Purpose: This study aims to investigate perceptions about interactive travel websites. The researchers hypothesize that engaging content, the quality of information and source credibility has a significant effect on the consumers’ utilitarian motivations to continue using them in the future.

Design/methodology/approach: A structured survey questionnaire was used to gather data from 1,287 online users, who were members of two popular social media groups. The methodology relied on a partial least squares (PLS) approach to analyze the causal relationships within an extended information adoption model.

Findings: The findings reveal that the research participants perceive the utility of interactive travel websites and are willing to continue using them, particularly the responsive ones. The research participants suggest that these sites are easy-to-use, capture their attention, and offer them useful information on various tourism services. The results also indicate that they appreciate their source credibility (in terms of their trustworthiness and expertise of their curators) as well as their quality content.

Research limitations/Implications: This study integrates key measures from the information adoption model (IAM) with a perceived interactivity construct, to better understand the individuals’ acceptance and use of interactive websites.

Practical implications: This research implies that service businesses ought to have engaging websites that respond to consumer queries, in a timely manner. Hence, they should offer a seamless experience to their visitors to encourage loyal behaviors and revisit intentions to their online domains.

Originality: To the best of our knowledge, there are no other studies that incorporated an interactive engagement construct with key constructs from IAM and from the technology acceptance model (TAM). This contribution underlines the importance of measuring the individuals’ perceptions about the engagement capabilities of interactive media when investigating information and/or technology adoption.

Keywords: information quality; source credibility; interactive engagement; information adoption model; technology acceptance model; consumer experience.
1. Introduction

Previous research sought to identify the factors affecting the consumers’ perceptions about the service quality of websites (Donthu et al., 2021; Klaus and Zaichkowsky, 2020; Zeithaml et al., 2002), in terms of the attractiveness and appeal of their designs (Li et al., 2017), functionality (Rosenmayer et al., 2018) and/or degree of user friendliness (Liu et al., 2013). Very often, the contributing authors shed light on the websites’ reliability, safety or security, as well as on their responsiveness, as customers expect websites to deliver an appropriate level of personalized electronic services (Camilleri, 2021; Nguyen et al., 2018; Valtakoski, 2019). Online users are continuously evaluating the attributes and features of electronic commerce websites (Klaus and Zaichkowsky, 2020; Zaki, 2019), before committing themselves to a purchase decision.

Many commentators suggest that corporate websites can offer high levels of customer services during and after sales transactions, as they are a useful tool to compare prices, to purchase services, and to communicate with the service providers (e.g. to request refunds or to voice complaints). These service technologies are equipped with consumer-centered, self-service applications (Lee et al., 2020; Wilkinson et al., 2021). Very often, these technologies may direct their visitors to frequently-answered-questions (FAQs), so that they can search for answers for themselves. Some of them are also offering Live Chat services that may be operated by human agents and/or through artificially intelligent (AI) chatbots/dialogue systems (Adam et al., 2021; Camilleri & Troise, 2022; Thomaz et al., 2020; Tsai, et al., 2021). The latter software can respond to consumers’ queries in real time, via social media networks (SNSs) including Facebook Messenger or WhatsApp, among others (Smutny and Schreiberova, 2020). Therefore, consumers may be expected to use electronic service technologies including interactive websites and/or AI-operated assistants, to resolve their service issues (Adam et al., 2021; Crolic et al., 2021; Pantano and Pizzi, 2020).
Arguably, there is scope for businesses to use service technologies, especially when and if they experience a sudden influx in customer issues, during popular times of the day and in specific periods of the year. Recently, service businesses were expected to deal with unprecedented changes in their marketing environment (Kabadayi et al., 2020; Rosenbaum and Russell-Bennett, 2020). The outbreak of the Coronavirus (COVID-19) pandemic has disrupted the travel itineraries of millions of consumers. Many tourism businesses received higher volumes of telephone calls and/or online inquiries through different digital media. During COVID-19, customers changed their bookings, cancelled their itineraries and/or submitted refund requests to service providers. Such contingent situations have inevitably led to inconvenience, extreme waiting times and inefficient service quality.

