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COVID-19 ads on purchase intention of online consumer behavior as business innovation activity: A contribution to the uses and gratification theory

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ABSTRACT

COVID-19 ads are gaining people's consciousness rapidly. Many companies are concerned with determining the new purchase intention of online consumer behavior (**PIC**) for the next normal conditions. This article aims to design a framework based on **PIC** as a business innovation activity to generate marketing strategies related to Uses and Gratification Theory (**UGT**). Based on **Delphi Panel-focus group** and Analytic Hierarchy Process (**AHP**), we identified factors, variables, and indicators to the **PIC** conceptual framework proposal. The survey data was on **400** Mexican online consumers (Mar to Sep, 2020), using Confirmatory Factor Analysis (**CFA**) and Covariance-Based Structural Equation Modeling (**CB-SEM EQS6.2**) to confirm **4** underlying factors, **8** variables, **27** indicators, and the framework's validity. The fuzzy set Qualitative Comparative Analysis (**fsQCA3.0**) extracted **3** patterns solutions as business innovation activity with high **PIC** for marketing strategies related to **UGT** as the original study's value.

1. Introduction

Several emergency contexts have occurred, in America, in recent times of the 21st century like terrorist acts (e.g., Anthrax attacks, 2001; Sept. 2001; San Bernardino attack. 2015; Black Lives Matter movement. 2013; Charlottesville. 2017, etc.) and several pandemics events (e.g., SARS. 2003, H5N1. 2006, H1N1. 2009). However, it is not until **COVID-19** the worldwide suffers a prolonged quarantine and lockdown that stops all human activities but still supported with information technologies (**IT**), not foreseen or described in previous works, making the online transactions the center of shifting behaviors (e.g., e-commerce, e-Business, or digital marketing platforms). This new situation has elicited new habits that affect the intention of online consumer behavior (**PIC**) in the form of new trends such as emergency habits accelerated, consumer resilience, adaptability to protect the health (less contact, more hygiene), wellbeing obsession (more consumption of anti-**COVID-19** products), the interest of social responsibility and the sustainability of the planet, etc. Thereby, the **PIC** has developed emotional connections with services or products, the standup for the most vulnerable, more flexibility in the workplace for consuming, changing the paradigm from "always-available" to "pre-planned experience" (e.g., walk-ins are now pre-planned) (Westbrook and Angus, 2021). The **COVID-19** crisis is

unprecedented, and several countries in the world are generally very concerned about the current global economic situation (McKinsey, 2020b). For instance, we cannot say how it will impact online consumers and their lifestyles in the next normal marketing scope. It is essential to determine, in advance, which trends are most important to consumers and are likely to continue being part of their behaviors. It allows businesses to understand consumer priorities and strategically plan the next steps in an unknown landscape in the wake of **COVID-19** ads. Indeed, digital marketing and electronic businesses, as we know, have changed. For instance, with the retail industry's closure, the stagnation of sports, the cancellation of hotel reservations, and thousands of travels, many online channel companies that have traditionally relied on are no longer available. Due to **COVID-19** is changing online consumer behavior, now and for the next months, companies have to adapt to very different conditions in the short term (McKinsey, 2020a; McKinsey, 2020d; AMVO, 2020). The emergency context, due to **COVID-19**, transmits different messages and narratives in a local region or a country (Mazidah, 2020). In this case, such messages and narratives produce several situations under permanent stress on the online consumer, affecting mainly their motivations, attitudes, and social media perceptions in the purchase intention of online consumer behavior (**PIC**) (Mikalef et al., 2016; AMVO, 2020). Our study implied the analysis of several **COVID-**

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19 ads producing several responses to the local and national online consumer behaviors in Mexico in times of a worldwide pandemic. The relationship between COVID-19 ads on purchase intention of online consumer behavior (PIC) could be a firm's business innovation activity (OECD, 2018) and a redefinition of new marketing strategies in the next normal (McKinsey, 2020c). Such redefinition includes all development, financial and commercial activities undertaken by companies to result in innovation and digital marketing strategies. For this reason, it is necessary to use representative surveys as the preferred method of data collection. Where feasible, these data can be supplemented by additional representative surveys or by linking surveys with administrative data (OECD, 2018, par.1.11).

On the other hand, as part of communication theory, the Uses and Gratification Theory (UGT), initially proposed by Katz et al. (1974), provides a framework for understanding when and how individual media consumers become more or less active and the consequences of that increased or decreased involvement (West and Turner, 2018). The UGT assumes that media present content and consumers consume it. Its value is addressed in considering the audience and individual media consumers in contemporary mass communication research and theory. The UGT needs to be updated to the new online channels. It may serve to the business innovation activity purchase intention of online consumer behavior (PIC) and create marketing strategies to the next normal.

The UGT theorists seek to understand the intersection between online media choice and consumer use. In this regard, this study's novelty is to identify the underlying factors, the grouping of the variables and indicators, and how they are involved in the purchase intention of online consumer behavior (PIC) after a prolonged quarantine and lockdown as predictors for the next normal conditions. The predictors are gathered through the design of a conceptual framework proposal as a business innovation activity to generate marketing strategies. The framework's design is explained in the following sections to relate the final results with the UGT to obtain final contributions.

2. A brief Mexican covid-19 economic context in 2020

According to Zaga et al. (2020), COVID-19 has deepened the contraction economy of Mexico.

As manufacturing and consumption rebound, continued demand for services can help the recovery. The global epidemic occurred when the Mexican economy shrank for five consecutive quarters. This was caused by various factors, such as the slowdown in investment and private consumption and the uncertainty of the free trade agreements reached with the United States and Canada. In Mexico, the COVID-19 crisis exacerbated this trend, causing the biggest contraction since the Great Depression in 1929. The economy fell sharply by 17.0% from the first to the second quarter, and then partially recovered by 12.1% in the third quarter of 2020. However, the output level is still 8.6% lower than the previous year. This pandemic has also affected Mexico's labor market. 12.5 million people have left the labor market, and the unemployment rate has risen from 3.3% in March to 4.5%. The pandemic reduced the economically active population from 60.5% in Feb to 47.5% in Apr 2020. Although the Mexican government has adopted a recovery policy in some sectors, the country's working conditions have become more unstable.

Due to the lockdown in manufacturing, automotive, and electronics, they registered a significant decline. Financial and real estate services, professional services, education, health care, and government services have been the most resilient. Wholesale and retail trade and transportation services rebounded rapidly from a -26.5% decline annually in Apr to -10.3% in Sep 2020. Leisure and hotel activities are the most vulnerable, 32% below Sep 2019 levels; it will take a long time for the sector to return to pre-pandemic levels. However, e-commerce sales increased between Apr to Sep 2020 by approximately 58%. This

pandemic has forced companies and people to embrace the digital economy as an opportunity to explore. Between Apr 2020 to Jun 2020, shopping apps' usage increased by 90% compared to the same period in 2019.

3. Uses and gratification theory (UGT)

Many of the assumptions of UGT were clearly articulated by the founders of the approach (Katz et al., 1974), asking the following question: "What do consumers do with the media?" They contend that there are five basic assumptions: 1. The audience is active, and its media use is goal-oriented; 2. The initiative in linking need gratification to a specific medium choice rests with the audience member; 3. The media compete with other sources for need satisfaction; 4. People have enough self-awareness of their media use, interests, and motives to provide researchers with an accurate picture of that use; 5. Value judgments of media content can only be assessed by the audience. The UGT gives the consumer power or audience activity to discern what media they consume. It assumes that the consumer has a clear intent and use evolving in several individual differences perspective as stages over the time. They moved from a position where they saw the media as very powerful (the beginnings of news and radio) to one where media effects were seen as more limited (since the television era). See Table 1.

The UGT is based on the assumption that different types of media consumers are "active audience"; this is an important part of consumer/consumption activity (Grob et al., 2015). Today, the value of UGT lies in its ability to provide a framework for the thinking of audiences and individual media online consumers in the contemporary mass digital communication research and theory when we are analyzing the intersection between media choice and online consumer use.

4. Designing framework and hypotheses

This section aims to describe the Oslo Manual marketing and brand equity concepts as innovation activities, the factors and indicators, and a final description of the ex-ante PIC conceptual framework proposal.

4.1. The Oslo Manual, marketing and brand equity as innovation activities

The Oslo Manual is an important reference for the analysis and collection of data on technological innovation. It is a guide that defines concepts and clarifies the activities that are part of the innovation process, including its different types and the performance impact at the organization, thus advancing the knowledge of the global process. The updating and use of the Oslo Manual contribute to the implementation of a technological culture currently under constant development. The main purpose of the Oslo Manual is that innovation can and should be measured. Innovation is defined as:

"...a new or improved product or process (or combination thereof) that differs significantly from the unit's previous products or processes and that has been made available to potential users (product) or brought into use by the unit (process)" (OECD, 2018, p.20).

The Oslo Manual proposes several alternative approaches for measuring innovation activity.

Companies can conduct eight activities to pursue innovation (OECD, 2018, par. 1.36), being one of them marketing and brand equity. This innovation activity measurement includes market research (for instance, information of online consumer's behavior, context, motivation, consumers features, and attitudes, amongst others), product placement, pricing methods, market testing, product advertising, product promotion at exhibitions or fairs, and developing marketing strategies (OECD, 2018, par.4.19).

4.2. Relating the perception of COVID-19 ads with context, motivation, attitude, and website attraction in the conceptual framework proposal

The global retail market reached 2014 was 1500 USD trillion (eMarketer, 2014), at 2019, 3535 USD trillion with expectancy global e-commerce approach in 5 USD trillion (eMarketer, 2019). However, after COVID-19, a collective \$3914 USD trillion in e-commerce sales is anticipated at the end of 2020 (Cramer-Flood, 2020). An essential factor in recovering the trend is to know the main factors about online consumer behavior, defined here as:

“...the study of the processes involved in the selection, purchase, use, or disposal of products, services, ideas, or experiences by individuals or groups to satisfy their needs and desires” (Solomon, 2018).

The online consumer behavior understanding can teach about consumers' consumption patterns and the internal/external influences that affect those customers and improve the marketing strategy to create products and services that provide the consumers with more value (Pappas et al., 2014). These results have increased the company's interest in implementing social media marketing strategies to attract new customers and increase revenues (Mikalef et al., 2016).

Because of the lack of models or frameworks explaining online consumer behavior and the relationship to emergency context (for instance, COVID-19 ads), motivations, attitudes, and web attraction

(ECMAW) on purchase intention of online consumer behavior (PIC), we proposed as a conceptual framework at this regard.

Thereby, we made a qualitative study in this research, applying the **Delphi Panel-focus group** and Analytic Hierarchy Process (AHP) (Saaty, 2008). This procedure involved 6 online consumer specialists (3 digital marketing professors, 3 CEOs of digital marketing agencies) to determine the main factors involved in the ECMAW-PIC as a conceptual construct framework. The results are displayed in Table 2.

4.2.1. The emergency context (ECX)

The emergency context of an ad displayed can significantly impact how the message is handled and its success. Several studies have shown that advertisements placed in environments that induce negative emotions are less systematic than ads placed in environments that put online consumers in positive emotions. It is also found that emotions affect the audience's awareness of advertising and modify the cognitive effect, thereby affecting the advertising attitude (Wen et al., 2016). Today, the role of COVID-19 advertising provides people with an insight that has changed their perception of the risks of the current global pandemic (Mazidah, 2020). People continue to support the new background of COVID-19 advertising in various ways in response to different emotional concepts of national and global concerns, especially: fear, anger, surprise, and interest, affecting online consumer behavior. This situation represents an opportunity for the industry to plan the

Table 1

The UGT over time and some relevant contributions.

Author	Description
Katz et al. (1974)	UGT developing based on “social situations” in which people find themselves can be “involved in the generation of media-related needs” in: 1. Tensions and conflicts; 2. creation an awareness of problems that demand attention, information about which may be sought in the media; 3. The impoverish real-life opportunities to satisfy certain needs, and the media can serve as substitutes or supplements; 4. The elicit of specific values, and their affirmation and reinforcement can be facilitated by the consumption of related media materials. 5. The demand familiarity with media; these demands must be met to sustain membership in specific social groups. The rejecting of “vulgar gratificationism” based on three things: First, are the mass media instrumental in creating this social situation? What role did various media outlets play? Based on what information did we form our opinions? Second, are the mass media instrumental in making the satisfaction of this situation's related needs so crucial? Why, for instance, was it important to have an opinion at all? Who put this issue on the public's agenda? Who determined that it was more important than any of the myriad events that were happening in the world?
Brown et al. (2012)	UGT continues to explore how and why audiences consume traditional media for their own gratifications vs. the newer media (motivations people had for watching crime dramas on TV.)
Malik et al. (2016)	UGT is exerted to study digital photo sharing on Facebook. Age was in positive correlation with disclosure and social influence gratifications; gender differences were identified among habit and disclosure gratifications; number of photos shared was negatively correlated with habit and information sharing gratifications.
Salubi and Muchaonyerwa (2018)	UGT explains how users seek out other media when gratifications obtained from media use do not equate to gratifications sought, which is not always correct.
Xiaodan et al. (2019)	UGT contributes to explain the microblogs as a revolutionary way of how users produce, consume and distribute short content.
Abid and Harrigan (2020)	UGT is exerted to explore the motivations that stimulate young voters to follow political entities on social media as psychological contract. The social, informational and entertainment gratifications are the primary initiators of this relationship. Further, developmental, individuated, relational and ethical interactions fortify online voter relationships. Altruism was the strongest predictor to fake news sharing behavior related to COVID-19, followed by instant news sharing and socialization. On the contrary, entertainment had no association with fake news sharing on COVID-19. Countries: Australia.
Apuke and Omar (2020)	UGT exhibits how: 1. Altruism, 2. Instant news sharing, 3. Socialization, 4. Self-promotion predicted fake news sharing related to COVID-19 pandemic among social media users in Nigeria.
Camilleri and Falzon (2020)	UGT The outbreak of COVID-19 and its preventative social distancing measures have led to a dramatic increase in subscriptions to paid streaming services. The individuals' perceived usefulness and ease of use of online streaming services were significant antecedents of their intentions to use the mentioned technologies. This study suggests that the research participants sought emotional gratifications from online streaming technologies, as they allowed them to distract themselves into a better mood, and to relax in their leisure time. Evidently, they were using them to satisfy their needs for information and entertainment.
Haman (2020)	The article examines how many leaders used Twitter during the COVID-19 pandemic, in what way, and the impact they had on the public. In the context of Twitter, the impact on the public refers to the growth in followers as it signifies the increased interest of the public about information. Furthermore, a significant increase in the number of followers during the pandemic compared to months prior was noted.
Igartua et al. (2020)	UGT indicates that the consumption of information about COVID-19 is structured along four latent dimensions: 1. Specialized health information on the Internet, official websites, and obtained through health personnel; 2. Through “visual” social media; 3. Through “written” social media and face-to-face contacts; and 4. Through the mass media. Significant differences are found in all the dimensions of consumption depending on age and country of residence. It is observed that high consumption of information about COVID-19 increases perceived knowledge on the subject, which in return leads to the adoption of preventive measures. Several countries: Spain, Cina, Brazil, Italy, Ecuador, USA, México.
Islam et al. (2020)	UGT Contributes to explain the individuals behave seriously toward crisis-related information, as they share COVID-19 information on WhatsApp not only to be entertained and seek status or information but also to help others. Further, norms of reciprocity, habitual diversion, and socialization as motivators that augment WhatsApp users' positive attitude toward COVID-19 information-sharing behavior.
Rochyadi-Reetz et al. (2020)	UGT shows that there are two media-use gratifications sought during the COVID-19 crisis: 1. Information and direction gratification sought; 2. entertainment and comparison gratification sought in Indonesia.

