious; Brand Conscious Consumer; Novelty, Variety Conscious Consumer; Price, Value Conscious Consumer; Recreational, Hedonistic Consumer; Impulsive, Careless Consumer; Confused by Over-Choice Consumer; Habitual, Brand-Loyal Consumer; Fulfillment Conscious Consumer; Incentive Conscious Consumer; Recommendation Conscious Consumer; Fulfillment Conscious Consumer; Incentive Conscious Consumer; Recommendation Conscious Consumer
Karimi et al.	2018	Satisficer (Low/High); Maximizer (Low/High)
Mohsenin et al.	2018	Best Seekers, Premeditators, Innovation Seekers, Price Insensitive
Sudbury-Riley et al.	2018	The Cooperators; The Autonomous-Cooperators; The Oppositional-Cooperators; The Unaffected
Maggioni et al.	2019	Recreational Shopping Consciousness; Innovativeness; Price Consciousness; Time Pressure
Matevz et al.	2019	Brand Consciousness; Quality Consciousness; Price Consciousness; Information Utilization
Nawaz et al.	2019	Recreational and Hedonistic Consciousness; Price and Value Consciousness; Brand Consciousness; Price and Value Consciousness; Confused by over choice ; Impulsiveness and Carelessness

# Table 1. CDMS Evolution

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Thangavel et al.	2019	Brand Loyal Shoppers; Brand-Conscious Shoppers; Quality-Conscious Shoppers; Confused by over-choice/ availability of too many choices; Price/Value-Conscious Economic Shoppers; Online Store Loyal Shoppers; Online Shopping Confidence; Influence of Reference Group/Socially Desirable/ Information Seeking
Bullini-Orlandi, L. & Pierce	2020	Analytical Customer Information Processing; Intuitive Customer Information Processing; Environmental Dynamism; Customer Responsiveness; Market Performance
Koch et al.	2020	Behavioral Intentions; Perceived Usefulness; Internal Subjective Norms; External Subjective Norms

Source: \*Madahi et al. (2012); \*\*Tarnanidis et al. (2014) and other authors with own adaptation; \*\*\*UKEssays (2018)

# **1.2. From the CDMS to the eCDMS**

All the models assume that the consumer undertakes comprehensive cognitive processing before purchase behaviour under several complex situations with the influence of a plethora of both conscious and subconscious factors. The CDMS evolution in certain circumstances may result not from attitude evaluation, but overall affective response in a process called *"affect-referral"*. These are thought to be important limitations in the context of clothing shopping where overall affective evaluation and hedonistic impulses are thought to influence some purchases (Solomon et al. 2006). The CDMS theories are widely applied in western cultures, however it is still unclear that the assumptions underpinning it are well suited to other cultures (Solomon et al. 2006).

In this sense, the eight-factor model (Sproles & Kendall, 1986) tends to be more applicable in some countries and contexts than others (Tarnanidis et al., 2014; Nawaz et al., 2019). Besides, the concept must be updated according to the new online consumer habits based on the internet and analyze the online Customer Decision Making-Styles (eCDMS) (Mejía-Trejo, 2021). Because of the COVID-19 lockdown, there are reactions highlighting new behaviors of eCDMS. For instance, millennials and high-income earners are in the lead when shopping online, switching brands at unprecedented rates. The brands need to ensure strong availability and convey value because online customers are changing how they shop in response to health and safety concerns. The online customer shopping intent wants value for their money, especially in essential categories. Online customers are changing how they spend their time at home. Finally, some trends vary by customer segment (Charm et al., 2020).

# 1.3.New Normal and New Consume Habits

We do not always recognize habits in our own behavior; much of people's daily lives are taken up by habits they have formed over their lifetime. The automatic response is an important characteristic of a habit. Approach 40 percent of people's daily activities are performed each day in almost the same situations as several studies point out. Associative learning is the source of the habits. There are patterns of behavior that allow people to reach goals. The people repeat what works, and when actions are repeated in a stable context, the people form associations between cues and response (Verplanken & Wood, 2006).

The COVID-19 pandemic and the prolonged lockdown with social distancing mandates have disrupted the online customer habits of shopping as well as buying. Customers are learning new habits. The online customers, for instance, prefer the store comes to home instead to go to the store. While customers think to go back to pre-COVID old habits, it is likely that they will be modified by new procedures and regulations in the way customers buy and shop services and products. New new normal habits have been emerged by technology advances, changing demographics, and innovative ways customers have learned to cope with blurring the work, leisure, and education boundaries (Seth, 2020).

Taking into account the particular consumption of COVID-19 lockdown Mexico (Deloitte, 2021): for instance, the daily use of a laptop increased to 78% and the tablet to 64%, as result of changes in the formats in education and distance work; the arise of access to wearables, like smartwatches, from 54% in 2019 to 72% in 2020 for health monitoring (oxygen levels in the blood) and exercise due to the social distance measures, 17% of people (mainly between 18 to 34 years old) acquired a smartphone. This can be considered as a habit of unusual consumption due to the COVID-19 pandemic disruption. Hence, COVID-19 pandemic is changing how consumers behave across eight spheres of life for instance work, shopping and consumption, learning, life at home, communications and information, play and entertainment, travel and mobility, health and wellbeing (Kohli et al., 2020). An analysis carried out by Cabrera (2020) concludes that Mexico has catapulted the use of e-commerce to such a degree that the progress registered during COVID-19 has a penetration of three years ahead. Therefore, many of the trends are accelerations of past behaviors producing perceptions that we covered a "decade in days" when it comes to the adoption of digital. Most behaviors will see a linear development trend or stick in the next normal with different impacts in several industries; for instance, behavior changes will reshape eCDMS journeys and the regarding companies will need to adapt fast (Kohli et al., 2020).

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# 2. The online Customer Decision Making-Styles (eCDMS) proposal framework

Marketers, advertisers, brands, and businesses need to focus on the psychology and behavior behind each facet of the eCDMS to engage with, influence, and empower customers at every stage. Understanding the eCDMS, the opportunities within each stage, and how customers interact during and between each stage is crucial to success (Koscierzynski, 2020). Modern customers make decisions at their own pace, on their own time, and on their terms. The modern decision-making journey is less linear; it is multi-dimensional and interconnected (Thangavel et al., 2019; Koscierzynski, 2020).