Previous studies investigated the online users’ perceptions toward a wide array of service technologies (Donthu et al., 2021; Kabadayi et al., 2020; Klaus and Zaichkowsky, 2020; Rosenmayer et al., 2018). Frequently, they employed the electronic service quality (e-SQ or e-SERVQUAL), electronic retail quality (eTailQ), transaction process-based approaches to evaluate service quality (eTransQual), net quality (NETQual), perceived electronic service quality (PeSQ), site quality (SITEQUAL) and website quality (webQual), among other research models. Most of these conceptual models, including e-SERVQUAL’s key constructs were utilized to examine the consumers’ satisfaction levels with electronic websites. One may argue that the websites’ designs, ease of use, reliability, security and responsiveness, among other factors, can be associated with key theoretical underpinnings related to the perceived interactivity construct (McMillan and Hwang, 2002).

A number of colleagues elaborated on the engagement capabilities of various technologies, including of social media networks (Lin and Chang, 2018; Vrontis et al., 2021), review websites (Liu et al., 2022), crowdfunding platforms (Camilleri and Bresciani, 2022), AI chatbots (Camilleri & Triose, 2022), augmented and virtual reality devices (Park and Yoo, 2020; Serravalle et al., 2019), metaverse applications (Gursoy et al., 2022), et cetera. In many cases, they clarified that these digital technologies
enable two-way communications as they facilitate person-to-person and/or person-to-machine communications, as opposed to traditional, one-way broadcast channels like linear TV, radio or print media, that do not offer responsive messages to their consumers. Conversely, most websites (particularly ecommerce websites) are increasingly offering interactive elements like personalization and customization options that are integrated in search engines, online consumer reviews, FAQs as well as concurrent live chat facilities, among other widgets. Therefore, consumers will probably hold perceptions about the functionalities and interactivity features of certain websites (including travel websites), in terms of their appealing content, ease-of-use (or user control) and degree of responsiveness (in a timely manner).

1.1 Research questions

Service marketing researchers have frequently explored the customer-brand engagement through different digital media. In many cases, they sought to clarify whether online interactions led to increased purchases and/or to positive reviews and ratings (Kim et al., 2020; Kumar, 2013). A number of studies indicated that online consumer-brand engagement or interactive engagement increases customer satisfaction, trust, commitment, loyalty and profitability, among other positive outcomes (Ashley and Tuten, 2015; Brodie, et al., 2013; Tsai et al., 2021). Most contributions suggest that consumers perceive the usefulness of interactive websites, and thus may be willing to revisit them again in the future (Bravo et al. 2021; Camilleri, 2019; Oliveira et al., 2020).

This research integrates measures from Davis et al.’s (1989) technology adoption model (TAM), namely, perceived usefulness and behavioral intentions with one of McMillan and Hwang’s (2002) perceived interactivity construct, they referred to as an ‘engaging’ construct; with information quality and source credibility from Sussman and Siegal’s (2003) information adoption model (IAM) or from Petty and Cacioppo’s (1986) elaboration likelihood model (ELM). In sum, it presumes that the websites’ engaging attributes and features (Kim et al., 2020; McMillan and Hwang, 2002), as well as the quality and credibility
of their online content (Cheung et al., 2008; Filieri and McLeay, 2014; Leong et al., 2019; Newell and Goldsmith, 2001; Wang and Scheinbaum, 2018), can have a positive and significant effect on the customers’ motivations to use them (Camilleri, 2022; Davis et al., 1989). Moreover, the researchers hypothesize that the online users’ perceptions about the usefulness of these interactive service technologies would predict their intentions to continue using them in the future. The underlying research questions (RQs) of this study are: (i) “Which factors are influencing the online users’ perceptions about the utility of interactive travel websites”, and (ii) “How and in what ways do interactive travel websites affect the consumers’ intentions to use these sites?”

This contribution differentiates itself from previous research. It puts forward an integrative information adoption – technology acceptance model that comprises key factors that were drawn from IAM (Camilleri, 2022; Filieri and McLeay, 2014; Salehi-Esfahani et al., 2016; Shu and Scott, 2013; Sussman and Siegal, 2003; Tseng and Wang, 2016), TAM (Ayeh, 2015; Bhattacherjee and Sanford, 2006; Chen, et al., 2007; Davis et al., 1989; Go, Kang and Suh, 2020) as well as from an (interactive) engagement construct (Calder et al., 2009; Chattaraman, Kwon, et al., 2019; Lin and Chang, 2018; Park and Yoo, 2020).