Source: West and Turner (2018) with own adaptation.

Table 2

Delphi Panel-focus group and AHP. Identification of major factors and indicators of ECMAW-PIC as the underlying factor.

Objective	Emergency Context-Motivation-Attitude-Web Attraction (ECMAW) On Purchase Intention of Online Consumer Behavior (PIC)			
	Names suggested by three digital marketing professors (academic vision)			Priorities suggested by three CEOs of digital marketing agencies (expert vision)
	Factors	Variables	Indicators	AHP priorities (%) importance
Alternatives	1. ECX	1. EME	1.MOO	0.30
			2.PES	0.18
			3.PEI	0.12
			4.NEA	0.10
			5.NEF	0.09
			6.VAL	0.08
		7. ECI	7.OFA	0.07
			8.ECE	0.05
			9.GRF	0.01
		TOTAL		1.00
	2. MTV	8. MOC	10.RAN	0.61
			11.IAN	0.19
			12.UTI	0.08
			13.HED	0.05
			14.OCP	0.04
			15.OCS	0.03
		12. MPS		1.00
		TOTAL		1.00
	3. ATT	13. AOB	16.OBI	0.51
			17.OBA	0.19
			18.OBE	0.13
			19.OBT	0.08
			20.LOW	0.04
			21.OSF	0.03
		19. ANN	22.OCN	0.02
				1.00
		TOTAL		1.00
	4. WBA	20. OMD	23.IVD	0.61
			24.OST	0.20
		21. OMQ	25.P&B	0.12
			26.WBQ	0.04
			27.S&P	0.03
				1.00
		TOTAL		1.00

Source: own.

Notes: ECX. Emergency Context; MTV. Motivation; ATT. Attitude; WBA. Web Attraction. EME. Emergency Context Mood, Emotions and Values; MOO. Mood; PES. Positive Emotions under Surprise; PEI. Positive Emotions under Interest; NEA. Negative Emotions under Anger; NEF. Negative Emotions under Fear. VAL. Values; ECI. Online Consumer Interest; OFA. Online Frequency to Access. ECE. Electronic Device and Uses; Online; GRF. Gatifactions; MOC. Motivation of Online Consumer; RAN. Reasoned Answer; IAN. Impulsive Answer; UTI. Utilitarian; HED. Hedonic; MPS. Motivation for Products and Services; OCP. Online Consumer Type of Purchase-Product; OCS. Online Consumer Type of Purchase-Service; AOB. Attitude to the Online Media Brand; OBI. Online Brand Image; OBA. Online Brand Positive Attitude; OBE. Online Brand Positive Experience; OBT. Online Brand Trust; LOW. Learning about the Online Brand Website; OSF. Online Consumer Attitude by Social Factors; ANN. Attitude to the Next Normal; OCN. Online Consumer Preparation to Next Normal; OMD. Online Media Design; IVD. Online Consumer Interactivity and Visual Design; OMQ. Online Media Benefits & Quality; OST. Online Consumer Service Satisfaction; P&B. Price & Benefit; WBQ. Website Quality; S&P. Security & Privacy.

innovation activity to determine marketing strategies to elicit competitive advantages.

The conceptual framework around the emergency context (ECX) factor is composed of

emergency context mood, emotions, and values (EME) with variables described as:

Emergency Context Mood (MOO). Two particularly confusing terms are “emotion” and “mood.” Moods are frequently less intense than emotions to attract attention and are less likely to be related to specific behaviors than emotions. It is necessary to be aware of how emotions

caused by emergencies may affect the formation of cognition. Although emotions affect the attention process and thereby affect behavior, compared with emotions, emotions are less likely to interfere with ongoing behavior by attracting attention (Hanpeng et al., 2011). Moods are general, reactive, and acute sensory states. The moods affect many aspects of our attitudes, beliefs, and buying behavior and help guide our thinking, decision-making, and actions.

Therefore, consumer’s moods are the main factor in their judgment and purchase intention (Hanpeng et al., 2011). The “Mood as information” is based on explaining the emotional state; we find that this emotional state is particularly fascinating. In the advertising context, if someone imputes negative emotions to something other than commercial information, they may focus on the source of the emotions rather than advertising (Wen et al., 2016). A negative mood promotes better remembering but reduces the intention to buy (Pelet and Papadopoulos, 2012). More specifically, negative emotions include more diagnostic features related to products or services and more information (Mei-Ju, 2020).

On the contrary, the problem-solving mode in a good mood people will not be triggered for the performance. Their processing capacity is not directed elsewhere so that they can process the ad centrally. The mood produced by the emergency context affects the ad’s perceptions in terms of their valence and number. Advertising perception is the input of an advertising attitude, an essential issue in the necessary components of the brand’s attitude, and the right to succeed in the market’s testing situation. Marketing professionals should understand what factors affect the formation of advertising awareness. Therefore, to predict the occurrence of moods and emotions, new research is needed and explain their impact on online consumer behavior and IT (Hanpeng et al., 2011).

The Emotions. Emotion is expressed under a context where the physical reactions have occurred simultaneously as humans’ evolution; the affected human behaviors will occur based on factors, objects, and events. Emotions are also mostly uncontrollable (Cinar, 2020). The role of emotional processes is an important subject of online consumer behavior research. Scholars have studied the emotions generated by using specific products, services, favorite items, or, more broadly, in various consumption situations. Consumption emotions may also be different from emotions in other situations. A correlation between negative and positive emotions hangs on the context, being negative or positive (Pappas et al., 2014). There is a broad trend in consumer research not to define emotions but to explain emotions through a list of emotional words describing specific discrete emotions or two sets of emotions (positive and negative emotions expressed in several conceptual models or frameworks) (Pappas et al., 2014). Online consumer behavior influences emotions either negatively, along with negative emotions, or positively, along with positive emotions. In this study, positive emotion is defined as interests & surprises as positive emotions, referring to the degree to which a person feels valued and happy; it means a warm feeling. Anger & fear are defined as negative emotions referring to the degree to which a person feels irritable, depressed, and unhappy to some extent. Indeed, positive emotions may lead to impulse purchases, while negative emotions may isolate a service provider from the customer; it can precipitate the idea to change the provider and regret (Pappas et al., 2014).

Nonetheless, even though negative and positive emotions are inter-related, this relationship is not proportional (Pappas et al., 2015). Even if positive emotions have been regarded as a necessary condition for improving purchase intention of online consumer behavior (PIC), negative and positive emotions can coexist and influence each other. Therefore, it is important to see how both explain online consumer behavior in several emergency contexts, such as COVID-19 (Pappas et al., 2020). In this study, we considered:

- Positive Emotions: Surprise & Interest (PES & PEI).** Varying positive emotions will also have different impact levels and show how much cognitive effort is exerted. Positive emotions in this

research include surprise and interest. In particular, a surprise refers to an individual's mental state of happiness in an unexpected event or situation. When online consumers suggest a feeling of surprise, people tend to feel less confident and personal control when consuming products or services (Mei-Ju, 2020). On the other hand, people with interest are motivated to try new places, new things, and new experiences; happiness fosters attachment. People without interest will stubbornly stick to what they like; they will not try new things, new places, and new experiences that have proven to be beneficial (Dunn and Hoegg, 2014). For online consumers, interest is a coordinated feeling, purpose, expression, and physical response to significant life events; the opportunity to obtain new information and deepen understanding stimulates people's interest. Interest involves alert, positive feelings; in terms of purpose, it motivates people to explore and investigate. This coordinated response pattern helps attention, information processing, stimulating understanding and learning (Reeve et al., 2014).

- b. **Negative Emotions: Anger & Fear (NEA & NEF).** Anger is frequently caused by a non-favorable consumption situation, in which case the individual intends to take action to face the stimulus. Anger suggests that online consumers show greater certainty in the use of a given service or product. Conversely, when online consumers show fear, they tend to show lower confidence and personal control in product or service consumption. These differences in evaluation trends are mainly related to threat perception: fearful online consumers tend to undergo higher risk perceptions, while angry online consumers tend to experience lower risk perceptions (Mei-Ju, 2020). When a person tries to avoid being harmed by an uncertain threat, fear is triggered. The use of fear can be focused on various emergency context to attract potential target customers because it is considered a principal behavioral antecedent where cognitive threat level beliefs and emotional fear response are highly correlated (Hartmann et al., 2014). Fear triggers actions and thoughts to avoid the crisis, rather than targeted actions against the problem. Online consumers experience greater brand emotional attachment when they experience brand-based fears than consumers in other emotions (such as sadness, excitement, or happiness) (Dunn and Hoegg, 2014). Therefore, in this research, we proposed the COVID-19 ads to be perceived by the online consumer as emergency context sources. We expect a negative emotional reaction of anger or fear or a positive emotional reaction of surprise or interest to trigger the purchase behavior.

The Values (VAL). The universal human values are presented as a complex of vitally

important values, connecting an individual with society and creating a unity of man and the world, with the civilization's development. In this research, we considered the prior work of Mazidah (2020) and Mejía-Trejo and Rodríguez-Bravo (2019b) to identify the level of how the values (e.g., the altruism in Abid and Harrigan, 2020) push or not to the cooperation of the online consumer or actions against the "home-influencers", "citizen journalism" or "fake news" as bad practices.

Finally, **Online Consumer Interest (ECI).** In order to classify the frequency of attempts of online consumers to make purchases on the Internet, the following suggestions are proposed (Online Frequency to Access. OFA): to classify online consumers who make online access once a year (occasionally), 2–4 times a year (often), 5–10 times a year, and more than ten online purchases a year as trials (regular) (Shi and Shan, 2019; Pappas et al., 2020). We included the most representative electronic devices used (ECE) (PC, Laptop, Tablet, Smartphone) and social media accessed (eMail, Websites, Wikis, Blogs, Vblogs Apps, Social Media) (Mejía-Trejo, 2017c, AMVO, 2020) and the leading proposal to access the online media is for gratification (GRF) such as entertainment, information, socialization, buying product or service, to install own contents to distribute and/or sell, reduce the anxiety, reduce the depression/monetary rewards/recognition reward/Other (AMVO,

2020/Mejía-Trejo, 2017c).

Hence, we proposed the following hypothesis:

"H1: Higher ECX higher PIC."

4.2.2. Motivation (MTV)

Consumer emotion is the main reason for motivation (Cinar, 2020). Motivation can elicit the purchase action on utilitarian or hedonic products/services (Martínez-López et al., 2014) under pressure to do it in reasoned (Mei-Ju, 2020) or impulsive answer (Krishna and Strack, 2017). According to Pappas et al. (2020), online consumers' motivations lead to purchase a concrete set of products/services (AMVO, 2020). The conceptual framework around the motivation (MTV) factor is composed of the motivation of online consumer (MOC) with variables described as:

Reasoned Answer (RAN). The emotional response is inseparable from cognitive processes, according to psychological research. The cognitive process is rational-oriented and aims to convey information helping the recipient and making the right decision. Comparing online reviews with positive and negative emotions is generally considered by readers to be more influential (Mei-Ju, 2020). If the behavior execution is considered feasible and the result is affirmative, then the behavior decision will link the self to the behavior result (Krishna and Strack, 2017). The online consumer's behavior models usually combine psychological and economic constructs related to IT adoption models that can be used as practical models by innovative marketers. Several studies in the marketing field try to use different classic models of "attitude-behavior" to propose the adoption of online purchases (Chawla et al., 2015). The most often used as a theoretical model to determine attitudes, beliefs, and social factors that influence online purchase intentions are the theory of reasoned action (TRA Fishbein and Ajzen, 2011). So far, the research results in this field have focused on TRA, including the Technology Acceptance Model (TAM) and its family theories besides TPB as the leading theory in this field (Chawla et al., 2015).

Impulsive answer (IAN). Authors like Krishna and Strack (2017) suppose that two interactive systems control the social behavior following different operating principles. For instance, the "reflective systems" use knowledge of values and facts for behavioral decisions, while "impulsive systems" use motivational orientations and association links to trigger behavioral decisions. As an impulsive system, it needs to meet the following requirements: cognitive ability is low, and behavior can be controlled under suboptimal conditions; between elements, relationships are associative links, formed according to the principle of similarity and continuity; when the activation exceeds a certain level. When a threshold value is reached, the behavior will be executed. The behavior will be triggered according to the propagation behavior schema activation. The information in the impulse system will be monitored so that the behavior can be implemented behaviorally. The impulsive system can be oriented towards entering and avoiding. The execution of emotional experience and behavior is adapted to the current motivational orientation, then they will be promoted (Krishna and Strack, 2017).

The impulsive answer is related to mood (Liu and Zhang, 2019; You-Feng and Feng-Yang, 2012). In this research, we proposed the COVID-19 ads as sources of motivation answers to be perceived by the online consumer. We expect a reaction from impulsive and unplanned to reasoned and planned answers to trigger the purchase behavior.