The preceding decision-making models in Table 1 are considered relevant from a broad-stroke perspective. In this research, 4 specialists discussed and analyzed them: 2 research professors in digital marketing and 2 SME CEOs in digital marketing strategies (in Mexico) to determine a final ex-ante model and a final questionnaire concluded and depicted in Table 2.

	eCDMS Conceptual Construct Framework	
Factors	Indicators Respond only for one option, according to Likert Scale 1-7: using Likert Scale 1-7 (1.Strongly disagree; 2. Disagree; 3. Somewhat disagree; 4. Neither agree or disagree; 5. Somewhat agree; 6. Agree; 7. Strongly agree).	Authors
1. Brand. (BND)	<ol> <li>Under online conditions:</li> <li>BND1. My first impulse is to buy with my favorite brands ("brand loyalty")</li> <li>BND2. The higher the price of a product, the better it is quality ("brand price")</li> <li>BND3. I prefer to buy the best-selling brands ("brand conscious")</li> </ol>	Sproles & Kendall (1986); Canabal (2002); Tarnanidis (et al., (2014); Thangavel et al. (2019); Mejía- Trejo (2021)
2. Quality. (QTY)	<ul> <li>Under online conditions, I usually try to buy the best overall product/service based on its value proposition for</li> <li>QTY1performance. ("quality performance")</li> <li>QTY2design ("quality design")</li> <li>QTY3quick access to the availability. ("quality in access")</li> </ul>	Sproles & Kendall (1986); Fan & Xio (1998); Safiek (2009); Saleh (et al., 2017); Osterwalder & Pygneur (2010); Matevz (et al., 2019); Thangavel (et al., 2019)
3. Self- Efficacy. (SEF)	<ul> <li>Under online conditions, despite all the information about different products/services confuses me:</li> <li>7. SEF1I search for more information via web pages, e-mail or social media, etc., to clarify it.</li> <li>8. SEF2I feel that I can distinguish real information from fake news.</li> <li>9. SEF3.The more I learn about different brands of product/services, it is easy to me to choose one.</li> </ul>	Bandura (1997); Chen & Cheng (2018)
4. Price Consciousne ss.(PRC)	<ul> <li>Under online conditions</li> <li>10. PRC1. I usually search in internet advertisements of discounts.</li> <li>11. PRC2. I usually use discounts to reuse them in shopping for other products/services.</li> <li>12. PRC3. I carefully watch how much I spend.</li> </ul>	Sproles & Kendall (1986); Thangavel (et al., (2019) Mohsenin (et al., 2018); Maggioni (et al., 2019)

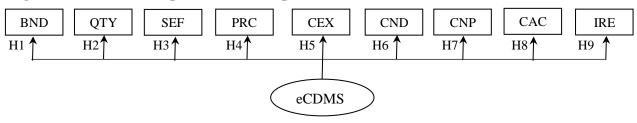
# Table 2. Final Design of eCDMS Questionnaire

r		
5. Customer Experience. (CEX)	<ul> <li>The presentation of product/service in the online media</li> <li>13. CEX1has a sense of human contact (<i>"social presence"</i>).</li> <li>14. CEX2is lively (<i>"sensory appeal"</i>).</li> <li>15. CEX3.I feel like I get more for what I pay of product/service in the online channel. (Satisfaction).</li> </ul>	Katawetawaraks & Lu- Wang (2011); Karimi (et al., 2018); Bleier (et al., 2019); Lai (et al., 2020)
6.	My first action for accessing to the online media are more	
Customer	16. CAC1reasoned and planned than impulsive and unplanned action.	Hafstrom (et al., 1996);
Action. (CAC)	( <i>"reasoned answer"</i> ). 17. CAC2impulsive and unplanned than reasoned and planned action.	Bakewell & Mitchel (2006);
(ene)	("impulsive answer")	(2000), Lysonsky (et al., 2009);
7. Customer Needs. (CND)	<ul> <li>The main needs for accessing to the online media for buying products /services are more</li> <li>18. CND1 "utilitarian" (i.e., convenience to pay in credit/debit card/bitcoin, accessibility, payment services, assortment, speed delivery and payment, customization, availability of information).</li> <li>19. CND2 "hedonic" (i.e., intrinsic enjoyment, visual appeal, sensation seeking, entertainment, socialize)</li> </ul>	Fishbein & Ajzen (2011) ; Krishna & Strack (2017); Liu & Zhang (2019); Nawaz (et al., 2019)
8. Customer Preferences. (CNP)	<ul> <li>The main preference for accessing to the online media is for</li> <li>20. CNP1buying products (i.e., auctions, books, computer hardware, computer software, consumer electronics, cosmetics, department stores, fashion, flowers &amp; gifts, food, furniture &amp; decoration, health, hygiene, jewelery, music price comparisons, sports, tickets, toys)</li> <li>21. CNP2buying services (i.e., banking services, mobile phones, service payments, subscription services, urban mobility, entertainment, education services, shows &amp; events, travels)</li> </ul>	Chi-Hsun, & Jyh-Jeng, (2017); Yildiz (2020); Deloitte (2021); Lai (et al., 2020)
9. Identity, Reputation Ethics. (IRE)	<ul> <li>The main justification for accessing online media for buying products/services is because</li> <li>22. IRE1 I search to reaffirm my individuality.</li> <li>23. IRE2 I consider ethical.</li> <li>24. IRE3It is important for me, the reputation of a firm.</li> </ul>	Francis & Hoefel (2018); Sudbury-Riley (et al., 2018); Bullini- Orlandi, L. & Pierce (2020); Koch (et al., 2020); Mejía-Trejo (2021)

Source: Own

This questionnaire includes the full spectrum of activities and specificity of online customer purchase of all the authors mentioned above (See Figure 1).