Although these measures have been used by a number of researchers in service marketing, information management and technology adoption; to date, there is no other study that examines the effects of ‘information quality’, ‘source credibility’ and (interactive) ‘engagement’ constructs (as exogenous factors) on TAM’s ‘perceived usefulness’ and ‘intentions’ to continue using interactive website technologies. This study addresses this knowledge gap in the academic literature. Unlike previous research, this contribution raises awareness on the importance of measuring the individuals’ perceptions about the engaging capabilities of interactive technologies when investigating their utilitarian motivations to use them (through information/technology adoption models).
The following section features a critical review of the relevant literature. The readers are introduced to the conceptual framework and to the research hypotheses of this empirical study. Hence, the methodology section sheds light on the method that was used to capture and analyze primary data. Subsequently, the results section presents the findings from the structural equations modeling partial least squares (SEM-PLS) confirmatory composite analysis approach. In conclusion, this article puts forward implications to academia and practitioners. It identifies its research limitations and outlines plausible research avenues to academia.

2. Conceptual framework and hypotheses development

Relevant theoretical underpinnings suggest that individuals tend to reflect on the quality of the persuasive messages they receive. They would probably synthesize their arguments, before making decisions and prior to committing themselves to certain behaviors (Bhattacherjee and Sanford, 2006; Shu and Scott, 2013). This argumentation is consistent with Petty et al.’s (1983) ELM. Previous research reported that the quality of online content can have a significant impact on the individuals’ intentions to visit a website or to make a purchase (Chen and Chang, 2018; Erkan and Evans, 2016; Gupta and Harris 2010; Park, et al., 2007). Debatably, individuals would pursue ELM’s central route, if they consider the quality of the argument in a message or communication, in terms of its understandability, accuracy, relevance, timeliness and completeness (Allison, et al., 2017; Cheung, et al., 2008; Park and Lee, 2008).

However, ELM also posits that the individuals’ attitudes towards information can be affected by less rational judgements (Petty et al., 1983). This form of low elaborated communication is associated with the peripheral route (Cheung et al., 2008; Petty and Cacioppo, 1986). Individuals may be influenced by the volume of information or by the trustworthiness and expertise of the sources communicating the messages (Bhattacherjee and Sanford, 2006; Sussman and Siegal, 2003). They may usually opt to pursue the peripheral route’s low elaboration, as they may not be motivated to make cognitive efforts to evaluate
the message, or simply because, for some reason, they are not capable of reflecting on its content (Petty and Cacioppo, 1986). For instance, consumers can be influenced by subjective cues like brand image and source attractiveness. These issues may hinder them from paying attention to the quality of the information that is communicated to them (Filieri and McLeay, 2014).

The target audience may rely on heuristic inferences relating to source credibility, such as endorsements or recommendations of other individuals, who may be likeable and/or knowledgeable in their respective fields (Wang and Scheinbaum, 2018; Li, 2013; Bhattacherjee and Sanford, 2006). Thus, individuals can be influenced by peripheral issues if they identify themselves with credible, trustworthy sources or with experts. The assessment of information through ELM’s central and/or peripheral routes does not necessarily imply that individuals will eventually reach different conclusions if they pursue a wide array of evaluation methods or cues (Salehi-Esfahani et al., 2016; Sussman and Siegal, 2003).

Both routes can lead to persuasion and may even trigger immediate behaviors, such as purchasing a product (Shu and Scott, 2013; Park et al., 2007). This reasoning is also reflected in other theories including in IAM (Erkan and Evans, 2016; Filieri, 2015) and in the principles relating to technology adoption models including TAM (Arghashi and Yuksel, 2022; Davis et al., 1989) and to psychological theories like the Theory of Reasoned Action (Fishbein and Ajzen, 1995) and the Theory of Planned Behavior (Ajzen, 1991), among others.

The latter models suggest that the individuals’ intentions toward certain behaviors (or technologies) is based on their perceptions, beliefs and evaluations. In a similar vein, IAM theorists argued that the persons’ perceptions about the usefulness of information can predict their adoption (Bhattacherjee and Sanford, 2006; Cheung et al., 2008; Sussman and Siegal, 2003). For instance, Cheung et al. (2008) maintained that the information usefulness of word-of-mouth publicity within a virtual platform, can lead individuals to make better buying decisions. Other authors pointed out that the online users’ perceptions
on the usefulness of consumer reviews, would predict their intentions to continue relying on online content (Erkan and Evans, 2016).