Utilitarian & Hedonic consume motivations (UTI & HED). Regarding the scope of consumer experience, Mikalef et al. (2016) and Chi-Hsun and Jyh-Jeng (2017) distinguish between "utilitarian" and "hedonistic" consumption motives on the Internet according to their respective types of needs. Motivation satisfies consumers. Companies may provide various benefits such as utilitarianism and hedonism to use online platforms and strategies to find online consumption processes. We put forward utilitarian motives (with seven issues), including motives for guiding consumers to obtain functions, economics, rationality,

practical or external benefits based on the following purposes: convenience/accessibility/efficiency; assortment; value and economy; adaptability/customization; availability of information; absence of social interaction; payment services.

On the other hand, we proposed hedonic motivations (with seven issues) related to experiential or emotional features that make the purchase process and consumption experience more pleasant (Martínez-López et al., 2014; Mikalef et al., 2016; Chi-Hsun and Jyh-Jeng, 2017; Yildiz, 2020).

Hedonic motivation is based on sensation intrinsic enjoyment; seeking entertainment; exploration of curiosity; socialize; pass the time; enduring involvement with a service/product.

Previous studies have shown that the perceived concentration of advertising will positively impact online consumers' utilitarian value. In contrast, cognitive enjoyment and concentration will positively impact the value of hedonic. Besides, hedonic value has a lesser impact on satisfaction than utilitarian value. Finally, hedonic value positively influences non-planned purchase behavior (Chi-Hsun and Jyh-Jeng, 2017). In this research, we proposed COVID-19 ads as sources of motivation to consume in online consumer perception. We expected a reaction from utilitarian to hedonic answers and ranked each one of the seven alternatives to trigger the purchase behavior amongst them. Finally, motivation for products and services (MPS) variables are described as:

Online consumer type of purchase-products (OCP) or services (OCS) to purchase. These factors are proposed here involving how the utilitarian or hedonic motivations are categorized to elicit products in online brand websites (auctions, books, computer hardware, computer software, consumer electronics, cosmetics, department stores, fashion, flowers & gifts, food, furniture & decoration, health, jewelry, music, price comparisons, sports, tickets, toys) and online services brands websites (banking services, mobile phones, service payments, subscription services, urban mobility, entertainment, education services, shows & events, and travels) AMVO (2020). In this research, we proposed COVID-19 ads as sources of motivation to purchase

products or services in online consumer perception. We expected a reaction to select from eighteen types of products and nine types of services' answers to trigger the purchase behavior.

Hence, we proposed the following hypothesis:

"H2: Higher MTV higher PIC."

4.2.3. Attitude (ATT)

In this stage of the study, the conceptual framework is around online consumer attitude factors over the online brand (AOM), described as:

Online Brand Image (OBI). Researchers are trying to answer why online consumer behavior's purchase intention has paid attention to several components of "e-image" of "e-retail" (Tao et al., 2012) due to it is a practical approach for two reasons. First of all, the "e-image" is a concept used to guide our overall assessment or perception of something in a certain way to guide our actions. Second, it is an approach that has focused well on traditional stores and shopping malls for many years (Pappas et al., 2015; Pappas, 2018; Pappas et al., 2020). This approach is especially important because the traditional retailers with a strong image have been doing business in e-retailing for a long time. The store's perception is based on physical characteristics such as logo color, slogan, etc. Simultaneously, the company name stimulates emotions based on images (Tao et al., 2012) and is associated with online images. In the e-retail environment, the most common image components include customer service, product selection, delivery or fulfillment, and customer service (Mitra and Jenamani, 2020).

Online Brand Positive Attitude (OBA). TRA The purchase intention of online consumer behavior is the direct result of attitude, affected by two factors: "subjective norms" and "attitude towards behavior." In this regard, subjective norms refer to the belief that a specific target indicates

whether the behavior should be performed and the motivation to comply with specific goals (Wilk et al., 2020). In short, we can call it a "social factor" through which we can tell the influence of other people on purchase intentions. In short, we can name as "social factors", through which we can say the influence of other people on purchase intentions. This concept is used to guide us in evaluating or evaluating something to guide us to take action. In terms of willingness to think about the importance (such as price, customer service, or image), we are more likely to purchase products from stores that we believe have a positive image. Over the years, this method has been proven in traditional shops and shopping centers (Pappas et al., 2020; Wilk et al., 2020).

Online Brand Positive Experience (OBE). The consumer purchase process involves multiple interrelated stages, including information collection, alternative product evaluation, post-purchase assessment, and purchase. It evaluates the service's information needs basing on the inherent experience, search, and reputation quality product. Due to online shopping is a relatively new activity, it is still considered dangerous than traditional shopping. Therefore, consumers who shop online rely heavily on the quality of the experience that can only be obtained by purchasing in advance (Jimenez-Barreto et al. 2020).

The Online Brand Trust (OBT). Trust means being willing to rely on a confident trading partner, critical to online consumers' intent (Pappas et al., 2020). As online consumers turn on more trustworthy and experienced, they tend to consume more. Trust is vital to all customers, no matter their experience level; it can positively impact customers' emotional quality.

However, at the same time, it may not affect their behavioral intentions (Pappas, 2018).

Trust, reputation, privacy, and operational site in a virtual medium purchase such as online consumers play essential roles (Akhter-Shareef et al., 2016; Silva et al., 2020).

Learning about the Online Brand Website (LOW). With the help of early research on another consumer behavior structure, as learning leads to more excellent purchase intentions, learning e-retail sites have become more attractive and efficient, and usage has increased (Aribarg and Schwartz, 2020).

Finally, the motivation for products and services (OSF) variables are described as:

Online Consumer Attitude by Social Factors (OSF). Social influence is also essential for online consumers, but it is difficult for online brands to meet these needs (Dwivedi et al., 2016; Mejía-Trejo, 2017a; Zhukov et al., 2018). Studies like Aluri et al. (2015) have found that social interaction is an important motivation for online consumers. Several studies have also shown that social motivations such as communication with other people with similar interests, membership and status, social experiences at home, and peer authority are useful for online consumption (Pappas et al., 2020). As a digital marketing strategy (Mejía-Trejo, 2017a), social media benefits online consumers by communicating with like-minded people just like social media influencers. Social is an important motivation for influencing intentions, including some artificial intelligence tools such as conversational commerce, chatbots, and personal assistants (Gentsch, 2019). Although some customers may not have a salesperson's pressure, without an experienced salesperson's professional assistance, much online shopping will be challenging to choose from and will feel frustrated. Besides, some customers have high social connections and rely on other opinions that are making purchase decisions. Consumers sometimes shop more in traditional stores focused on satisfying their entertainment and social needs due to online shops' restrictions (Katawetawaraks and Lu-Wang, 2011).

Online Consumer Preparation to the Next Normal (OCN). According to AMVO (2020), we proposed the indicator as part of the attitudes to return, restart, or reinvent the online consumer's own life for the next normal. In this research, we proposed COVID-19 ads as sources to categorize the purchasing activity back to the next normal in online

consumer perception. We expected a reaction to classify amongst three alternatives: 1. Return; 3. Restart; 5. Reinvent as answers to trigger the purchase behavior.

Hence, we proposed the following hypothesis:

“H3: Higher ATT higher PIC.”

4.2.4. Website attraction

The online consumers' preference to purchase in online channels strongly depends on a serial of the website attributes that boost to search and buy, such as online media design (OMD) factor, composed of:

Online Consumer Interactivity and Visual Design (IVD). Several online brand studies have noticed that shopping is a matter of obtaining products and services involving enjoyment, experience, and entertainment in the online consumer behavior context. Experience and enjoyment come from the interaction between online consumers and e-retail websites, which we call “*electronic interactivity*.” This e-interactivity includes interaction between sales staff and customers, visual marketing, and even the influence of all senses on consumer behavior.

According to experience, interactivity is the main factor determining consumer attitudes.

In general, interactivity is the most relevant variable of consumers' attitudes towards specific e-retailers, and interactivity may affect trust and attitudes towards online brands (Chincholkar and Sonwaney, 2017; Pappas et al., 2020). Interactivity is a function of marketability (call-to-action), accessibility, credibility, usability, scalability, and visibility, all of the properties of a successful website design (Mejía-Trejo, 2017c; Nia and Shokouhyar, 2020).

In this study, we proposed COVID-19 advertisements as a source for classifying web design attributes. We hope to be able to classify the following four functions to trigger purchase behavior as online media benefits & quality (OMQ):

Online Consumer Service Satisfaction (OST). Online satisfaction means the pleasure consumer degree from services, products, or the online consumer experience in the consumption process. In this sense, the hedonic value has less influence on satisfaction than utilitarian value; hedonic value comes from the pleasure, pleasure, and satisfaction of online consumer experience (Chi-Hsun and Jyh-Jeng, 2017). By expanding existing knowledge on how to combine motivation and emotion to identify specific user patterns and increase satisfaction, these users are important to these factors and greatly affect their satisfaction (Pappas et al., 2020). Companies must be aware of these significant issues, due to lead to dissatisfaction with online shopping. One of the most critical issues affecting online brands' success or failure is online trust (Katawetawaraks and Lu-Wang, 2011). Online satisfaction can promote loyalty and engagement (Akhter-Shareef et al., 2016; Lai et al., 2020).

Price & Benefits (P&B). An important choice for companies to influence innovation activities is whether to compete primarily on price. Price-centric companies should pay more attention to efficient processes (OECD, 2018, par. 5.22). The direct benefit of using the website is the shopping convenience, placing orders without buying pressure, collecting information, comparing products and prices, etc. (Al-Debei et al., 2015; Mejía-Trejo, 2017b). In online purchases, the expected quality, the actual price, the emotional value, and the final performance experience are all carried out after purchase (Akhter-Shareef et al., 2016). Price is considered a competitive marketing strategy (Svatošová 2013; OECD, 2018). The final online consumer output during the purchase process will affect the online environment, the price, and the quality of the products provided in customer service and other marketing activities.

Online consumers from emerging economies believe that product quality is important. Nevertheless, they are still mainly looking for and following special offers and preferential prices. Buying second-hand goods and shopping in online stores or auctions has also led to the purchase of second-hand goods. It can be assumed that the primary

motivations for shopping through the Internet are lower prices, the convenience of shopping, more choices of products and services, and comparison between them (Svatošová, 2013; Lai et al., 2020).

Website Quality (WBQ). An important choice for a company to influence its innovation activities is whether to compete for quality mainly. Quality-centric companies should be more likely to develop new products to market (OECD, 2018, par. 5.22). It must be confirmed different expectations according to a different step of the online consumption process. Online consumers' expectations include: information, online navigation, website accessibility, attractiveness, convenience and speed of ordering and payment, and network quality of product/service delivery (Ching, 2018). Quality is considered a competitive marketing strategy (Mejía-Trejo, 2017b; OECD, 2018). Higher perceived network quality leads to higher trust in online shopping sites and a more positive attitude towards online consumers. It has been found that a direct predictor of trust is the network quality perception, and the former has a significant and positive impact on the perception of the benefits (Al-Debei et al., 2015). In a highly competitive and rapidly changing environment, online Internet brands pay more and more attention to quality Web services (You-Shyang et al., 2018; Lai et al., 2020).

Security & Privacy (S&P). Credit/debit cards as a payment method increase the odds of online selling, and customers frequently pay attention to the seller's information to protect themselves. Online consumers tend to trust in reputed or famous brands and tend to buy products and services from retailers based on such trust. A critical issue to prevent customers from spending online is security because they are warned that online stores will cheat or misuse their personal information, especially credit/debit cards. Besides, people are concerned about data and transaction security; both are crucial in purchasing online (Katawetawaraks and Lu-Wang, 2011).

The two main obstacles to adopting online shopping sites are privacy and security, both widely recognized because they significantly impact trust and form a positive attitude towards the future of online shopping. An appropriate privacy system should be developed because it is the primary concern of online consumers. In this case, government laws, organizational policies, and regulations must be emphasized this issue seriously. Therefore, functions that manage the online consumer's privacy have to be conveniently implemented in online shopping sites. Besides, security is another relevant factor that remarkably affects consumer trust. Decreasing trust in the website will result from the lack of security for online shopping sites (Al-Debei et al., 2015; Lai et al., 2020).

4.2.5. Final design of purchase intentions of online consumer behavior (PIC)

Several authors (You-Feng and Feng-Yang, 2012; Laroche and Richard, 2014; Mikalef et al., 2016; Chi-Hsun and Jyh-Jeng, 2017; Pappas et al., 2015; Pappas et al., 2020; Mei-Ju, 2020; Yildiz, 2020), have written about different points of view of purchase intention of online consumer behavior. However, not with the perspective of emergency contexts like COVID-19 ads, motivation, attitude, and website attraction implied in a conceptual framework (ECMAW-PIC) as this research study poses.

Hence, we proposed the following hypothesis:

“H4: Higher WBA higher PIC.”

4.3. Describing the final ECMAW-PIC conceptual framework proposal

To show the proposed framework, we will need a Venn diagram illustrating the five groups of structures around ECMAW-PIC and their intersection displayed in Fig. 1.

These five groups of structures reflect the results of interest. In this study, the purchase intention online consumer behavior (PIC) and four groups of causal conditions (independent factors) are used to predict the

results. In detail, the set of four-factors with each one of their indicators of causal conditions are emergency context (ECX) (indicators: *emergency context mood; emergency context emotions and emergency context consumer frequency*); Motivations (MTV) (indicators: *type of motivations answer; type of motivation to consume and motivation to purchase toward products or services*); Attitudes (ATT) (indicators: *attitude online brand website with trust and experience; attitude under social media influence and attitude online consumer preparation to the next normal*) and finally, Website Attraction (WBA) (indicators: *website design; website satisfaction and website quality*). Hence, we have:

“H5: There is no single best combination of underlying factors, variables, and indicators that lead to purchase intention of online consumer behavior (PIC). These combinations could be considered marketing strategies as innovation activity”.

The factor configurations are represented through intersections, which are higher-level interactions. Finally, a questionnaire survey based on the construct's definition and literature sources (Mejía-Trejo, 2019) is exhibit in Table 3.

5. Research method

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

Stage 1. It implied a qualitative study based on a literature review involving consistent research on the purchase intention of online consumer behavior (PIC). This was made to precise and pose criteria researchers used to determine business innovation activity to generate marketing strategies. The configurational approach enables the understanding to identify the initial underlying factors: emergency context (ECX); motivation (MTV); attitude (ATT); web attraction (WBA). These underlying factors will be grouped in variables and indicators as components to integrate the conceptual framework empirically proved.