#### Figure 1. ex-ante Conceptual Model Proposal.



Notes: eCDMS. Online Customer Decision-Making Styles

BND. Brand; QTY. Quality; SEF. Self-Efficacy; PRC. Price Consciousness; CEX. Customer Experience; CND. Customer Needs; CNP. Customer Preferences; CAC. Customer Action; IRE. Identity, Reputation & Ethics-Source: Own

Vol.01.No. 02. Jul-Dec (2021): 1-26 <u>https://doi.org/10.55965/setp.1.02.a1</u> eISSN: 2954-4041 Hence, we proposed the following hypotheses:

- H1. Higher BND higher eCDMS
- H2. Higher QTY higher eCDMS
- H3. Higher SEF higher eCDMS
- H4. Higher PRC higher eCDMS
- H5. Higher CEX higher eCDMS
- H6. Higher CAC higher eCDMS
- H7. Higher CND higher eCDMS
- H8. Higher CNP higher eCDMS
- H9. Higher IRE higher eCDMS

# 3. Methodology

This section describes the procedure of how the datasets were posed and aggregated for further data analyses in several stages as follows:

- **3.1.***Stage 1.* It implied a qualitative study based on a literature review using VOSViewer software to explore SCOPUS and Web of Science scientific databases involving consistent research on the customer decision-making styles (CDMS). The selected decision-making models were discussed and analyzed by 4 specialists: 2 research professors in digital marketing and 2 SME CEOs in digital marketing strategies (in Mexico) to determine a final ex-ante model and a final questionnaire. The configurational approach enabled the understanding to identify the initial 24 indicators finally grouped in 9 underlying factors: brand (BND); quality (QTY); self-efficacy (SEF); price consciousness (PRC); customer experience (CEX); customer needs (CND); customer preferences (CNP); customer action (CAC); identity, reputation & ethic (IRE).These underlying factors and indicators are the basic components to integrate the conceptual framework to be proved empirically.
- **3.2.***Stage 2.* The dataset of 24 indicators and the 9 underlying factors determined the final questionnaire design (see Table 2) to be applied to 400 Mexican online customers (May-Aug-2021) as *"snowball self-report"* in the new normal. This framework is measured using Likert Scale 1-7 (1. Strongly disagree; 2.Disagree; 3.Somewhat disagree; 4. Neither agree or disagree; 5.Somewhat agree; 6.Agree; 7.Strongly agree). According to Hair (et al., 2019), the sampling frames could be addressed based on the number of framework parameters. There is a basic rule

of thumb for sample size that is 10 times the number of arrows pointing at a construct, whether as a formative indicator to a construct or a structural path to an endogenous construct. The CB-SEM algorithm obtains solutions when other methods do not converge or develop inadmissible solutions. In our case 24 indicators x 10 times= 240. The 400 Mexican online customers sample fulfill this condition widely. On the other hand, the most important demographic data of the participants are depicted in **Table 3**.

Measure	Items	Frequency	Percentage
	18-25	100	13
Age	26-30	150	13
	31-40	150	38
	Total	400	100
Gender	Female	200	50
Gender	Male	200	50
	Total	400	100
Marital Status	Single	300	75
Maritar Status	Couple	100	25
	Total	400	100
	Undergraduate	200	50
	Postgraduate	150	37
	Doctorate	50	13
	Total	400	100
	>40,000	50	13
Monthly Income	30,000- 39,999	150	37
Monthly Income (Mexican Pesos)	20,000-29,999	150	37
(Mexicall Fesos)	10,000-19,999	30	8
	1,000-9,999	20	5
	Total	400	100
	-Once annually (trial)	20	5
Internet	-2-4 times annually (occasional)	160	40
Purchasing	-5-10 times annually (frequent)	200	50
Behavior	-More than 10 times annually (regularly)	20	5
	Total	400	100

Table	3.	<b>Demographic Data</b>	
Lanc	<b>J</b> •	Demographic Data	

Source: Own

**3.3.** *Stage 3.* There are planned to apply 3 quantitative multivariate analyses. First, the framework`s validity was made through Confirmatory Factor Analysis (CFA) using Covariance-Based Structural Equations Modeling (CB-SEM) (Byrne, 2006) through the maximum likelihood method with EQS 6.2 software. Besides, were used Cronbach's alpha per factor and composite reliability index (CRI) (Hair et al., 2019; Bagozzi & Yi, 1988) as techniques to prove the scale's

Vol.01.No. 02. Jul-Dec (2021): 1-26 <u>https://doi.org/10.55965/setp.1.02.a1</u> eISSN: 2954-4041 reliability. For Cronbach's Alpha and CRI, all scales' values exceed the recommended value of 0.7, showing evidence and proving the scales' internal reliability (Nunnally & Bernstein, 1994; Hair et al., 2019). It was computed the average variance extracted (AVE) from the factors of the construct (Fornell & Larcker, 1981) where higher values than 0.6 are desirable (Bagozzi & Yi, 1988). The root mean square error of approximation (RMSEA), non-normed fit index (NNFI), (CFI) the comparative fit index, normed fit index (NFI) were the main settings used in this study (Byrne, 2006; Hair et al. 2019). The RMSEA values below 0.08 were acceptable (Hair al.,2019); NNFI, CFI, and NFI values, preferably, suitable et must be between 0.80 and 0.89 (Byrne, 2006; Hair et al., 2019). Hence, the eCDMS orientation was determined probing 9 hypotheses describing the relationship of each one of the 9 factors with eCDMS orientation (see Table 4).