This argumentation is in line with the relevant literature that is focused on the impact of communications on the individuals’ intentional behaviors, including consumer purchase decisions (Chen and Chang, 2018). Subsequently, Erkan and Evans (2016) have built on Sussman and Siegal’s (2003) and Cheung et al.’s (2008) frameworks as they included purchase intention as their endogenous construct in their empirical model. Their study investigated the online users’ intentions to continue using review websites. In sum, the researchers found that their respondents considered such recommender systems as useful, helpful and informative. Similarly, individuals would be willing to revisit travel websites if they consider them as useful to compare prices, to purchase itineraries, hotel accommodation, et cetera, and to cancel their reservations, request changes in their bookings or to request refunds from the service provider. This reasoning leads to the following hypothesis:

**H1**: The perceived usefulness of interactive travel websites significantly affects intentions to use them.

Presumably, individuals may be satisfied with good quality online content if it reflects their expectations, and if it meets their requirements (Liu, et al., 2017; Rahimi and Kozak, 2017; Tsai et al., 2021). Previous studies confirmed that the quality of websites is an antecedent for their adoption (Salehi-Esfahani et al., 2016). Sussman and Siegel (2003) indicated that the quality of the emails’ content has a significant effect on their usefulness. In other words, the individuals’ overall assessment about information quality can also determine their confidence in online content (Kim and Niehm, 2009). Notwithstanding, the information that is featured in websites, can raise awareness on the businesses’ services and products, it could improve their image, and may also influence the consumers’ final purchase decisions (Chen and Chang, 2018; Erkan and Evans, 2016).
On the other hand, poor information quality is time consuming for consumers, and can have negative effects on the businesses’ reputation. The use of low-quality content may result in detrimental effects on the customers’ perceptions about brands (Gu et al., 2007). Customers will usually evaluate the quality of information through indicators like the ease of accessibility and relevance of the content, or by evaluating the richness of the data (Cheung et al., 2008; Islam and Rahman, 2017; Popović et al., 2012). Many authors suggested that individuals tend to assess the quality of the websites according to the understandability, reliability and clarity of their content (Gu et al., 2007; Salehi-Esfahani et al., 2016). Generally, they contended that consumers perceive them as useful if they believe that they feature high quality content (Cheung et al., 2008; Sussman and Siegal, 2003). Hence, they may be intrigued to revisit them again in the future (Arghashi and Yuksel, 2022; Salehi-Esfahani et al., 2016). This argumentation leads to the following hypothesis:

**H2**: The quality of information of interactive travel websites significantly affects their perceived usefulness.

ELM suggests that the individuals’ stance about information quality can help them form their perceptions on a wide variety of topics (Petty and Cacioppo, 1986). However, it also presumes that the credibility of information sources could also influence the individuals’ attitudes, particularly, if they are considered as dependable and reliable (Bhattacherjee and Sanford, 2006; Tseng and Wang, 2016). Individuals are usually influenced by the sources’ attractiveness, likeability, as well as by their credentials (Cheung et al., 2008). The sources’ expertise and their trustworthiness are considered as key dimensions of source credibility (Ayeh, 2015; Dou et al., 2012; Hussain et al., 2017; Lowry et al., 2014; Newell and Goldsmith, 2001).
Whilst the source trustworthiness construct is used to measure the levels of trust on the communicators’ content; source expertise is utilized to measure the recipients’ perceptions about the content curators’ competences to convey correct information (Ismagilova et al., 2020; Filieri et al., 2018; Lock and Seele, 2017). The information that is disseminated by communication experts is assumed to be reliable and credible, when compared to other content that is transmitted by unprofessional sources. Source experts are perceived as knowledgeable and skilled by the receivers of information (Bhattacherjee and Sanford, 2006; Ismagilova et al., 2020). If online users believe that the sources of information are credible in terms of their trustworthiness and expertise, they will probably perceive that their content is helpful to them (Salehi-Esfahani et al., 2016). Thus, source credibility can have a positive influence on the individuals’ perceptions about the usefulness of information. This argumentation leads to the following hypothesis:

**H3**: The source credibility of interactive travel websites significantly affects their perceived usefulness.

Chen et al. (2007) argued that the richness of the media is an important antecedent of information usefulness. Thus, interactive websites can be characterized as high or low in terms of “media richness”, depending on their ability to facilitate shared meanings that are based on the immediacy of feedback, multiple cues, language varieties and personal foci (Capriotti et al., 2021). The Internet offers great potential for interactive engagement (Camilleri and Kozak, 2022). It influences the online users’ perceptions toward companies and their products (Baggio and Del Chiappa, 2014). For example, it can affect the consumers’ perceived images of travel destinations (Cao and Yang, 2016; Choi et al., 2007). Interactive websites that offer simultaneous, synchronous, and a continuous exchange of information, are responsive to their visitors’ needs, hence online users would find them useful before planning their travel itineraries (Bastida and Huan, 2014; Camilleri, 2018; Camilleri and Camilleri, 2022; Chen et al., 2007).
Many service companies including travel and tourism businesses are increasingly using interactive websites as they help them raise awareness about their services (Hadjielias et al., 2022; Rather and Camilleri, 2019). Ultimately, it is in their interest to create attractive websites, to entertain their visitors (Cao and Yang, 2016). Hence, they can feature a good selection of appealing images and videos to entice prospective travelers to visit destinations. This way, they familiarize them with their tourism products (Salehi-Esfahani et al. 2016; Choi et al., 2007).

Generally, the tourism businesses use the interactive media to share useful information on the attributes and features about their services and to display their prices. Therefore, their corporate websites must capture the attention of online users. They have to be easy-to-use and should offer a variety of content that provide immediate answers to consumers and prospects (EU, 2020; Park and Jang, 2014; McMillan and Hwang, 2002). This leads to the following hypothesis:

**H4**: Engaging travel websites significantly affect their perceived usefulness.

Figure 1 depicts the research hypotheses of this contribution. This study explores the direct effects between perceived usefulness and intentions to use interactive travel websites, and between information quality, source credibility and interactive engagement on perceived usefulness. At the same time, it sheds light on the indirect effects of all constructs on intentions to use interactive technologies.
3. Methodology

The empirical data was collected through an online survey questionnaire that was disseminated through two popular social media groups in June 2021. These groups were focused on consumer experiences with service providers (including those that used travel, tourism and hospitality websites). They had more than 60,000 subscribers. A link directed the targeted research participants to the survey questionnaire. The group members were kindly invited to participate in an academic study that investigated their perceptions about (interactive) travel websites. They were reassured that their identity would not be revealed, as only aggregate data was analyzed in this research. After two weeks, there were 1,287 respondents who submitted their completed questionnaires.

The survey instrument integrated measures that were drawn from ELM/IAM (Camilleri, 2022; Wang and Scheinbaum, 2018; Filieri and McLeay, 2014; Cheung et al., 2008; Sussman and Siegal, 2003),
TAM (Camilleri 2018; Camilleri and Falzon, 2020; Cheung et al., 2008; Erkan and Evans, 2016) and from relevant literature relating to interactive engagement (Kim et al., 2020; McMillan and Hwang, 2002). Table 1 features a list of measures that were utilized in this study and provides a short definition for them.
Table 1 The measuring constructs and their corresponding items that were used in this research