Stage 2. The literature review dataset results were compared by three digital marketing professors (academic vision) vs. three CEOs of digital marketing agencies (expert vision) using the **Delphi Panel-focus group** and **AHP**. Finally, the dataset of 27 indicators was detected and distributed in 8 variables and named such as emergency context mood, emotions, and values (EME), online consumer interest (ECI), the motivation of online consumer (MOC), motivation for products and services (MPS) attitude to the online media brand (AOB), attitude to the next normal (ANN), online media design (OMD) online media benefits & quality (OMQ). Such variables are around four underlying factors ECX, MTV, ATT, and WBA (see details in Table 2) and their initial interactions (see Fig. 1). A questionnaire (see Table 3) was designed as a final aggregated dataset results.

Stage 3. The survey data applied to 400 Mexican online consumers (Mar to Sep, 2020, see Table 4) during the COVID-19 pandemic and the

next normal.

Stage 4. After the collection datasets, the quantitative study applies a cross-validation method to test the framework's predictive validity (see Table 5). We contribute with a solid conceptual framework proposal using Confirmatory Factor Analysis (CFA) through covariance-based structural equation modeling (CB-SEM) using EQS 6.2 software. This CFA/CB-SEM is done to determine the loading factors and test the framework's reliability with convergent and discriminant validities (see Table 5). Here, only one combination of underlying factors, variables, and indicators (items) are obtained according to their factors loading to get the purchase intention of the online consumer (PIC).

Stage 5. Once proved the factors loading and tested the framework's reliability with convergent and discriminant validities, the datasets are aggregated in the fsQCA analyses using fsQCA3.0 software to determine the several combinations of the underlying factors, variables, and indicators (items) to get the same outcome, the purchase intention of the online consumer (PIC).

Stage 6. Result analyses, discussion, and conclusions.

5.1. Demographic data

According to the results obtained from the frequency analysis of 400 subjects, the most important data of the participants were: 31–40 years old (37.5%), male/female (50%/50%), single (75%), postgraduate education (37.5%), with monthly income between 6000 and 12,000 (65%), and frequent Internet purchases (5–10 times per year, 70%). An analysis carried out by Statista (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. The results of the frequency demographic data analysis are exhibit in Table 4.

5.2. Sampling based on CFA/CB-SEM technique

The critical discussion of CFA/CB-SEM applications' sample size technique involves how large a sample is needed to produce reliable results. This decision involves three aspects of framework complexity. According to Hair et al. (2019), the sampling frames could be addressed among:

- Number of constructs.** Prior reviews indicate the average number of constructs per model is higher in PLS-SEM (Partial Least Squares-SEM, approximately eight constructs) compared to CFA/CB-SEM (Confirmatory Factor Analysis/Covariance-Based-SEM approximately five constructs)
- Number of indicators per construct.** Simultaneously, the number of indicators per construct is typically higher in PLS-SEM than CFA/CB-SEM. In contrast, the PLS-SEM algorithm does not simultaneously compute all the framework relationships but instead uses separate ordinary least squares regressions to estimate the partial regression relationships.
- Number of observations per estimated parameter.** Finally, the adequacy of sampling for this research is 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 27 indicators \times 10 times = 270. The 400 Mexican online consumers sample fulfill this condition widely.

5.3. Data collection

The “virtual snowball sampling” method was used in this research; it is a method to recruit participants to access representative samples of interconnected human networks involving consumers with an online

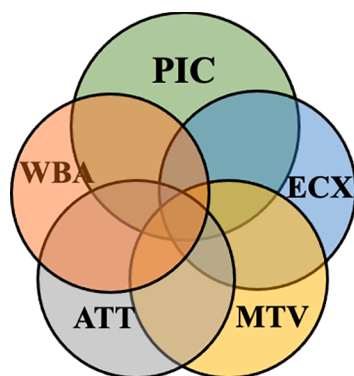


Fig. 1. Venn Diagram of the ECMAW-PIC conceptual framework. Notes: PIC. Purchase Intention of Online Consumer Behavior ECX. Emergency Context; MTV. Motivation; ATT. Attitude; WBA. Website Attraction. Source: Own.

Table 3
Description of questionnaire survey

ECMAW-PIC Conceptual Construct Framework			
Factor	Variables	—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). Each question begins with the expression: “When I perceive a COVID-19 ad”	Authors
1. Emergency Context (ECX)	1. Emergency Context Mood, Emotions and Values (EME)	1 I feel in the mood (MOO) of: - Emergency - Enjoyment when accessing the online media 2. I feel the emotion of: - Surprise. (Positive Emotions under Surprise. PES) when accessing the online media 3. I feel the emotion of: - Interest. (Positive Emotions under Interest. PEI) when accessing the online media 4. I feel the emotion of: - Anger (Negative Emotions under Anger. NEA) when accessing the online media 5. I feel the emotion of: - Fear (Negative Emotions under Fear. NEF) when accessing the online media 6. I'm identified with values (VAL) that push me to: General actions around social responsibility Particular actions around individual cooperation Only receptive actor of the information Particular actions with narrative of annoyance General actions aimed to resistance	Hanpeng et al. (2011), Pelet and Papadopoulou (2012), Zhukov et al. (2018), Mu-Yen and Ting-Hsuan (2019) Dunn and Hoegg (2014), Reeves et al. (2014), Pappas et al. (2020), Mei-Ju (2020), Mu-Yen and Ting-Hsuan (2019), Cinar (2020)
	2. Online Consumer Interest (ECI)	7. I access the online media (OFA): 1-Trial (Once yearly); 2-Occasional (2–4 times yearly); 3-Moderated (4–6 times yearly); 4-Frequent (7–10 times yearly); 5- Regular (>20 times yearly) Online frequency to access:z I access the online media in a day (OFA): –30 min–2 hr; 2 hr–4 hr; 4 hr–6 hrs; 6hrs–8hrs; >8hrs 8. I prefer to access the online media by (ECE): PC/-Laptop/-Tablet/-Smartphone/SmartTV, Other I prefer to use (ECE): -eMail/-Websites/-Wiki s/-Blogs/-VBlogs (Yotube, Vmeo, etc.)/-Apps/Other -Social Media:/Facebook/Twitter/Instagram/Snapchat/Linkedin/TikTok/SmartTV Platforms (Netflix, Disney+,etc.).Other 9. My main proposal to access the online media is the gratification for (GRF): - Entertainment/Information/Socialization/Buying product or service/installation of online content for buy & sell or entertainment/-Reduce the anxiety/Reduce the depression/Monetary rewards/Recognition reward/Other	Mazidah (2020), Mejía-Trejo and Rodríguez-Bravo (2019b) Shi and Shan (2019), Mejía-Trejo (2017c), AMVO (2020)
2. Motivation (MTV)	3. Motivation of Online Consumer (MOC)	10. My motivations to access to the online media are more reasoned and planned than impulsive and unplanned action. (Reasoned Answer (RAN)). 11. My motivations to access to the online media are more impulsive and unplanned than reasoned and planned action (Impulsive Answer. IAN) 12. My motivations to access to the online media are due to: (Utilitarian. UTI) - Convenience/accessibility/efficiency - Payment services - Assortment - Value and economy - Adaptability/customization - Availability of information - Absence of social interaction 13. My motivations to access to the online media are due to: (Hedonic. HED) - Intrinsic enjoyment - Visual appeal - Sensation seeking/entertainment - Exploration/curiosity	Krishna and Strack (2017), Fishbein and Ajzen (2011), Chawla et al. (2015), Mei-Ju (2020) Chawla et al. (2015); Krishna and Strack (2017); Liu and Zhang (2019); You-Feng and Feng-Yang (2012) Martínez-López et al. (2014), Mikalef et al. (2016), Chi-Hsun and Jyh-Jeng (2017); Yildiz (2020)

(continued on next page)

Table 3 (continued)

ECMAW-PIC Conceptual Construct Framework			
Factor	Variables	—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). Each question begins with the expression: “When I perceive a COVID-19 ad”	Authors
		<ul style="list-style-type: none"> - Pass time - Socialize - Enduring involvement with a product/service 	
	7. Motivation for Products and Services (MPS)	14. Select only one section (Product or Service): My primary motivation to access to the online media is for products in online brands websites (online consumer type of product purchase. OCP)	AMVO (2020)
			<ul style="list-style-type: none"> Auctions Books Computer Hardware Computer Software Consumer Electronics Cosmetics Department Stores Fashion, Flowers & Gifts
Food	Furniture & Decoration	Health & Higiene	
Jewellery	Music	Price Comparisons	
-Sports,	Tickets	Toys	
15. My primary motivation to access to the online media is for services in online brands websites (online consumer type of service purchase. OCS)			
Banking Services	Mobile Phones	Service Payments	
Subscription Services	Urban Mobility	Entertainment	
Education Services	Shows & Events	Travels	
3. Attitude (ATT)	8. Attitude to the Online Media Brand (AOB)	16. My attitude to access the online media is influenced positively by the online brand image (OBI)	Tao et al. (2012), Mitra and Jenamani (2020), Pappas et al. (2020)
		17. My attitude to access the online media is influenced positively by my online brand positive attitude (OBA)	Pappas et al. (2020), Wilk et al. (2020)
		18. My attitude to access the online media is influenced positively by my online brand positive experience (OBE)	Pappas et al. (2020), Jimenez-Barreto et al. (2020)
		19. My attitude to access the online media is influenced positively by my online brand trust (OBT)	Akhter-Shareef et al. (2016), Pappas (2018), Silva et al. (2020)
		20. My attitude to access the online media is influenced positively by my learning about the online brand website (LOW)	Pappas et al. (2015), Aribarg and Schwartz (2020)
		21. My attitude to access the online media is influenced positively by social media factors (OSF), such as: - Follower/followed interactions - Social communication	Katawetawaraks and Lu-Wang (2011); Mejía-Trejo (2017a); Zhukov et al. (2018); Gentsch (2019)
	6. Attitude to the Next Normal (ANN)	22. My attitude to access the online media is influenced positively by preparing myself for the next normal (OCN) to my own life for: - Return - Restart - Reinvent	AMVO (2020)
5. Web Attraction (WBA)	9. Online Media Design (OMD)	23. I'm attracted to access the online media due to the online consumer interactivity sound visual design (IVD): - Ease of interaction. - Visual design. - Sound design	Chincholkar and Sonwaney (2017); Mejía-Trejo (2017c); Nia and Shokouhyar (2020), Pappas et al. (2020)
	8. Online Media Benefits & Quality (OMQ)	24. I'm attracted to access the online media due to the online consumer service satisfaction (OST): - Service satisfaction	Katawetawaraks and Lu-Wang (2011), Akhter-Shareef et al. (2016), Chi-Hsun and Jyh-Jeng (2017); Pappas et al. (2020), Lai et al. (2020)
		25. I'm attracted to access the online media due to the (P&B): - Price & Benefit	Svatošová (2013); Akhter-Shareef et al. (2016), Mejía-Trejo (2017b), Al-Debei et al. (2015), OECD (2018), Lai et al. (2020)
		26. I'm attracted to access the online media due to the Web Quality (WBQ): - Amount of information - Online navigation - Accessibility - Convenience	Al-Debei et al. (2015), Mejía-Trejo (2017b); OECD (2018), You-Shyang et al. (2018), Lai et al. (2020)

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Table 3 (continued)

ECMAW-PIC Conceptual Construct Framework			
Factor	Variables	—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). Each question begins with the expression: “When I perceive a COVID-19 ad”	Authors
		<ul style="list-style-type: none"> - Speed of ordering-payment, - Delivery of product/service 	
		27. I'm attracted to access the online media due to the:	Katawetawarakas and Lu-Wang (2011), Al-Debei et al. (2015), Lai et al. (2020)
		<ul style="list-style-type: none"> - Online brand security and privacy (S&P) 	

Source: Several authors with own adaptation.

Table 4

Research sample demographic profile.

Measure	Items	Frequency	Percentage
Age	18–25	100	25
	26–30	100	25
	31–40	150	37.5
	>40	50	12.5
Gender	Female	200	50
	Male	200	50
Marital Status	Single	300	75
	Couple	100	25
Education Level	College	100	25
	Undergraduate	100	25
	Postgraduate	150	37.5
	Doctorate	50	12.5
Monthly Income	>12,000	40	10
	6000–12,000	260	65
	1000–5000	100	25
	Once annually (trial)	20	5
Internet Purchasing Behavior	–2–4 times annually (occasional)	80	20
	–5–10 times annually (frequent)	280	70
	–>10 times annually (regularly)	20	5

Source: Own.

Table 5

Model Cross-validation.

Factors	Correlation Coefficient among variables	Model 1 with dataset 2 (Subsample)	Model 2 with dataset 1 (Holdout subsample)
ECX	EME	0.739	0.713
	ECI	0.740	0.726
MTV	MOC	0.762	0.744
	MPS	0.773	0.757
ATT	AOB	0.699	0.710
	ANN	0.779	0.709
WBA	OMD	0.801	0.798
	OMQ	0.778	0.768

Note: All correlations are statistically significant ($p = 0.01$).

Source: Own.

shopping experience. Also, they are very sensitive respondents due to closed COVID-19 advertising. Participants (initially 580; finally 400) were asked to answer the questionnaire created in Table 3 to remind them of their opinions. They were also provided with a brief description of the concepts dealt with before answering the survey. Participation was voluntary, confidential; no rewards were provided for participants; it was sent the survey questionnaire via google forms from Mar 16 to Sep 30, 2020. Therefore, the sample is regarded as representative of online consumer users in Mexico.

5.4. The survey instrument

The final survey resulted from the **Delphi Panel-focus group** and **AHP** techniques among three digital marketing professors (academic vision) vs. three **CEOs** of digital marketing agencies (expert vision).

The results were the main factors to adopt in the emergency context-motivation-attitude-website attraction (**ECMAW**) on purchase intention of online consumer behavior (**PIC**) involved as a conceptual framework proposal (see Table 3).

5.5. Predictive validity testing

Predictive validity is fundamental to this stage of the study because it does not necessarily mean that the framework can provide reasonable predictions when achieving a good model fit. The framework's validity test prediction was made through the cross-validation method (Wu et al., 2014; Woodside, 2014). The cross-validation method randomly split the sample into two mutually exclusive subgroups almost the same size. Taking one subgroup, a framework developed of metrics was used to predict other subset metrics and check the correlation between each framework's metrics. The results are displayed in Table 5, where the correlation between the observed measurement value and the predicted measurement value is statistically significant because it is medium-high; This indicates that our results are valid. For this reason, the samples were divided into sub-samples and reserved samples.