- **3.4.***Stage 4.* Once probed the CB-SEM, the second multivariate analysis applied was the Cluster Analysis based on the K-means non-hierarchical clustering. This procedure was applied using the SPSS 25 IBM software to categorize the eCDMS and was aimed to determine the shopping segments (eCDMS segmentation). Such a procedure is based on a large selection of initial cluster centers with well-separated values and requires a previous specification of a number of clusters (Hair et al., 2019). Therefore, iteratively re-assigns observations until the solution is achieved for optimized clustering. Such an optimization procedure allows for reassignment of observations to create the most distinct clusters (Hair et al., 2019; Mejía-Trejo 2019a). Thus, the cluster solution regarding stability and validity is enhanced (see Table 5)
- **3.5.***Stage 5.* Finally, the last multivariate analysis was the one-way ANOVA post hoc test. This analysis was used based on a quantitative dependent variable (eCDMS orientation) by a single factor (CDMS segmentation) variable, the one-way ANOVA procedure produces a one-way analysis of variance. To test the hypothesis that several means are equal among the groups is the homogeneity of variance analysis and ANOVA summary table (see Table 6). This technique is an extension of the two-sample t test. The differences existing among the means are determined and explained with such differences (see Table 7). The post hoc range pairwise and tests multiple comparisons can determine which means differ Homogeneous subsets are identified with range tests of means that are not different from each other. Pairwise multiple comparisons test the difference between each pair of means and yield a matrix where asterisks

indicate significantly different group means at an alpha level of 0.05 (see Table 8) ( (Hair, 2019: Mejía-Trejo, 2019c). Therefore, the significance of each new groups of eCDMS were probed.

### 4. Results

We present three groups of analyses results:

**4.1.***The CB-SEM analysis*. This analysis probed the eCDMS orientation through the model's reliability, convergent and discriminant validity. See **Table 4**.

# Table 4. Results of Internal Consistency and Convergent Validity of Latent Variables inthe Theoretical Model of eCDMS Orientation

	Theoretical Model Convergent Validity							Theoretical Model Discriminant Validity								
Factor	Indicators	Loading Factor (>0.6)	Robust <i>t</i> Value	Average Loading Factor	<b>CBA</b> (>=0 .7)	<b>CRI</b> (>=0 .7)	AVE (>=0 .5)	BND	QTY	SEF	PRC	CEX	CAC	CND	CNP	IRE
	1. BND1	0.970***	1.000a													
1.BND	2.BND2	0.950***	18.545	0.93	0.95	0.90	0.88	0.93	-	-	-	-	-	-	-	-
	3. BND3	0.880***	14.358													
	4. QTY1	0.960***	1.000a													
2.QTY	5.QTY2	0.949***	19.685	0.94	0.92	0.9	0.89	0.70	0.94	-	-	-	-	-	-	-
-	6.QTY3	0.901***	17.308													
	7.SEF1	0.890***	1.000a													
3.SEF	8. SEF2	0.878***	21.519	0.87	0.90	0.86	0.80	0.65	0.78	0.88	-	-	-	-	-	-
	9. SEF3	0.850***	19.763													
	10.PRC1	0.900***	1.000a													
4.PRC	11.PRC2	0.871***	26.341	0.88	0.87	0.85	0.78	0.58	0.68	0.75	0.83	-	-	-	-	-
	12.PRC3	0.868***	20.129													
	13. CEX1	0.920***	1.000a													
5.CEX	14. CEX2	0.915***	13.902	0.91	0.89	0.87	0.85	0.66	0.45	0.56	0.67	0.92	-	-	-	-
	15. CEX3	0.898***	15.444													
6.CAC	16. CAC1	0.850***	1.000a	0.81	0.81	0.84	0.68	0.69	0.56	0.68	0.59	0.54	0.82	_	-	
0.CAC	17. CAC2	0.770***	13.345	0.01	0.81	0.84	0.08	0.09	0.30	0.08	0.39	0.34	0.82	-	-	-
	18.CND1	0.890***	1.000a	0.05	0.05	0.02	0.75	0.00	0.62	0.70	0.51	0.67	0.61	0.07		
7.CND	19.CND2	0.805***	18.861	0.85	0.85	0.83	0.75	0.80	0.62	0.78	0.51	0.67	0.61	0.87	-	-
	20.CNP1	0.878***	1.000a				0.00									
8.CNP	21.CNP2	0.801***	19.891	0.84	0.80	0.81	0.69	0.72	0.75	0.67	0.23	0.43	0.56	0.35	0.83	-
	22.IRE1	0.810***	1.000a													
9.IRE	23.IRE2	0.798***	23.271	0.80	0.84	0.80	0.67	0.57	0.67	0.38	0.33	0.26	0.45	0.23	0.55	0.82
,	24.IRE3	0.785***	18.521													
Structu	ral Relation	Standardi zed Path Coefficie nt ß	Robust <i>t</i> Value		<u> </u>	<u> </u>	<u> </u>	Hypotheses					<u> </u>	Results		
BND1	-> eCDMS	0.920***	22.590	H1. Hi	gher BNI	D higher	eCDMS	. There a	re positiv	ve effects	of BND	on eCDN	AS		Accepted	l
QTY -	-> eCDMS	0.898***	20.198	H2. Hi	gher QTY	higher /	eCDMS.	There ar	re positiv	e effects	of MKK	on eCDN	ИS		Accepted	l
SEF -	> eCDMS	0.870***	19.570	H3. <i>H</i>	ligher SE	F higher	eCDMS	. There a	re positi	ve effects	of STA a	n eCDM	S		Accepted	l
PRC-	> eCDMS	0.827***	18.971	H4. Hi	gher PR	C higher	eCDMS	. There a	re positiv	ve effects	of PRC of	on eCDN	AS		Accepted	l
CEX-	> eCDMS	0.812***	17.265	H5. <i>H</i>	igher CE	X higher	eCDMS	. There a	re positiv	ve effects	of CEX a	on eCDM	IS		Accepted	l
CAC-	> eCDMS	0.798***	15.761	H6. Hi	gher CA	C higher	eCDMS	. There a	re positiv	ve effects	of CAC	on eCDN	AS		Accepted	