<table>
<thead>
<tr>
<th>Construct</th>
<th>Definition</th>
<th>Code</th>
<th>Item</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information quality</td>
<td>This construct refers to the individuals’ perceptions about the quality of the online content in terms of its understandability, completeness, timeliness and accuracy.</td>
<td></td>
<td>IQ1 The information in the travel websites is easy to understand.</td>
<td>Elaboration Likelihood Model's Central Route (Camilleri, 2022; Cheung et al., 2008; Filieri and McLeay, 2014).</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>IQ2 The information in the travel websites is complete.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>IQ3 The information in the travel websites is timely.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>IQ4 The information in the travel websites is correct.</td>
<td></td>
</tr>
<tr>
<td>Source credibility</td>
<td>This construct refers to the individuals’ perceptions about the sources’ credentials in terms of the trustworthiness of their online content and expertise in curating their information.</td>
<td></td>
<td>SC1 I trust the content that is featured in the travel websites.</td>
<td>Elaboration Likelihood Model's Peripheral Route (Camilleri, 2022; Newell and Goldsmith, 2001; Wang and Scheinbaum, 2018).</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>SC2 The content that is featured in the travel websites is truthful.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>SC3 The travel business has a great amount of experience in the curation of online content.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>SC4 The travel business is skilled in developing online content.</td>
<td></td>
</tr>
<tr>
<td>Interactive engagement</td>
<td>This construct refers to the individuals’ perceptions about the engagement capabilities of interactive websites, in terms of appealing content, ease-of-use and their degree of responsiveness.</td>
<td></td>
<td>ENG1 The travel websites offer a variety of content.</td>
<td>Perceived Interactivity - Engaging Construct (Camilleri &amp; Kozak, 2022; McMillan and Hwang, 2002).</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ENG2 The travel websites keep my attention.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ENG3 It is easy to use the travel websites.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ENG4 The travel websites provide immediate answers to my questions.</td>
<td></td>
</tr>
<tr>
<td>Perceived usefulness</td>
<td>This construct refers to the individuals’ beliefs about the utilitarian value of (interactive) technologies.</td>
<td></td>
<td>PU1 The travel websites are useful.</td>
<td>Technology Acceptance Models - TAM, TAM2 and TAM3 (Camilleri &amp; Falzon, 2020; Davis et al., 1989; Erkan and Evans, 2016).</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>PU2 The travel websites are informative.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>PU3 The travel websites are helpful.</td>
<td></td>
</tr>
<tr>
<td>Intentions to use the technology</td>
<td>This construct refers to the individuals’ willingness to perform specified behaviors (like using interactive technologies).</td>
<td></td>
<td>INT1 Most probably, I will return to the travel websites, sometime in the near future.</td>
<td>Technology Acceptance Models - TAM, TAM2, TAM3 (Camilleri and Camilleri, 2022; Davis et al., 1989; Erkan and Evans, 2016) and Theory of Planned Behavior (Ajzen, 1991), among others.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>INT2 I will continue using the travel websites in future.</td>
<td></td>
</tr>
</tbody>
</table>
The respondents were expected to indicate the extent of their agreement with the survey’s measuring constructs in a five-point Likert scale. Their responses ranged from 1 “strongly disagree” to 5 = “strongly agree”, and 3 signaled an indecision. In the latter part of the questionnaire, the participants revealed their demographic information, as they disclosed their gender and age. They also indicated their frequency of usage of travel websites.

The measuring items were presented in a such a way to reduce the plausibility of common method bias. The survey instrument considered the effects of the chosen participants’ response styles, the proximity of related or unrelated constructs. The items’ wording was kept simple and straightforward, according to MacKenzie and Podsakoff’s (2012) recommendations. The method bias was reduced by pilot testing the questionnaire with a small group of experienced colleagues, to identify any possible weaknesses in the survey instrument.

4. Results

More than half of the respondents were females. The sample consisted of 731 females (56.8%) and 555 males (43.2%). Most of the respondents (n=465, 36.1%) were between 30 and 39 years of age. The second largest group (n=354, 27.5%) comprised individuals who were between 40 and 49 years old. The findings indicated that most of the research participants frequently browsed through interactive travel websites in the past. Table 2 provides a descriptive profile of the research participants.
Table 2. The profile of the research participants

<table>
<thead>
<tr>
<th>Variable</th>
<th>Range</th>
<th>N</th>
<th>Variable</th>
<th>Range</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Female</td>
<td>731</td>
<td>Usage of travel websites</td>
<td>Yes</td>
<td>1268</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>555</td>
<td></td>
<td>No</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>Missing</td>
<td>1</td>
<td></td>
<td>Missing</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1287</td>
<td></td>
<td>Total</td>
<td>1287</td>
</tr>
<tr>
<td></td>
<td>18-29</td>
<td>291</td>
<td>Frequency of usage of travel websites</td>
<td>Never</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>30-39</td>
<td>465</td>
<td></td>
<td>1-2 times a year</td>
<td>445</td>
</tr>
<tr>
<td></td>
<td>40-49</td>
<td>354</td>
<td></td>
<td>3-5 times a year</td>
<td>567</td>
</tr>
<tr>
<td></td>
<td>50-59</td>
<td>124</td>
<td></td>
<td>1-2 times a month</td>
<td>162</td>
</tr>
<tr>
<td></td>
<td>Over 60</td>
<td>53</td>
<td></td>
<td>More than 3 times in a month</td>
<td>98</td>
</tr>
<tr>
<td></td>
<td>Missing</td>
<td>0</td>
<td></td>
<td>Missing</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1287</td>
<td></td>
<td>Total</td>
<td>1287</td>
</tr>
</tbody>
</table>