5.6. The CFA/CB-SEM analysis technique

The framework's validity was made through Confirmatory Factor Analysis (**CFA**) using Covariance-Based Structural Equations Modeling (**CB-SEM**) based on EQS 6.2 software. The questionnaire consisted of 27 indicators or items (besides the demographics questions in Table 4), grouped in 8 variables based on the perception of the COVID-19 ads, 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) The final questionnaire can select a related question (according to the case) to test the proposition, including the reflection scale for the structure designed on the **ECMAW-PIC** conceptual framework. Regarding **CFA**, it is a vital part of a broader method called structural equation modeling (**CB-SEM**) or sometimes called covariance structure analysis. From the General Linear Model (**GLM**) are both **EFA** and **CFA**. **CFA** specifies a “measurement model,” which describes how certain latent variables come from a reflection of measured variables. Once these measurement models or frameworks were assessed satisfactorily, researchers can explore path models linked as latent variables (called “structural models”) (Thompson, 2004). It is strongly recommended that **CFA** be used as a tool for constructing the structure's validity to analyze the relationship amongst the constructs from the broadest perspective. This construct is unobservable and theoretical (factors or latent variables). However, although they are unobserved, related theories often describe how structures should be related to each

other.

Construct validity refers to a measure that checks attributes (or constructs) that are not operationally defined or directly measured (Harrington, 2009). In CFA, researchers can “fix” or “constrain” specific parameters as mathematically “allowable” values and “release” the input data used to get estimates of other model parameters (Thompson, 2004).

5.7. The fsQCA analysis technique

Despite all the above, traditional statistical methods (such as **CB-SEM** and **MRA** Multiple Regression Analysis) are intrinsically limited in explaining the effects of complex interaction (of three or more contributing factors) (Ragin, 2008). The **fsQCA** provides suitable methods to adapt to the complex complementary and nonlinear relationships between structures (Ganter and Hecker, 2014; Woodside, 2013).

The **fsQCA** combines qualitative comparative analysis (**QCA**) with fuzzy sets and logic principles (Ragin, 2008). We applied the **fsQCA 3.0** program, which recognizes the pattern of elements that led to the selected result (Mejía-Trejo, 2020). This technique goes a step further than uniquely identifying the correlation between independent and related factors (**MRA**).

The **fsQCA** technique allows determining multiple paths leading to the same result can be captured, known as *the principle of equifinality* (Ordanini et al., 2014; Woodside, 2014). These pathways are a combination of factors and indicators, which can be used in the outcome as predictors in a few cases. The **MRA** usually cannot be identified by the focusing of great impact (Woodside, 2014). However, they are still relevant depending on the specific situation. The major benefits of **fsQCA** and configuration analysis come from **MRA** restrictions. In a competitive environment, the approaches on a variance-based focus on the principal consequences between factors and indicators. The covariance existing among the model or framework under study stipulates that one factor's absence or presence may affect other factors' influence and the unique outcome; hence, the need for configurational analysis (Fiss, 2007). Here, we used the **fsQCA** to get the different factors configuration leads to the high purchase intention of online consumer behavior (**PIC**) results of the survey questionnaire.

The use of **fsQCA** makes the results and predictors more likely to be at a fuzzy level (continuous) rather than a binary level (binary). Since this technique produces multiple configurations (solutions), it contains “sufficient” and “necessary” conditions (may exist or not in the solution) that can be marked by their existence, nonexistence, or “irrelevant” conditions. Both “sufficient” and “necessary” conditions leading to “core conditions” (outcome relationship with strong causality) and “peripheral conditions” (or weaker conditions) (Fiss, 2011).

The “necessary analysis” of a condition is prior. It determines if any causal condition could be a superset of the unique outcome and, therefore, if such conditions are or not necessary (essential) to get high **PIC** (Ragin 2008); a threshold of 0.9 is required for a condition to be necessary (Schneider and Wagemann, 2010).

The “sufficiency analysis” in a condition is based on the “principle of causal asymmetry” that corresponds to the “configuration theory,” which establish that “the presence of a factor may lead to a certain unique outcome, but the absence or negation of the same factor may not lead to the absence or negation of that outcome” (Ragin, 2008). Besides, a factor can be “necessary” for the unique outcome to occur; however, at the same time, it can be “insufficient” on its own for the same unique outcome (Woodside, 2014).

5.7.1. Calibrating the raw data

The following and very important step in the **fsQCA** execution is the data calibration.

This means all raw data transformation of factors into fuzzy sets (values ranging from 0 to 1) (Ragin, 2008). Specifically, a value of 1 means full collective membership and a value of 0 means no collective

membership. Therefore, with a scale ranging from 0 to 1, all factors are continuous, meaning its membership level.

Data calibration can be “direct” (to calibrate all data values researchers select, as anchor values, three qualitative thresholds) or “indirect” (researchers decide to determine the factors to be calibrated after qualitative evaluation). The method selection depends on the basic theory, the raw data, and the researcher's experience. The qualitative thresholds in the direct method correspond to “full, non-full, and intermediate membership.” For a case, it means the level to belong to the set (Ragin, 2008). Due to the data raw must be calibrated, the most effortless manner to achieve it is to select 1, 0.5, and 0 as the break-points. In our case, on a seven-point Likert scale, the values 7, 4, and 1 would be calibrated into 1, 0.5, and 0, respectively, and the rest (6, 5, 3, 2) would follow accordingly. Multiple studies suggest that the values of 6, 4, and 2 are used as thresholds (Ordanini et al., 2014).

However, when calibrating using the **fsQCA** software, these values follow logarithmic conversion. The breakpoints of “full membership” and “non-membership” are 0.05 and 0.95, instead of 0 and 1, because logarithmic conversion is not performed able to generate membership that is precisely equal to 0 or 1. For more details, see Ragin (2008: 86–94).

5.7.2. Generating solutions through truth table

Once the calibration is successful, the **fsQCA** activates the fuzzy algorithm to generate a solution that is a conditions combination supported on a high quantity of cases. The directive to be consistent is “the combination leads to the outcome.” Hence, a “truth-table” of rows is generated, where *k* represents the number of outcome predictors. Each row represents the observations quantity in each combination. For instance, a truth table between four variables (i.e., conditions) can provide sixteen possible logical combinations. For every combination, the degree in which every case supports the specific combination (“minimum membership value”).

The **fsQCA** uses the threshold of 0.5 to identify the combinations that are acceptably supported by the cases. Hence, all combinations that are not supported by at least one case with membership over the threshold of 0.5 are automatically removed from further analysis.

The “truth-table”, has to be refined according to “consistency” and “frequency” (Ragin, 2008). The “frequency” represents observations quantity for every possible combination; in other words, the “frequency” of several combinations is expected to be zero. The “consistency” is an exhibit for each combination in “truth-table”. It refers to the correspondence level among the sample cases sharing a configuration or a causal condition in displaying an outcome-focused (Ragin, 2008; Fiss, 2011). Next, it is necessary to sort the table according to the agreement and frequency value. A “frequency threshold” should be set to ensure that the minimum quantity of empirical observations is obtained to evaluate the subset relationship. It is appropriate to set at 1 or 2 for small and medium-sized samples (i.e., <100 cases) (Ragin, 2008; Fiss, 2011) and should be set at 3 for large-scale samples (i.e., >100 cases, in our research 400). In this research, the “frequency threshold” was adjusted at 3 (0.9, 0.6, 0.3) and was deleted all lower frequencies combinations for further analysis. Besides, to exceed the recommended value of 0.75, the “consistency threshold” also was adjusted (Ragin, 2008). More “necessary conditions” are a product of low “consistency threshold,” increasing type I errors (false positives), but reducing type II errors (false negatives), and the opposite (Dul, 2016). In this research, the “consistency threshold” was adjusted at 0.85 defining the combinations that explain the unique outcome entirely. The “consistency threshold” with the ones above explains the unique outcome entirely.

Therefore, the unique outcome column value is adjusted at 1, and the remaining values are adjusted at 0. The **fsQCA** provides three sets of “complex, parsimonious, and intermediate solutions.” (More details in Ragin, 2008).

The “complex solutions” exhibit all possible combinations of conditions, but it is hard to interpret and impractical in most cases (Mendel and Korjani, 2012). The “parsimonious solutions” exhibit the most

important and simplified conditions which cannot be left out from any solution; they are called “core condition” (Fiss, 2011). The “intermediate solutions” exhibit the result of “counterfactual analysis” on “complex” and “parsimonious” solutions. They are based on assumptions by the researcher being consistent theoretically and empirically with knowledge.

The conditions that are part of the “intermediate solutions” and not part of the “parsimonious solutions” are called “peripheral conditions” (Fiss, 2011). The next step is the counterfactual analysis explanation treated broadly on Mendel and Korjani (2012).

The concept of “coverage” evaluates the practical importance of the necessary conditions. This is a conditional level in which instances are paired with the unique outcome instance, relating the set-theoretic connection’s empirical relevance. The fsQCA technique was exerted to examine COVID-19 ads perceptions around the combination of conditions or factors like emergency context (ECX), motivation (MTV), attitudes (ATT), and web attraction (WBA) (or ECMAW model) produce the purchase intention of online consumer behavior (PIC)

Hence, the underlying factors: MTV, ATT, and WBA predict PIC. However, it is still unclear how in the condition of ECX (like COVID-19 ads), their presence or absence will influence such PIC.

6. CFA/CB-sem and fsQCA measurement findings

This section introduces the results of the CFA/CB-SEM to validate the conceptual framework measurement validity and fsQCA results.

Table 6

CFA/CB-SEM results or internal consistency and convergent validity of latent variables in the theoretical framework.

Factors	Theoretical Framework Convergent Validity							Theoretical Framework Discriminant Validity												
	Variables	Indicators	Factors Loading (>0.6)	Robust t Value	Cronbach's Alpha (>0.7)	CRI (>=0.7)	AVE (>=0.5)	ECX	MTV	ATT	WBA									
1. ECX	1. EME	1.MOO	0.906***	1.000a	0.866	0.875	0.594	0.770	0.21–0.42	0.44–0.66	0.67–0.80									
		2.PES	0.601***	17.675																
		3.PEI	0.653***	16.295																
		4.NEA	0.638***	14.027																
		5.NEF	0.957***	15.025																
		6.VAL	0.901***	19.871																
	2. ECI	7.OFA	0.919***	28.287																
		8.ECE	0.890***	22.231																
		9.GRF	0.910***	28.391																
2. MTV	3. MOC	10.RAN	0.996***	1.000a	0.898	0.902	0.609	0.600	0.780	0.21–0.45	0.33–0.51									
		11.IAN	0.612***	19.015																
		12.UTI	0.960***	19.308																
		13.HED	0.651***	19.756																
	4. MPS	14.OCP	0.896***	15.545																
		15.OCS	0.873***	9.341																
3. ATT	5. AOB	16.OBI	0.725***	1.000a	0.889	0.893	0.546	0.459	0.381	0.738	0.21–0.48									
		17.OBA	0.776***	14.589																
		18.OBE	0.986***	11.763																
		19.OBT	0.908***	15.777																
		20.LOW	0.697***	13.119																
		21.OSF	0.914***	16.264																
	6. ANN	22.OCN	0.984***	12.935																
		4. WBA	7. OMD	23.IVD								0.704***	1.000a	0.865	0.871	0.577	0.500	0.426	0.627	0.759
			8. OMQ	24.OST								0.771***	11.902							
26.P&B	0.856***		12.444																	
26.WBQ	0.779***		11.429																	
27.S&P	0.814***		11.564																	
Structural Relation	Standardized Coefficient β		Robust t Value	Hypotheses							Results									
ECX -> PIC	0.887***	10.950	H1: Higher ECX higher PIC. There are positive effects of ECX on PIC							Supported										
MTV -> PIC	0.707***	12.268	H2: Higher MTV higher PIC. There are positive effects of MTV on PIC							Supported										
ATT-> PIC	0.751***	12.047	H3: Higher ATT higher PIC. There are positive effects of ATT on PIC							Supported										
WBA ->PIC	0.867***	10.491	H4: Higher WBA higher PIC. There are positive effects of WBA on PIC							Supported										

$S-B\chi^2 = 864.2621$; $df = 399$; $p < 0.000$; $RMSEA = 0.079$; $NNFI = 0.852$; $CFI = 0.867$; $NFI = 0.824$ 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); below the diagonal part presents the variance (correlation squared), and above the diagonal is an estimate of the correlation of factors with a confidence interval of 95%.

Notes: CRI, Composite Reliability Index, AVE, Average Variance Extracted.

Source: Own data using EQS 6.2.

6.1. The CFA/CB-SEM conceptual framework measurement validity

The validity of the measurement scale was measured using CFA/CB-SEM (Byrne, 2006; Mejía-Trejo, 2020) 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 and Yi, 1988) as techniques to prove the scale’s 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 and Bernstein, 1994; Hair et al., 2019). It was computed the average variance extracted (AVE) from the factors of the construct (Fornell and Larcker, 1981) where higher values than 0.6 are desirable (Bagozzi and 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 (Bentler and Bonnet, 1980; Byrne, 2006; Bentler, 1990; Hair et al. 2019). RMSEA values below 0.08 were acceptable (Hair et al., 2019); NNFI, CFI, and NFI values, preferably, must be suitable between 0.80 and 0.89 (Byrne, 2006; Hair et al., 2019). The CFA/CB-SEM results are displayed in Table 6 suggesting that the framework produce a good fit to the data as follows: $S-B\chi^2 = 864.2621$; $df = 399$; $p < 0.000$; $RMSEA = 0.079$; $NNFI = 0.852$; $CFI = 0.867$; $NFI = 0.824$.

The 0.70 value recommended for Cronbach alpha and CRI fulfills Nunnally and Bernstein (1994) conditions. Also, it was computed the average variance extracted rate (AVE) per pair of constructs with values >0.50 (Fornell and Larcker, 1981) as convergent validity evidence;

the results indicate that all CFA/CB-SEM items related to factors are significant ($p < 0.001$); all factors loading are better than 0.60 (Bagozzi and Yi, 1988).