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CND-> eCDMS	0.787***	14.872	H7. Higher CND higher eCDMS. There are positive effects of CND on eCDMS	Accepted					
CNP-> eCDMS	0.750***	13.879	H8. Higher CNP higher eCDMS. There are positive effects of CNP on eCDMS	Accepted					
IRE-> eCDMS 0.720*** 12,657 H9. Higher IRE higher eCDMS. There are positive effects of IRE on eCDMS Accepted									
Notes: S-B $\chi^2$ = 924.45; df=450; p<0.000; NFI=0.840; NNFI=0.852; CFI=0.831; RMSEA=0.089; a Parameters constrained to the									
value in the identification process. ***= $p < 0.001$ .									
About Theoretical Model Discriminant Validity, the diagonal represents the square root of the average variance extracted (AVE)									
CBA. Cronbach's Alpha, CRI. Composite Reliability Index, AVE. Average Variance Extracted; BND. Brand; QTY. Quality; SEF. Self-									
Efficacy; PRC. Pric	Efficacy; PRC. Price Consciousness; CEX. Customer Experience; CND. Customer Needs; CNP. Customer Preferences; CAC. Customer								
Action; IRE. Identi	ty, Reputat	ion & Ethio	CS.						
BND#: OTV#:SEE	RND#: OTV#:SEE#:DDC#:CEV#:CND#:CND#:CAC#:IDE#_soo Table 2								

BND#; QTY#;SEF#;PRC#;CEX#;CND#;CNP#;CAC#;IRE# see Table 2

Source: Own data using EQS 6.2

**4.2.***The Cluster analysis.* This analysis determines the number of new eCDMS segmentation groups through the final cluster centers. See **Table 5.** 

	Cluster				ANOVA						
e-CDMS		(e-CDMS		Cluster		Error					
orientation	s	egme	ntation	)	Maan Sauana	df	Maan Squara	df	F	Sig.	
	1	2	3	4	Mean Square	ai	Mean Square	di			
BND	6	4	1	1	121.045	3	.467	314	259.061	.000	
QTY	7	4	3	2	139.695	3	.424	314	329.267	.000	
SEF	4	6	4	4	121.045	3	.467	314	259.061	.000	
PRC	4	7	3	3	139.695	3	.424	314	329.267	.000	
CEX	6	4	3	4	126.131	3	.545	314	231.482	.000	
CND	3	2	7	6	209.643	3	.815	314	257.203	.000	
CNP	2	3	6	5	210.623	3	.815	314	257.203	.000	
CAC	3	3	1	7	202.523	3	.894	314	226.521	.000	
IRE	2	2	4	6	234.205	3	1.063	314	220.343	.004	

**Table 5. Final Cluster Centers** 

Notes: BND. Brand; QTY. Quality; SEF. Self-Efficacy; PRC. Price Consciousness; CEX. Customer Experience; CND. Customer Needs; CNP. Customer Preferences; CAC. Customer Action; IRE. Identity, Reputation & Ethics SOURCE: Own with adaptation using IBM SPSS 25

4.3.The one-way ANOVA. This procedure probes the equal variances through all the groups

proposed. See Table 6.

Table 6. Test of Homogeneity of Variances eCDMS	Table 6.	. Test of Hom	ogeneity of Variance	s eCDMS
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Levene Statistic	df1	df2	Sig,				
.355	2	315	.304				
Courses Oran using TDM CDCC 25							

Source: Own using IBM SPSS 25

Using the differences between groups, within groups and the multiple comparisons method, it was determined how related are the new eCDMS segmentation groups defined. See **Table 7** and **Table 8**.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1886.667	2	943.333	83.250	.000
Within Groups	460.000	398	1.456	-	-
Total	2346.667	400	-	-	-

Table 7. ANOVA summary table. eCDMS

Source: Own using IBM SPSS 25

(I)Type	(J) Type	Difference	Std. Error	Sig.	95% Confidence Interval	
		(I-J)	Siu. Error		Lower Bound	Upper Bound
MKK	PRC	91.59767*	6.66932	.000	74.8507	108.3446
	CVS	74.60594*	6.98658	.000	57.0623	92.1495
	ERK	68.70554*	6.76540	.000	52.8832	87.7886
PRC	MKK	-91.59767*	6.66932	.000	-108.3446	-74.8507
	CVS	-16.99173*	7.21037	.000	-35.0973	1.1138
	ERK	-12.17659*	5.54673	.000	-29.75299	58.70432
CVS	MKK	-74.60594*	6.98658	.000	-92.1495	-57.0623
	PRC	16.99173*	7.21037	.000	-1.1138	35.0973
	ERK	14.87895*	5.88765	.000	-56.7786	-34.8755
ERK	MKK	-68.70554*	6.76540	.004	-88.7886	-51.8832
	PRC	12.17659*	5.54673	.004	-58.70432	-29.75299
	CVS	-14.87895*	5.88765	.003	36.87544	56.7786

Table 8. Comparisons dependent variable: eCDMS. Tukey HSD. Bonferroni

\*. The mean difference is significant at the .05 level.

Notes: MKF. Marketing Followers; PRS. Price Searchers; CVS. Convenience Shoppers; ERK. Ethics&Reputation Keepers

Source: Own with adaptation using IBM SPSS 25

#### 5. Discussion

This research updates the CDMS theory under online conditions (eCDMS), unraveling and describing 9 orientations. In this way, based on eCDMS, orientations our research continues to analyze and determine the online customers' profiles or segmentations. Such profiling or segmentation is relevant for firms to plan digital marketing innovative strategies to grant online customer engagement according to the new normal context and hence, we have:

*Table 4*. CB-SEM analysis, the results of our model probed the Cronbach's alpha model reliability (CB. >0.7), the composite reliability index (CRI>= 0.7) and the average variance extracted (AVE>=0.5) (Hair et al., 2019; Mejía-Trejo, 2019). The eCDMS model consists of 9 factors and

24 variables. Besides, the 9 hypotheses statements were approved, based on the relationship between eCDMS and each one of the 9 variables established. Although the average loading factors are so close to each other, in the first instance, the results about the eCDMS orientation indicated in decrescent order are:

The high average loading factor for quality (QTY, 0.94) is characterized by performance (i.e., delivery timing), design (i.e., new fashion), and access (i.e., availability) of products/services. These results pinpoint the pursuit of value proposition inherent in online purchasing (Sproles & Kendall, 1986; Fan & Xio, 1998; Safiek, 2009; Saleh et al., 2017; Osterwalder & Pygneur, 2010; Matevz et al., 2019; Thangavel et al., 2019). This factor remains no matter the incomes of the online customer.