Using a single survey respondent (e.g., Survey Monkey, Survey Gizmo, or Key Survey) as the source for both the independent and dependent data in one instrument introduces the possibility of bias caused by using a single data collection method (Bradford, 2014). Therefore, Harman's single factor test for common method bias was applied over our 27 indicators to identify bias issues. This technique uses exploratory factor analysis where all variables are loaded onto a single factor and constrained to have no rotation (Podsakoff et al., 2003). The common latent factor result must explain $<50\%$ of the total variance probing that there is no common method bias present. In our case is 29%. See Table 7.

About the four hypotheses proposed (H1, H2, H3, H4), all of them were accepted according to the high value of their standardized path coefficients with significance ($*** = p < 0.001$) and the fulfillment of $S-B\chi^2 = 864.2621$; $df = 399$; $p < 0.000$; $RMSEA = 0.079$; $NNFI = 0.852$; $CFI = 0.867$; $NFI = 0.824$. See Table 6.

The final results highlight in the first instance (loading factors > 0.8), to get high purchase intention of online consumer behavior (PIC):

- The emergency context (ECX) is influenced by negative emotions under fear (NEF, 0.957***) with regular frequency to access (OFA, 0.919***), emergency feeling (MOO, 0.906***), searching entertainment to reduce the stress as gratification (GRF, 0.910***) being only receptive actor of the information as values (VAL, 901***) with the use of smartphones and TikTok apps (ECE, 890***).
- This situation triggers the motivations (MTV), boosted for reasoned answer (RAN, 0.996***) in a utilitarian (UTI, 0.960***) way motivated to access products (OCP, 0.896***) and services (OCS, 0.873***) with more health and hygiene products and service payments.
- The online consumer attitude (ATT) is based on online brand positive experience (OBE, 0.986***), influenced by social communication as

social factors (OSF, 0.914***) relying on online brand trust (OBT, 0.908***) with customer attitude to restart to the next normal (OCN, 0.984***).

- The web attraction (WBA) is based on price and benefit (P&B, 0.856***) and security and privacy (S&P, 0.814***).

However, despite these very interesting results, they are considered as only one of the several variable combinations to get high PIC (Ragin, 2008) as business innovation activity to contribute to the Uses and Gratification Theory (UGT). For such reason, in this research, we resorted to the fsQCA technique.

6.2. fsQCA findings

The following results show “necessary” and “sufficiency” analyses conditions.

6.2.1. Analysis of necessary conditions

Table 8 exhibits the analysis of “necessary” results for both the high presence of PIC and its for negation (i.e., not high or low/medium values of PIC).

The “necessary conditions” were tested, corresponding to the presence (i.e., low/medium/high) of purchase intention online consumer behavior (i.e., PIC) and absence levels (i.e., \sim PIC). In this research with PIC higher values, the range of “consistency” is (0.40–0.98). Thereby emergency context mood, emotions and values (EME), or online consumer interest (ECI), or motivation of online consumer (MOC) are considered as “necessary conditions” because they have “consistency” values over 0.9 (Ragin, 2008; Schneider and Wagemann, 2010). These sets of results indicate that users with high EME (0.97), ECI (0.98) or high MOC (0.92) will show high levels of purchase intentions of online consumer behavior (PIC). In other words, it means online consumers with high emergency context and emotions, or high online consumer interest or motivation of online consumer will have high levels of purchase intention of online consumer behavior (PIC)

Table 7
Total Variance explained.

Component	Initial Eigenvalues			Extraction Sum of Squared Loadings		
	Total	% of Variance	%Cumulative	Total	% of Variance	%Cumulative
1	7.863	29.122	29.122	7.863	29.122	29.122
2	3.641	13.486	42.608			
3	2.868	10.622	53.229			
4	1.673	6.195	59.425			
5	1.412	5.230	64.654			
6	1.260	4.667	69.321			
7	0.902	3.342	72.664			
8	0.873	3.234	75.898			
9	0.763	2.827	78.724			
10	0.673	2.494	81.218			
11	0.634	2.347	83.565			
12	0.566	2.095	85.661			
13	0.493	1.826	87.487			
14	0.448	1.658	89.145			
15	0.435	1.610	90.755			
16	0.391	1.447	92.202			
17	0.361	1.338	93.540			
18	0.322	1.192	94.732			
19	0.312	1.154	95.886			
20	0.290	1.073	96.959			
21	0.238	0.881	97.840			
22	0.210	0.779	98.619			
23	0.191	0.708	99.327			
24	0.182	0.673	100.000			
25	5.104E-16	1.890E-15	100.000			
26	-8.278E-17	-3.066E-16	100.000			
27	-6.443E-16	-2.386E-15	100.000			

Extraction Method: Principal Component Analysis

Source: Own using IBM SPSS 25.

Table 8Analysis of “*necessary*” conditions for the presence and negation PIC (Purchase Intention Online Consumer Behavior).

Factors	Variable causal conditions	PIC		~PIC	
		Consistency (>0.9)	Coverage (>0.5. Non Trivial conditions)	Consistency (>0.9)	Coverage (>0.5. Non Trivial conditions)
ECX	EME	0.97	0.82	0.78	0.38
	~EME	0.62	0.86	0.56	0.54
	ECI	0.98	0.72	0.76	0.56
	~ECI	0.66	0.34	0.60	0.65
MTV	MOC	0.92	0.80	0.67	0.46
	~MOC	0.67	0.45	0.59	0.57
	MPS	0.80	0.60	0.68	0.58
	~MPS	0.56	0.48	0.57	0.45
ATT	AOB	0.86	0.56	0.60	0.67
	~AOB	0.56	0.78	0.59	0.33
	ANN	0.87	0.63	0.72	0.66
	~ANN	0.48	0.87	0.96	0.78
WBA	OMD	0.40	0.75	0.80	0.57
	~OMD	0.56	0.83	0.98	0.58
	OMQ	0.60	0.82	0.78	0.22
	~OMQ	0.24	0.89	0.91	0.55

Source: Own data using fsQCA 3.0.

Also, appear two necessary conditions with “*coverage scores*” (0.56–0.82), indicating a status of “*non-trivial*” conditions, (i.e., 0.50 and above). The “*non-trivial*” conditions as “*necessary conditions*” exert some constraints on the unique outcome. In contrast, “*trivial*” scores as conditions are those firmly present in most cases (i.e., high “*consistency*”), representing an outcome or not (i.e., low coverage) (Ragin, 2006).

On the other side, for low/absence of purchase intentions of online consumer behavior (~PIC), low levels of attitude to the next normal (~ANN, 0.96), and low levels for online media design (~OMD, 0.98) and online media benefits & quality (~OMQ, 0.91) are considered as necessary conditions since they have consistency values over 0.9 (see negation of such variables in Table 8). These findings imply that online consumers low/without attitude to the next normal (~ANN) or low/without a perception of online media design (~OMD) or low/without a perception of online media benefits and quality (~OMQ), will have low/without levels of purchase intention of online consumer behavior (~PIC). Hence, we decided to start the testing of “*sufficiency conditions*” for high PIC.

6.2.2. Analysis of sufficiency conditions for high PIC

The main configurations of high purchase intention of online consumer behavior (PIC) as findings from the fsQCA are shown in Table 9. Each combination in the solution can explain the same result in a specific amount.

Conditions can be either present, negated, or absent without affecting the solution (Ragin, 2008). Each combination in the solution can explain the same result in a specific amount. Each solution has its “*consistency*” with values higher the recommended threshold (>0.75), as well as the “*overall solution consistency*.” The “*consistency*” shows the degree to which a subset relationship has been approximated; the “*coverage*” evaluates the empirical relevance of a consistent subset (Ragin, 2006; Rihoux and Ragin, 2009). The “*overall solution coverage*” relates the degree to which high purchase intention of online consumers (PIC) can be determined from the existing configurations and is very similar to the R-square value reported in traditional regression analyses (Woodside, 2013). Therefore, the “*overall solution coverage*” of 0.77 indicates that the four solutions explain a considerable proportion of the outcome. Besides, for each solution, fsQCA 3.0 calculates every solution’s empirical importance by computing “*raw*” and “*unique coverage*.” The “*raw coverage*” describes the amount of the outcome that is explained by a specific alternative solution; the “*unique coverage*” describes the amount of the outcome that is exclusively explained by a specific alternative solution. The solutions provided in Table 9 explain high, medium, or low purchase intentions of online consumer behavior levels (PIC), with results-related cases ranging from 23% to 78% (“*raw coverage*”) of cases associated with the same outcome. Hence, if the framework’s “*consistency*” is above 0.74, and “*coverage*” is between 0.25 and 0.65, it is “*informative*” (Ragin, 2008; Woodside, 2013). An “*overdetermination*” between solutions generates low levels of “*unique*

Table 9Analysis of “*sufficiency*” conditions. Complex configurations indicating high intention PIC (Purchase Intention On-line Consumer Behavior) based on fsQCA.

Factors	ECX		MTV		ATT		WBA		Raw Coverage (0.25 to 0.65 = informative)	Unique Coverage (>0.01)	Consistency (>0.75)
Solutions	EME	ECI	MOC	MPS	AOB	ANN	OMD	OMQ			
1	●	●	●	●	●	●	●	●	0.78	0.04	0.99
2	●	●	●	●	●	●	●	●	0.67	0.07	0.95
3	●	●	●	●	●	●	⊗	⊗	0.60	0.03	0.90
4	●	●	●	●	●	●	⊗	⊗	0.23	0.002	0.60
Overall Solution Coverage				0.77							
Overall Solution Consistency (>0.75)				0.85							

Notes according to Ragin (2008):

- . Presence of a condition or “*core conditions*”.
- . Presence of a condition as “*peripheral conditions*”.
- ⊗. Negation of a condition (Absence) or “*peripheral conditions*”.
- . Blank spaces indicate *no matter what level of presence conditions*.

Source: Own data using fsQCA 3.0.

coverage” for each of them, and the individual “consistency” will be quite high (“unique coverage” must be ≥ 0.01); therefore, it has a low level of explanation and must be avoided (Ragin, 2008).

Identifying the solutions

The results can be interpreted by the introduction of the boolean algebra algorithm, with the most relevant variables conditions:

Solution 1: High EME*High ECI*high MOC*Low/Medium MPS*Low/Medium AOB* high ANN*Low/Medium OMD*Low/Medium OMQ (for 78% of the online consumers) + **Solution 2:** High EME*High ECI*Low/Medium MOC*Low/Medium MPS*Low/Medium ANN (for 67% of the online consumers) + **Solution 3:** High EME*Low/Medium ECI*Low/Medium MOC*High MPS*Low/Medium ANN*Negated ~ OMD*Negated ~ OMQ (for 55% of the online consumers)

Solution 4 due to the low levels of “raw coverage,” (0.23) “unique coverage,” (0.002) and “consistency,” (0.60), **solution 4 is discarded** (see Table 9).

The results offer support for more than one configuration leads to high PIC, which indicates “equifinality”, revealing configurations of high PIC adoption. One condition could be either present or absent depending on its combination with the other conditions, indicating “causal asymmetry”.

Fig. 2 depicts the Fuzzy XY Plots test results in solutions 1–3, representing the online consumers for which their PIC can be high, medium, or low. For instance, the findings in solution 1 show NTotal = 50 online consumers, with high emergency context mood, emotions, and values (EME); high online consumer interest (ECI); high motivation of online consumer (MOC); low/medium motivation for products and services (MPS); low/medium attitude to the online media brand (AOB); high attitude to the next normal (ANN); low/medium online media design (OMD); low/medium online media benefits & quality (OMQ) (scores over 0.7), out of which only N1 = 40 have high purchase intention of online consumer behavior (PIC) (upper right corner in the plot, with scores over 0.80).

The findings in solution 2 show NTotal = 60 online consumers, with high emergency context mood, emotions, and values (EME); high online consumer interest (ECI); low/medium levels of motivation of online consumer (MOC); low/medium levels of motivation for products and services (MPS); no matter what level of presence of attitude to the online media brand (AOB); low/medium levels of attitude to the next normal (ANN); no matter what level of presence of online media design (OMD); no matter what level of presence of online media benefits & quality (OMQ) (scores over 0.7), out of which only N1 = 20 have high purchase intention of online consumer behavior (PIC) (upper right corner in the plot, with scores over 0.80).

Finally, the findings in solution 3 show NTotal = 40 online consumers, with high

levels of emergency context mood, emotions, and values (EME); low/medium levels of online consumer interest (ECI); low/medium levels of motivation of online consumer (MOC); high levels of motivation for products and services (MPS); no matter what level of presence of attitude to the online media brand (AOB); low/medium levels of attitude to the next normal (ANN); absence level of online media design (OMD); absence level of online media benefits & quality (OMQ) (scores over 0.7), out of which only N1 = 20 have high purchase intention of online consumer behavior (PIC) (upper right corner in the plot, with scores over 0.80).

Hence: “H5: There is no single best combination of underlying factors, variables, and indicators that lead to purchase intention of online consumer behavior (PIC). These combinations could be considered marketing strategies as innovation activity”, is positive, and we proceed to the following discussion and implications.

7. Discussion and implications

The unusual appearance of COVID-19 as an emergency context has elicited worldwide prolonged quarantine and lockdown that stops all human activities literally and has brought essential changes. Significantly, the purchase intention of online consumer behavior (PIC) for emerging countries like Mexico, which are needed to be determined as business innovations activities and create marketing strategies for the firms affected by the lost economic growth levels. Moreover, the specialists in massive communications are expected how the several online media exerted (or not) influence in the user, in this case, the purchase intentions of online consumer behavior (PIC) in Mexico. We argue two main concepts:

1. The perception of COVID-19 ads on the purchase intention of online consumer behavior (PIC) depends on 4 factors: the role of the emergency context (ECX), motivation (MTV), attitude (ATT), and the website attraction (WBA), with 27 indicators, distributed in 8 variables: emergency context mood, emotions and values (EME), online consumer interest (ECI), the motivation of online consumer (MOC), motivation for products and services (MPS) attitude to the online media brand (AOB), attitude to the next normal (ANN), online media design (OMD) online media benefits & quality (OMQ). These relationships are considered business innovation activities to determine marketing strategy proposals. They are called here the empirical ECMAW-PIC framework designed for the firms affected by the COVID-19 pandemic.
2. The final empirical ECMAW-PIC can contribute to the updating of Uses and Gratification Theory (UGT), as follows:

7.1. Comparing CFA/CB-SEM and fsQCA results.

The CFA/CB-SEM extends multiple indicators of a single concept to numerous concepts and their interrelationships. In essence, the construction of indexes from multiple indicators occurs within the context of an analysis of the interrelationships among concepts.