The next average loading factor corresponds to the brand (BND, 0.93), that is described mainly with the willingness to buy in online media based on favorite brands (*"brand loyalty"*), a strong perception about higher the price of a product, the better its quality (*"brand price"*) associated with the best-selling brands (*"brand conscious"*). These results support the correlation between the searching of loyalty, price based on well-positioned brands as a traditional marketing strategy long time used (Sproles & Kendall 1986) but necessary to take into account in the online media shopping (Canabal, 2002; Tarnanidis et al., 2014; Thangavel et al. 2019; Mejía-Trejo, 2021). This factor tends to increase while the online customer incomes increase.

The third average loading factor was customer experience (CEX, 0.91). Here there is a high sense of human contact (*"social presence"*) with the perception of *"the lively"* (*"sensory appeal"*), and sensation of *"I feel like I get more for what I pay of product/service in the online channel"* (*"satisfaction"*). The customer experience is strongly related to high online perceptions that lead to an absolute sense of high satisfaction in online media buying (Katawetawaraks & Lu-Wang, 2011; Karimi et al., 2018; Bleier et al., 2019; Lai et al., 2020). This factor decreases in the online customer s when their perceptions decrease too.

The following average loading factor was the price consciousness (PRC, 0.88). It is described for searching in internet advertisements of discounts to reuse them in shopping for other products/service watching carefully how much the online customer r spend. This factor tends to increase as online customer income falls (Sproles & Kendall, 1986; Thangavel et al., 2019; Mohsenin et al., 2018; Maggioni et al., 2019)

The next average loading factor was self-efficacy (SEF, 0.87), where the customer tends to be skeptical when facing doubts about the information. The customer is an active subject searching for more information via web pages, e-mail or social media, etc., to clarify it. The customers can distinguish real information from fake news as they learn more about different brands of product/services as long as it is searching for in the online media (Bandura, 1997); Chen & Cheng, 2018). Like PRC, this factor also tends increase as online customer income falls.

Other average loading factor was the customer needs (CND, 0.85). This indicator describes the first needs of the online customer purchasing, determining in tough times (like the beginning of COVID-19 era) the "*utilitarian needs*" (i.e., convenience to pay in credit or debit card/bitcoin, accessibility, payment services, assortment, speed delivery and payment, customization, availability of information). The "*hedonic needs*" (i.e., intrinsic enjoyment, visual appeal, sensation seeking, entertainment, socialize) result from a lengthy lockdown of the customers. The "*hedonic needs*" indicator tends increase as online customer income increases in the new normal (Hafstrom et al., 1996; Bakewell & Mitchel, 2006; Lysonsky et al., 2009; Fishbein & Ajzen, 2011; Krishna & Strack, 2017; Liu & Zhang, 2019; Nawaz et al., 2019).

The seventh average loading factor to be described is customer preferences (CNP, 0.84). The factor is aimed to detect the first preferences for the online customers either for buying products (i.e., auctions, books, computer hardware, computer software, customer electronics, cosmetics, department stores, fashion, flowers & gifts, food, furniture & decoration, health, hygiene, jewelry, music price comparisons, sports, tickets, toys) or buying services (i.e., banking services, mobile phones, service payments, subscription services, urban mobility, entertainment, education services, shows & events, travels). The results pinpoint that the indicator of the product, especially food, water, hygiene, and health, was the most consumed in emergency times (i.e., at the beginning of COVID-19). Afterward, at the same time as the consequence of the long lockdown of customers, the services occupy a relevant place, especially for banking, subscription, and education services (Chi-Hsun, & Jyh-Jeng, 2017; Yildiz, 2020; Deloitte, 2021; Lai et al., 2020). These results are due to the new modalities of home-office for works and home-classroom for education, staying the inertia even in the new normal. The "*services*" indicator tends to increase in the factor as online customer income increases in the new normal.

The next average loading factor to describe was customer action (CAC, 0.81), characterized by how the online customer reacts to buy determining if it is a *"reasoned answer" or "impulsive* 

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Vol.01.No. 02. Jul-Dec (2021): 1-26 <u>https://doi.org/10.55965/setp.1.02.a1</u> eISSN: 2954-4041 *answer*". The evidence in this research pinpoints a "*reasoned answer*" in the online customers at the same time their incomes are falling for the new normal (Hafstrom et al., 1996; Bakewell & Mitchel, 2006; Lysonsky et al., 2009; Fishbein & Ajzen, 2011; Krishna & Strack, 2017; Liu & Zhang, 2019; Nawaz et al., 2019).

Finally, the last average loading factor designed to describe the expectations of the younger online customers was the identity, reputation & ethics (IRE, 0.80). This factor remarked the online customers preference to buy more personalized products/services that highlighted their individuality, the preference to purchase products from companies that them consider ethical with reputation of the firm. The IRE factor tends to increase as the online customers is a younger between 20 and 35 years old and their income tends to increase (Francis & Hoefel, 2018; Sudbury-Riley et al., 2018; Bullini-Orlandi, L. & Pierce, 2020; Koch et al., 2020; Mejía-Trejo, 2021).

*Table 5. Cluster analysis.* This table shows the results based on final cluster centers and after 10 iterations better adjusted 4 clusters based on the Likert Scale 1-7, we observed and determined the new eCDMS segments names with the following proposed names. Observe that all the p values <0.005. IRE factor has a p=0.004 and is suggested to be reviewed in future studies.

QTY+BND+CEX->Marketing Followers (MKF).

PRC+SEF->Price Searchers (PRS).

CND+CNP->Convenience Shoppers (CVS).

CAC+IRE-> Ethics& Reputation Keepers (ERK).