Using CFA/CB-SEM, researchers can evaluate the coherence of their constructed indexes within the context of the model in which they are embedded. Simultaneously, they can assess the coherence of the model as a whole (Ragin, 2008).

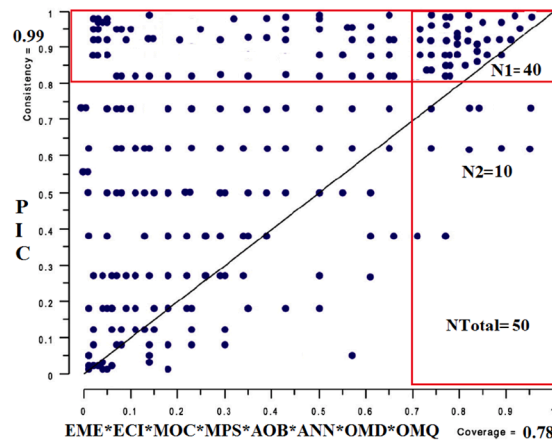
The complexity of purchase intention of online consumer behavior (PIC) makes it difficult to comprehensively understanding its formation mechanism. The dominant approaches exploring the influence factors and developing or testing theories on PIC are regression-based approaches such as CFA/CB-SEM.

Given that regression-based approaches cannot satisfactorily deal with the problems of multicollinearity, asymmetric, and nonlinear relationship, the explanatory power of theories and models based on these approaches is usually low or medium. The fsQCA is viewed as a new alternative approach, which may provide more nuanced information, but it also has its limitations. We use both CFA/CB-SEM and fsQCA to predict PIC using four antecedent conditions and their combinations, such as emergency context (ECX), motivation (MTV), attitude (ATT), and website attraction (WBA). The results from both CFA/CB-SEM and fsQCA provide enough evidence to support that such factors influence the PIC. Indeed, the following hypotheses were supported (see Table 6):

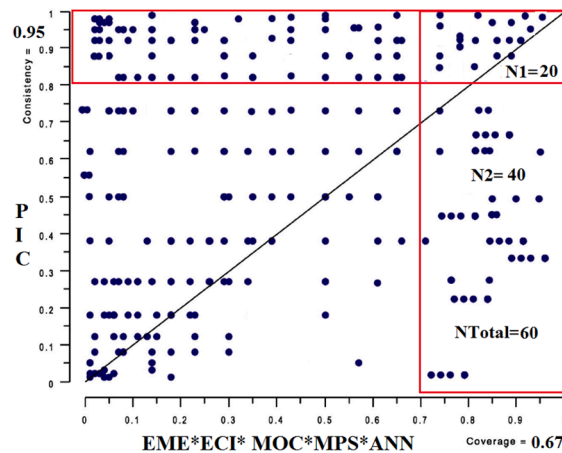
- H1: Higher ECX higher PIC. There are positive effects of ECX on PIC.
 H2: Higher MTV higher PIC. There are positive effects of MTV on PIC.
 H3: Higher ATT higher PIC. There are positive effects of ATT on PIC.
 H4: Higher WBA higher PIC. There are positive effects of WBA on PIC.

And according to the Table 9:

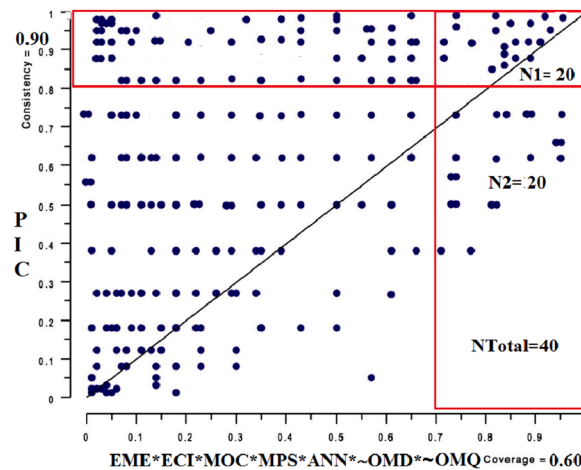
Solution 1



Solution 2



Solution 3



Notes:

Fuzzy XY Plots for testing solutions 1-3. Rectangles highlight cases for solutions with coverage values over 0.7 but the purchase intention of online consumer behavior (PIC) can be either high (over 0.8) or low, describing different persons in the sample. ECX. Emergency Context; ATT. Attitude; MTV. Motivation; WBA. Web Attraction.

Source: Own data using fsQCA 3.0

Fig. 2. Fuzzy XY plots for testing Solutions 1-2-3. Notes: Fuzzy XY Plots for testing solutions 1–3. Rectangles highlight cases for solutions with coverage values over 0.7 but the purchase intention of online consumer behavior (PIC) can be either high (over 0.8) or low, describing different persons in the sample. ECX. Emergency Context; ATT. Attitude; MTV. Motivation; WBA. Web Attraction. Source: Own data using fsQCA 3.0.

H5: *There is no single best combination of underlying factors, variables, and indicators that lead to purchase intention of online consumer behavior (PIC). These combinations could be considered marketing strategies as innovation activity”, and it is positive.*

Indeed, the results of fsQCA indicate that only **three** equifinal configurations lead to the PIC outcome conditions. Thereby, regarding the high purchase intention of online consumer behavior (PIC), this unique outcome is reached through several combinations of the variables as solutions (“*recipes*,” Ragin 2008) as follows:

Solution 1 has combinations in which at least one factor such as the emergency context

(ECX), motivation (MTV), attitude (ATT), and web attraction (WBA) and their variables are present in high/low-medium levels.

Solution 2 presents combinations in which at least one emergency context (ECX) and

motivation (MTV) and their variables are present. However, it is not the same for the attitude (ATT) factor where only the attitude to the next normal (ANN) variable is present, and no matters what level of presence conditions are prevailing for the attitude to the online media brand (AOB) variable. For web attraction (WBA) factor is in the same condition, but also, no matters what level of presence conditions are prevailing for online media design (OMD) and online media benefits and quality (OMQ).

Solution 3 also presents combinations like **solution 2** for emergency context (ECX),

motivation (MTV), and attitude (ATT) factors. However, **solution 3** for web attraction (WBA) highlights the absence levels of online media design (OMD) and online media benefits and quality (OMQ).

Hence, we proceed to describe the factors ECX, MTV, ATT, and WBA based on the CFA/CB-SEM relevant loading factors > 0.8*** and fsQCA results, as follows:

7.1.1. Describing the emergency context (ECX) factor

In this sense, according to fsQCA results (see Table 9), high PIC is obtained when the online consumer perceives the variable presence of emergency context mood, emotions, and values (EME) as high in **all the three solutions** being “*core conditions*.” If we see the CFA/CB-SEM results in Table 6, the more relevant indicators of such variable are emergency mood (MOO, 0.906***), with negative emotions under fear (NEF, 0.957***), searching value (VAL, 0.901***).

Let us analyze the fsQCA results (Table 9) again. We observe that variable ECI presence is high in **solutions 1 and 2** being “*core conditions*”, but with medium presence in **solution 3**, thus being “*peripheral conditions*”. Again, with CFA/CB-SEM results (Table 6), the mentioned situation provokes the indicator frequency to access (OFA, 0.919***), which triggers gratifications (GRF, 0.910***), as online consumer interest (ECI).

7.1.2. Describing the motivation (MTV) factor

It is supported by the variable motivation of online consumer (MOC) boosted for the indicators a reasoned answer (RAN, 0.996***), in a utilitarian (UTI, 0.960***), way, that leads to access the variable motivation for products and services (MPS) with the indicators of more health and hygiene products (OCP, 0.896***), and services payments (OCS, 0.873***).

According to fsQCA results (Table 9), MOC and MPS have high presence in **solution 1 and 3** (“*core conditions*”), medium presence for both variables in **solution 2**, with medium presence for MOC in **solution 3**, with medium presence in MPS in **solution 1** (“*peripheral conditions*”).

7.1.3. Describing the attitude (ATT) factor

Keeping the analysis in the fsQCA results (Table 9), the variable attitude to the online media brand (AOB) appears with medium presence in **solution 1** (“*peripheral conditions*”) no matter what level of presence got for **solution 2 and solution 3**. If we see CFA/CB-SEM

results (Table 6), AOB is influenced by the indicators of social factors (OSF, 0.914***), producing online brand positive experience (OBE, 0.986***), and online brand trust (OBT, 0.908***).

Again, with the analysis in the fsQCA results (Table 9), the variable attitude to the next normal (ANN) has a high presence in **solution 1** (“*core condition*”) and medium presence for **solution 2 or solution 3** (“*peripheral condition*”). If we see CFA/CB-SEM results (Table 6), the variable ANN is strongly influenced by the indicator online consumer preparation to next normal (OCN, 0.984***), being from a customer that they want to restart.

7.1.4. Describing the web attraction (WBA) factor

The fsQCA results (Table 9) also point out the variables online media design (OMD) and online media benefits and quality (OMQ), both in similar conditions. Both have a medium presence in **solution 1** and no matter what level of presence for **solution 2** or even more, and a negated condition for **solution 3** (“*peripheral condition*”). Finally, according to the CFA/CB-SEM results (Table 6), the variable OMQ is strongly influenced by the indicators price and benefit (P&B, 0.856***), and security & privacy (S&P, 0.814**). Finally, the variable OMD is strongly influenced by its own indicator online consumer interactivity and visual design (IVD, 0.704***).

7.2. Theoretical implications

We contribute with a reliable and robust empirical framework based on emergency context, motivations, attitude, and web attraction (ECMAW) product of the Delphi Panel-focus group, AHP, CFA/CB-SEM and fsQCA able to explain purchase intention of online consumer behavior (PIC) as business innovation activity.

This empirical framework may generate innovation marketing strategies and how it is related to Uses and Gratification Theory (UGT). The UGT has had considerable history as a recognizable, discrete theory, had its greatest influence in the 1970s and 1980s. The relevance of the theory today is considered “*one of the most widely used theoretical underpinnings in communication research*.” (Perse and Lambe, 2016 in West and Turner, 2018), and it is worth update to the 2020s.

Thereby, the ECMAW-PIC results could contribute to the UGT when we describe the emergency context (ECX) factor and its emergency context mood, emotions, and values (EME) and online consumer interest (ECI) variables, as follows:

For EME variable in the feeling (MOO) indicator about the acknowledgment of “*emergency*” vs. “*enjoyment*” when accessing the online media (Hanpeng et al., 2011; Pelet and Papadopoulou, 2012; Zhukov et al., 2018; Mu-Yen and Ting-Hsuan, 2019) under emergency feeling, addressing four main emotions (PES, PEI, NEA, NEF): “*surprise, interest, anger, and fear*”. The first results pointed out the negative emotion: fear (Dunn and Hoegg, 2014; Reeve et al., 2014; Pappas et al., 2020; Mei-Ju, 2020; Mu-Yen and Ting-Hsuan, 2019; Cinar, 2020; Mazidah, 2020) searching “*values*” (VAL) (Mazidah, 2020; Mejía-Trejo and Rodríguez-Bravo, 2019b), with a tendency to be a “*receptive actor to of the information*”.

For ECI variable when the online consumer is accessing the online media with regular frequency (OFA). It is highlighted the uses of smartphones and the Tik-Tok app as the main device and service utilized (ECE). The constant evolution of technology innovation in the media requires to be involved and updated in UGT (Malik et al., 2016; Xiaodan et al., 2019) in UGT to get gratification (GRF), for instance, as “*entertainment*” or “*relief depression*” (Shi and Shan, 2019; Mejía-Trejo, 2017c; AMVO, 2020). Here we have the main contribution of ECMAW-PIC to UGT sharing the same proposals; when UGT is related with the individuals that behave seriously toward crisis-related information, not only to be entertained and seek status or information but also to help others (Apuke and Omar, 2020; Haman, 2020; Igartua et al., 2020; Islam et al., 2020) searching emotional gratifications (Salubi and Muchao-nyerwa 2018; Camilleri and Falzon, 2020).

The UGT is based on “active audience” (Rochyadi-Reetz et al., 2020; Grob et al., 2015), and ECMAW-PIC include a clear profile of motivation (MTV) (Brown et al., 2012), sharing the same proposals with UGT (Abid and Harrigan, 2020), described as follows:

For motivation of online consumer (MOC) variable, this is based more on *reasoned* than *impulsive answer* (RAN/IAN) (Chawla et al., 2015; Fishbein and Ajzen, 2011; Krishna and Strack, 2017; Liu and Zhang, 2019; Mei-Ju, 2020; You-Feng and Feng-Yang, 2012) to be more *utilitarian* (UTI) than *hedonic* (HED) indicator (Martínez-López et al., 2014; Mikalef et al., 2016; Chi-Hsun and Jyh-Jeng, 2017; Yildiz 2020) with primary motivation to access to the online media is for “health and hygiene products” (OCP) and “service payments” (OCS) (AMVO, 2020).

The UGT “active audience” also requires for attitude (ATT) factor and it is also supported by the ECMAW-PIC described as follows:

For attitude to the online media brand (AOB) the access to the online media is influenced positively by the “online brand image” (OBI) (Tao et al., 2012; Mitra and Jenamani, 2020; Pappas et al., 2020), with “positive attitude” (OBA) (Pappas et al., 2020; Wilk et al., 2020) with “positive experience” (OBE) (Pappas et al., 2020; Jimenez-Barreto et al., 2020) with “online brand trust” (OBT) (Akhter-Shareef et al., 2016; Pappas, 2018; Silva et al. (2020), with “learning about the online brand website” (LOW) (Pappas et al., 2015; Aribarg and Schwartz, 2020) including social media factors based more on “social communication” than “follower/followed interactions” (OSF) (Dwivedi et al., 2016; Katawetawaraks and Lu-Wang, 2011; Mejía-Trejo, 2017a; Zhukov et al., 2018; Gentsch, 2019). For attitude to the next normal (ANN) results the online consumer depend more to access the online media on a “restart” (OCN) than the “return” or “reinvent” (AMVO, 2020).