When is applied one-way ANOVA are depicted several tables such as:

*The Table 6. Test of Homogeneity of Variances eCDMS*. This table shows the homoscedasticity based on the Levene's test with the following expression result F(2,316)=0.355, p=0.304 > 0.05. Thus, the new groups are homogeneous; it tests the null hypothesis that the error variance of the dependent variable (eCDMS) is equal across groups (MKF, PRS, CVS, ERK).

*The Table 7. ANOVA summary table eCDMS.* This table describes the result of the one-way ANOVA where we have F(2,316) = 83.250, p<0.05 and  $\eta^2 = 80\%$  (1886.667/2346.667). In other words, we explain that there are media significant differences between groups.

The Table 8. Multiple Comparisons. It is a complementary result of one-way ANOVA, and it

probed all the possible pairwise comparisons for our new 4 eCDMS segmentation profile groups with p<.005, thus, the groups are clearly differenced using Tukey and Bonferroni procedures (only the ERK segmentation group is interesting to be reviewed in future analyses because all the p values

are around .003 and .004). Such groups, we called: marketing followers (MKF), price searchers (PRS), convenience shoppers (CVS), and ethics & reputation keepers (ERK).

#### **5.1.Theoretical implications**

We contribute with a reliable and robust empirical framework to help academics, retail, and marketing managers, in eCDMS orientations, benefit from the results reported here. For instance, the marketing innovations strategies under online conditions could be determined based on 9 factors: brand (BND); quality (QTY); self-efficacy (SEF); price consciousness (PRC); customer experience (CEX); customer needs (CND); customer preferences (CNP); customer action (CAC); identity, reputation & ethic (IRE).

A secondary result is the fact to have determined the 4 new eCDMS segmentations profile that supports such marketing innovations strategies based on the following proposed profiling's:

*Marketing Followers (MKF)* is the result of the first cluster (see Table 5 ) and is composed of the brand (BND), quality (QTY), and customer experience (CEX) factors. This eCDMS profile is characterized by a first impulse to buy previously recognized brands fostering "brand loyalty"; also, the online customer is willing to think: "the higher the price of a product, the better it is quality" associated as a "brand price" and hence, exists a preference to buy the best-selling brands as a "brand conscious" (Sproles & Kendall, 1986; Tarnanidis et al., 2014; Thangavel et al., 2019; Mejía-Trejo, 2021). This eCDMS profile takes into account the shopping of products/services, the performance ("quality performance"), design ("quality design"), and access ("quality in access"). Furthermore, this profile is aimed to pursue the value proposition (Osterwalder & Pigneur, 2010) in the consume with a high sense of human contact ("social presence"), lively ("sensory appeal"), and strength feeling like: "I get more for what I pay of product/service in the online channel" ("satisfaction") (Katawetawaraks & Lu-Wang, 2011; Bleier et al., 2019; Lai et al., 2020).

*Price Searchers (PRS)* is the result of the second cluster (see Table 5), and it is composed of selfefficacy (SEF) and price consciousness (PRC) factors. Despite all the information about different products/services that might confuse the online customer, this eCDMS profile is characterized by searching for more information via web pages, e-mail or social media, etc., to clarify it. The online customer feels that can distinguish real information from fake news. Hence, the online customer tends to think: "*the more I learn about different brands of product/services, it is easy to me to choose one*" (Bandura, 1997; Chen & Cheng, 2018). Besides, the online customer usually searches the advertisements of discounts to reuse them in shopping for other products/services and carefully watch how much they spend (Sproles & Kendall, 1986; Thangavel et al., 2019).

*Convenience Shoppers (CVS)* is the result of the third cluster (see Table 5) and is composed of customer needs (CND) and customer preferences (CNP) factors. It is characterized by how the online customer experiences that ultimately saves them time and effort. Convenience is quick, easy, close by and allows a shopper to get what they need, when they need. This eCDMS profile is characterized by two types of convenience: the "*utilitarian*" (i.e., convenience to pay in credit or debit card/bitcoin, accessibility, payment services, assortment, speed delivery and payment, customization, availability of information) or "*hedonic*" (i.e., intrinsic enjoyment, visual appeal, sensation seeking, entertainment, socialize) (Fishbein & Ajzen, 2011; Krishna & Strack, 2017). Such types of conveniences are aimed to both preferences for buying "*products*" (i.e., auctions, books, computer hardware, computer software, consumer electronics, cosmetics, department stores, fashion, flowers & gifts, food, furniture & decoration, health, hygiene, jewelery, music price comparisons, sports, tickets, toys) or "*services*" (i.e., banking services, mobile phones, service payments, subscription services, urban mobility, entertainment, education services, shows & events, travels) (Fishbein & Ajzen, 2011; Krishna & Strack, 2017).

*Ethics & Reputation Keepers (ERK)* are the result of the fourth cluster (see Table 5) and are composed of customer action (CAC) and identity, reputation, and ethics (IRE) factors.

This eCDMS profile is characterized by the main justification for an online customer to reaffirm its individuality or for a firm's ethics or reputation issues (Francis & Hoefel , 2018; Mejía-Trejo, 2021). Despite the above description, this segment is suggested to remain a potential group to be analyzed in future studies due to the p values obtained around .003 and .004 (see Table 6); in other words, it is an incipient segmentation group to observes its evolution.

#### **5.2.Practical Implications**

This study makes several practical contributions to the field:

*First.* We designed a solid conceptual framework relating 9 factors as eCDMS orientation (see Figure 1): brand (BND); quality (QTY); self-efficacy (SEF); price consciousness (PRC); customer experience (CEX); customer needs (CND); customer preferences (CNP); customer action (CAC); identity, reputation & ethic (IRE). This framework consists of 24 indicators. Prior studies did not consider the new normal environment (post-COVID-19 era), especially for Mexico, as we did. The study's novelty is to identify the underlying factors, indicators, and how they are involved in the new electronic customer decision-making styles (eCDMS) orientations after a prolonged quarantine and lockdown as predictors for the new normal conditions.

*Second.* Because of the new customer habits, the eCDMS orientations framework is the basis to unraveling the new groups of eCDMS segmentations (see Table 8) described lines above, as: the marketing followers (MKF), the price searchers (PRS), the convenience shoppers (CVS), and the ethics& reputation keepers (ERK). These categories are very useful to the firms to determine the marketing innovation strategies more accurately.