The UGT must contain all data about online media to be updated (Malik et al., 2016), mainly, the web attraction features (WBA). This factor is also included into the ECMAW-PIC model, through the online media features online media design (OMD) and online media benefits & quality (OMQ) variables described as follows:

For online media design (OMD) we have the “online consumer interactivity and visual design” (IVD) (Chincholkar and Sonwaney, 2017; Mejía-Trejo, 2017c; Nia and Shokouhyar, 2020; Pappas et al., 2020) where the results point out more than “visual design” than “ease of interaction” or “sound design”

For online media benefits & quality (OMQ) we have the results about how the online consumer is accessing to the online media due to the online consumer service satisfaction (OST) (Katawetawaraks and Lu-Wang, 2011; Akhter-Shareef et al., 2016; Chi-Hsun and Jyh-Jeng, 2017; Pappas et al., 2020; Lai et al. 2020); with price & benefits (P&B) (Svatošová, 2013; Akhter-Shareef et al., 2016; Mejía-Trejo, 2017b; Al-Debei et al., 2015; OECD, 2018; Lai et al. (2020)

with satisfaction (WBQ) (Al-Debei et al., 2015; Mejía-Trejo, 2017b; OECD, 2018; You-Shyang et al., 2018; Lai et al., 2020), and security and privacy (S&P) (Katawetawaraks and Lu-Wang, 2011; Al-Debei et al., 2015; Lai et al., 2020)

The results can provide empirical evidence of how the ECMAW-PIC model contributes to the UGT depending on the online media interest, age, gender, occupation, socioeconomic incomes, and hour of the day. For instance, we unveiled several gratification combinations based on: entertainment, information, socialization, buying products or services, installing own contents to distribute and or sell, reduce anxiety, reduce depression, monetary reward/recognition reward/other. Besides, the young people (millennials) preferred more entertainment, socialization, buying products and services, the installation of online content for buy & sell (Facebook, Instagram, Snapchat). The younger people (Zentennials) preferred more socialization (using Facebook, Youtube, and TikTok), the installation of online content for entertainment (Facebook, TikTok). We noticed a new word is appearing to the next normal: “the home-influencer.” Generation X preferred more entertainment and information using Smart TV platforms (Netflix, Disney+) to drive their anxiety and depression levels directly (it was a situation non-clear for the younger people). The convenience has changed according to the results, younger

consumers prefer digital interactions, whereas older consumers prefer talking to human customer service representatives. In gender, women are with the sensation to be more affected in anxiety and depression in all the categories of answers.

These results are the contribution to the UGT from ECMAW-PIC framework when the consumers, are able to address different scenarios. For instance:

- The combination based on emergency context (ECX) with *emergency context mood, emotions, and values* (EME) at different/absent levels of the following predictive scenario = *emergency feeling* (MOO) + *influenced with emotions under fear* (NEF) + *searching entertainment to reduce the depression as gratification* (GRF) + *being receptive actor of the information* (VAL) >20 times yearly and >8 hrs per day (OFA) + *using smartphone + TikTok* (ECE).
- The combination based on motivation (MTV) at different/absent levels of the following predictive scenario: *impulsive answer* (IAN) + *availability of information* (UTI)/*health and hygiene products* (OCP)/*payment services* (OCS).
- The combination based on attitude (ATT) at different/absent levels of the following predictive scenario: *online brand image* (OBI) + *online brand positive attitude* (OBA) + *online brand positive experience* (OBE) + *online brand trust* (OBT) + *learning about the online brand website* (LOW) + *online consumer attitude by social factors* (OCS) + *restart as attitude to the next normal* (ANN).
- The combination based on web attraction (WBA) at different/absent levels of the following predictive scenario: *online consumer interactivity and visual design* (IVD) + *online consumer service satisfaction* (OST) + *online media price & benefit* (P&B) + *website quality* (WBQ) + *security & privacy* (S&P).

Several theoretical implications can be derived from this study as a contribution from ECMAW-PIC framework to the UGT:

First, the number of online media available to the users presents different opportunities to study at least two questions, from “what do the online media with the users” to “what do consumers do with the media?”. For instance, in this last sense, the social media factors (OSF) and the online consumer interest (ECI) from ECMAW-PIC are unveiling about followers/followed users as a strong influencing factor on content contribution behaviors as a contribution to the UGT.

Second. The different levels of gratification experienced by several perspectives, such as followers/followed users, entertainment, rewards, etc. may serve as a justification for selecting and using all the online media available and in a prior knowledge for the user, such as blogs, vlogs, wiki's, etc. platforms.

Third. Based on the findings of the perceived gratification in this study, marketing strategies can be designed by the online media content provider to improve user gratification.

Fourth. The ECMAW-PIC framework shows a potential basis to explore variations in consumers' use of brand online social networking for future studies (Lim and Kumar, 2017).

Fifth. The UGT research has spanned several decades, and the theory has framed several research studies. The theory has been investigated largely using mainly qualitative approaches. It is necessary to define how to prove its contribution quantitatively. ECMAW-PIC methodology is based on AHP-Delphi-focus group panel-CFA/CB-SEM and fsQCA. UGT could adopt the quantitative methodology section to prove validity and reliability of measurements and to probe several paths to get the same outcome with “necessary”, “sufficiency” conditions with “coverage” and “consistency” as a complement of its qualitative counterpart. The heuristic nature of UGT could be improved (West and Turner, 2018)

Sixth. Because of the great variety of online media uses, UGT must describe an exact list of gratifications corresponding to each specific medium. Special attention deserves the use of mobile devices and the gratification (e.g., time and resources savings).

7.3. Practical implications

This study makes several practical contributions to the field:

First, we designed a solid conceptual framework relating four main factors: emergency context (ECX), motivation (MTV), attitude (ATT), and web attraction (WBA) that we call **ECMAW-PIC** framework that consists of eight variables emergency context mood, emotions, and values (EME), online consumer interest (ECI), the motivation of online consumer (MOC), motivation for products and services (MPS) attitude to the online media brand (AOB), attitude to the next normal (ANN), online media design (OMD) online media benefits & quality (OMQ). Prior studies did not consider the emergency context like **COVID-19**, as we did. The study's novelty is to identify the underlying factors, the grouping of the variables and indicators, and how they are involved in the purchase intention of online consumer behavior (PIC) after a prolonged quarantine and lockdown as predictors for the next normal conditions.

Second. The final empirical framework **ECMAW** can measure the purchase intention of online consumer behavior (PIC) and is used to relate with the Uses and Gratification Model (UGT) mainly in:

- Due to the social influence having a crucial influence on online media, UGT could deeply analyze the mechanism of social influence, such as the interaction between contributors and followers, and go beyond the limited user needs to satisfy and promote best interaction and information sharing the way. It is crucial to assure the theoretical coherence (McQuail, 1984) of UGT using framework support such as **ECMAW-PIC**. New online consumer abilities such as “home influencers” or “citizen journalism” demand regulation to avoid inaccurate or unethical behaviors. The new media allow “citizen journalism”, where anyone with a smartphone can publish ideas, allegations, and photos without the checks and balances or the training that accompanies professional journalism.
- How to measure the “active audience” and engagement. Tools such as **ECMAW-PIC** include all the online media today. Those tools might require some adjustments to adapt them for a selected online media under interest (Perse and Lambe, 2016) and start the measurements, to support UGT.
- The research results provide useful enlightenment for scholars, innovative marketing managers, and professional practitioners of innovative activities. Suppose they use the conceptual framework proposal implemented here and validated for advertising in an emergency context, such as health (like **COVID-19**), extreme weather conditions, amber alarms, mass immigration, etc. In our case, they could obtain new insights on how the factor combinations emergency context (ECX), motivation (MTV), attitude (ATT), web attraction (WBA) must be present or absent to get high (or low/medium) to purchase online intention consumer behavior (PIC). This result helps establish permanent marketing innovation activities to be adopted by firms economically affected by such context. The context could be the opposite; for example, an enjoyment context motivated for agreeable situations, just like the Olympiad Games, the Worldwide Soccer Cup, the Panamerican Games, etc.
- According to the **fsQCA** results, several combinations of each factor's **ECMAW-PIC** can get the same outcome to elicit high PIC as business innovation activity to get marketing strategies. Strategists involved in online innovation marketing in the company consciously should generate relevant, attractive, and interesting content for the online target audience, in our case, **COVID-19** as the emergency context under different emotions (i.e., positive: interest, surprise, etc. or negative: anger, fear, etc.) to ignite the consumer mood ethically into the context (i.e., emergency or enjoyment) (Zhukov et al., 2018; Mu-Yen and Ting-Hsuan, 2019; Pappas et al., 2020). The survey period is critical because the context may change, for instance, from negative emotions (fear or anger) to positive emotions (surprise or interest).

The values are essential to define the limits of social or individual interest (Mejía-Trejo and Rodríguez-Bravo, 2019b; Mazidah, 2020). Hence, the marketing innovation strategies suggest to survey several times the PIC in a year the internet timing access, kind of device, the online media uses of interest, and the gratification expected. All described above is necessary to motivate the purchase intentions of online consumer behavior (PIC), either under the impulsive or reasoned answer (Krishna and Strack, 2017) to help them seek, compare, select, and buy utilitarian or hedonic products or services for every online consumer (Martínez-López et al., 2014; AMVO, 2020), no matter its frequency, access to the internet (Pappas et al., 2020). The purchase intention of online consumer behavior (PIC) attitude means using social media networks to raise their efficiency and gain knowledge of selecting and building customer relationships in social networks. (Dwivedi et al., 2016; Gentsch, 2019). Therefore, knowing the reason what motivates satisfied users can guide us in improving persuasion strategies. This online marketing innovation strategy must include the attitude of the interest of followers/followed on social media and online consumer perception of the new living form to the future, in our case, the next normal. In this sense, the strategist can assess three options: return, restart, or to reinvent (AMVO 2020). The actions involve the positive attitudes of the online brand, image, experience, and the learning about the website and trust (Pappas et al., 2020). The online marketing innovation strategy must include the implementation of several options of prices and benefits (Al-Debei et al., 2015; OECD, 2018) of utilitarian-hedonic of products-services keeping special care of web quality, online service satisfaction, security & privacy, interactivity, and visual design (You-Shyang et al., 2018; Katawetawaraks and Lu-Wang, 2011; Chincholkar and Sonwaney, 2017). The online marketing innovation strategist can switch into the conceptual framework proposal (**ECMAW-PIC**) to filter the target: emergency/enjoyment context; positive (surprise, interest, etc.) or negative emotions (anger, fear, etc.); online consumer frequency; impulsive or reasoned answer; utilitarian or hedonic; product or service and the hope for the future to return, restart or reinvent with the rest of the level indicators to determine the purchase intention of online consumer behavior (PIC). The empirical **ECMAW-PIC** framework could determine such marketing innovation strategies according to the sample demographic profile data, such as gender, age, education level, marital status, monthly income, internet purchasing behavior.

Third. The **ECMAW-PIC** provides results of several new habits and behaviors that have emerged from emergencies context like **COVID-19**, for instance, when the supply chain is interrupted customer service is overwhelmed delivery is delayed. It is often necessary to use connected devices (such as a QR codes) to perform additional steps to avoid queues and maintain social distancing. The goal is to eliminate the inconvenience associated with **COVID-19** related and regain the experience that feels normal when using virtual technology to talk to the customers.

8. Conclusions

We offer insights into understanding the purchase intention of online consumer behavior (PIC) as a business innovation activity to design the marketing strategies and how it is related to UGT, as follows:

1. Based on **CFA/CB-SEM** is designed and probed the empirical framework called **ECMAW-PIC**, with 27 indicators and distributed in 8 variables: emergency context mood, emotions, and values (EME), online consumer interest (ECI), the motivation of online consumer (MOC), motivation for products, and services (MPS) attitude to the online media brand (AOB), attitude to the next normal (ANN), online media design (OMD) online media benefits & quality (OMQ). Such variables are around 4 factors: emergency context (ECX), motivations (MTV), attitudes (ATT), and web attraction (WBA). These factors, variables, and indicators can be combined to get high PIC. For emergency context, 15/27 indicators were the most relevant

involving only one solution of variables combination in the CFA/CB-SEM model.

2. Based on fsQCA is revealed that there is not only one solution but three solutions with different combinations of the eight variables presence: EME, ECI, MOC, MPS, AOB, AON, OMD, OMQ (i.e., absence/low/medium/high levels) to get high PIC.
3. These ECMAW-PIC results are empirical evidence able to interact and support the UGT, providing a more comprehensive test for update such a theory with the following suggestions to precise drivers:
 - a. The inclusion of new variables according to the terminology of the online media, such as: “emergency context”, “motivation”, “attitude” and “web attraction”
 - b. It is of especial interest considering the vast number of gratifications (e.g., including entertainment, rewards or relief of depression and anxiety) and their combinations (with uses, mood, emotion, values, etc.), to determine innovation marketing strategies. Here, the ethics of how the marketing managers can handle the innovations is highly recommended for practical improvements, including regulation (e.g., actions against “home-influencers” and “citizen journalism” “fake news” as bad practices).
 - c. Finally, ECMAW-PIC is a reliable and solid empirical framework to support an update the Uses and Gratifications Theory (UGT), mainly for the selection of several online media to respond to both questions: “what do the online media with the users” and “what do consumers do with the media?”

9. Limitations and future studies

All empirical studies have certain limitations:

First, due to recruiting respondents’ “snowball self-report” nature, sampling methods may limit survey results. The survey results are based on the questionnaire’s self-reported data to remind them of their opinions.

Second, Future research may compare this questionnaire’s self-reported data with COVID-19 ads using online media tools such as audiovisuals or internet messages with a duration approach of 20 s to provoke their perceptions. Also, survey data may from direct semi-structured interviews, direct observations of specific websites, or direct from their social media analytics that may provide more in-depth insight.

Third, with adjustments of ECMAW-PIC using fsQCA is possible to support the UGT in several online media. Thereby, future studies should consider some ECMAW-PIC adjustments for each online media to explain under UGT vision, for instance, only an exclusive study of Vlogs, SmartTV platforms, social media influencers more accurate explanations. The evolution of new technology (such as wearable tools, virtual reality, augmented reality, artificial intelligence, etc.) brings new opportunities for ECMAW-PIC framework and UGT, implying new challenges to the business innovation activity designing new strategies of marketing. About cultural vision must be considered because of the different introduction and uses of the technology and how the usage and adoption of social networking sites, in particular, were influenced by cultural background. A longitudinal study would provide more validity on causal inferences than prior studies that were based on cross-sectional data.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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