*Third*. The final empirical eCDMS framework is helpful to academics, firms' retailers, and marketing managers to determine marketing innovation strategies if we combine the 9 factors as eCDMS orientation with the 4 groups of eCDMs segmentation, it is possible to get marketing innovations based on different cohorts just as generation X, Y, Z, etc., or different educations levels such as college, undergraduate, postgraduate, or doctorate, or different monthly incomes, or different gender perceptions. Furthermore, we can get a combination of such conditions, for instance, how is the relationship between the eCDMS orientation and eCDMS segmentation under women perception with incomes in the range of 10,000-19,000 pesos, with a college education from generation Y?

*Fourth.* The eCDMS contributes to updating the original CDMS theory of Sproles & Kendall (1986) in new contexts such as the online media customers and the effects of a prolonged quarantine and lockdown for the new normal conditions after COVID-19. The empirical findings

of this research suggest that the first eCDMS orientations are quality (QTY), brand (BND), and customer experience (CEX). In other words, they are the three dominant shopping motivations that drive the eCDMS orientations. At the same time, these three orientations are the basis to describe a new group of customers called here marketing followers (MKF). These people are searching for brands, quality of products/services, and a high customer experience. It is not rare if we notice that our demographic data point out our leading group of people between 31-40 years old with monthly incomes in the range of 30,000-39,000 pesos (150 persons, 47% of the sample).

Fifth. The findings suggest that the new eCDMS segmentation (4 target customers) could be flexible in their eCDMS orientation (9 groups). The firms' retailers and marketing managers must understand their target customers. The online customer decision-making styles (eCDMS orientation) under different contexts (i.e., time of crisis like COVID-19 or time of enjoyment like Olympiads) is the basis to improve their marketing innovation activities and grant effective communication to support customer decisions. Besides, the firms' retailers and marketing managers must actively observe the eCDMS orientations to identify and determine emerging new eCDMS segmentations or new online customers that show changes in shopping/buying in online media. This surveillance is necessary for instance, to enhance the positioning, advertising products/services, intriguing the online customers, and get good customer personalization. These actions should increase customer satisfaction regarding shopping/buying for the company's products and services.

*Sixth*. The COVID-19 pandemic has demonstrated very impressive online customer behaviors, especially in hygiene and security issues, just like, at the beginning of COVID-19 massive purchases of toilet paper, antibacterial gel, or masks representing a phenomenon to carry out further studies regarding times of crisis.

#### 6. Conclusion

The study contributes to the theory of customer decision-making styles (CDMS) under online media. The prolonged lockdown and social distancing to combat the COVID-19 virus has generated significant disruptions on online customer decision-making styles prevailing the habit that *"the store has to come to the customer."* Online customers have adapted to house arrest for a

prolonged time, based on adopting digital technologies that facilitate work, study, and consumption in a more convenient manner modifying the existing habits in all the circumstances.

The firms need to understand this new online customer decision-making style (eCDMS) to design new marketing innovations strategies to facilitate the new normal transactions and remain in the market.

This research argued that, although eCDMS have been investigated extensively since the Sproles & Kendall (1986) work, incipient research has started conceptualizing how the new habits after a prolonged time of crisis (i.e., COVID-19) and which are the new customer groups under online rules. Hence, this paper conceptualizes the online customer decision-making styles (eCDMS) based on updating customer decision-making theory to unravel new online consumer decision-making styles in orientation and online customer segmentations.

Thereby, we offer insights into understanding the electronic customer decision-making styles (eCDMS) orientations based on a framework with 9 factors: brand (BND); quality (QTY); self-efficacy (SEF); price consciousness (PRC); customer experience (CEX); customer needs (CND); customer preferences (CNP); customer action (CAC); identity, reputation & ethic (IRE) with 24 indicators. This empirical framework is the basis to determine 4 new groups or eCDMS segmentations: the marketing followers (MKF), the price searchers (PRS), the convenience shoppers (CVS), and the ethics& reputation keepers (ERK) to elicit marketing innovation strategies for the firms in the context of the new normal.

The empirical findings of this research suggest that the first eCDMS orientations are quality (QTY), brand (BND), and customer experience (CEX). At the same time, these three orientations are the basis to describe a new group of customers called here marketing followers (MKF).

#### 7. Limitations and future studies

All empirical studies have certain limitations:

*First.* Due to recruiting respondents' *"snowball self-report"* nature, sampling methods may limit survey as biased results. The survey results are based on the questionnaire's self-reported data to remind them of their opinions due to the biased demographic characteristics; for instance, more people from the city than the rural zones or more people between 31-40 years old with monthly incomes in the range of 30,000-39,000 pesos (150 persons, 47% of the sample).

*Second*. The relationship between eCDMS orientation and eCDMS segmentations have several variations to analyze more accurately, for instance, the relationship between (eCDMS segmentation) online customer needs (CND) and preferences (CNP) under major emphasis with identity, reputation & ethics (IRE), brand (BND), and price consciousness (PRC) (eCDMS orientation). In this sense, it is highly recommended to study in a matrix arrangement of 36 crosspoints combining eCDMS orientations (9 groups) vs. eCDMS segmentations (4 groups) to determine marketing innovations more accurately and under the rules of different industries. Besides, the eCDMS is different among the online customers; for instance, B2C, B2B, B2G, etc., require the special attention of researchers and future studies in this area.

*Third.* The cultural vision must be considered because there are different introductions and uses of the technology, different perceptions of the new normal means, the different social media literacy or adoption of social networking sites, etc. The cultural background is a source of different people's reactions. A longitudinal study would provide more validity on causal inferences than prior studies that were based on cross-sectional data to precise the eCDMS framework (Bagozzi, et al. 2000).

*Fourth.* The eCDMS in this empirical research is not framed only in mobile technology. To undertake future studies of mobile eCDMS should specify features such as the real-time and location-sensitive nature that enhances their value in the customer decision-making process.

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