The respondents have mostly agreed with the survey items in the model, as the mean scores (M) were above the mid-point of 3. Whilst the perceived usefulness - PU3 construct reported the highest score (M=4.114), information quality - IQ1 registered the lowest mean score (M=3.4). The standard deviations (SD) indicated that there was a narrow spread around the mean. The values of SD ranged from 0.51 that represented intention to use the technology - INT1, to 1.091, that was noted for information quality – IQ1.

4.1 Confirmatory composite analysis

This study relied on a structural equation modelling partial least squares (SEM-PLS) approach to explore the measurement quality of a reflective measurement model (Ringle et al., 2014). SEM-PLS’ algorithm revealed that the results of the outer loadings were higher than 0.6. Cronbach’s alpha, rho_A and the composite reliability values were well above 0.7. The constructs that were used in this study reported acceptable convergent validities as their average variance extracted (AVE) values were higher than 0.5 (Hair et al., 2012). There was evidence of discriminant validity, as the square root value of AVE
was higher than the correlation values among the latent variables (Fornell and Larcker, 1981). This study also presented the results of the heterotrait-monotrait (HTMT) as reported in the shaded area of Table 3. Again, the correlations re-confirmed the presence of discriminant validity, where the values were lower than 0.85 (Henseler et al., 2015).
Table 3. The descriptive statistics as well as the construct reliability and validity values

<table>
<thead>
<tr>
<th>Construct</th>
<th>Items</th>
<th>Mean</th>
<th>Deviation</th>
<th>Loadings</th>
<th>Alpha</th>
<th>rho_A</th>
<th>CR</th>
<th>AVE</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Interactive engagement</td>
<td>ENG1</td>
<td>3.725</td>
<td>0.922</td>
<td>0.778</td>
<td>0.808</td>
<td>0.815</td>
<td>0.872</td>
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<td>2 Information quality</td>
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<td>5 Source credibility</td>
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Note: The discriminant validity was confirmed through Fornell-Larcker’s criterion and the HTMT procedure. The values of the square root of the AVEs (in bold) for each construct were greater than the correlations among the constructs in their respective columns. The shaded area features the results from the HTMT procedure. The discriminant validity was reconfirmed where the values were less than 0.85 (Henseler et al., 2015)
4.2 Structural Model Assessment

The assessment criteria involved an examination of the collinearity among the constructs. SEM PLS algorithm indicated that there were no collinearity issues as the variance inflation factors (VIFs) were lower than 3.3 (Kock, 2015). The model’s predictive power indicated the coefficients of determination ($R^2$) and the effects ($f^2$) of the exogenous factors on the endogenous constructs. The findings from this research model reported that the constructs that were used in this study predicted 52.9% of the participants’ perceived usefulness and 28.1% of their intentions to continue using interactive travel websites.

Perceived usefulness had the highest effect on intentions to use the technology, where $f^2=0.391$. There were other effects between interactive engagement-perceived usefulness ($f^2=0.152$), source credibility-perceived usefulness ($f^2=0.075$) and information quality-perceived usefulness ($f^2=0.02$). Figure 2 depicts the explanatory power of this research model. It illustrates the total effects, outer loadings and the coefficient of determination ($R^2$) values of the constructs.

Figure 2. Factors affecting the individuals’ motivations to engage with interactive travel websites
The results from the bootstrapping procedure were used to explore the hypothesized path coefficients. With regards to H1, this research reported that the perceived usefulness of travel websites strongly and significantly predicted the individuals’ intentions to use them ($\beta=0.53$, $t=14.017$, $p<0.001$). This finding is consistent with other studies relating to TAM. H2 suggests that the quality of information was reported to be a significant antecedent of the respondents’ perceived usefulness ($\beta=0.141$, $t=2.819$, $p<0.01$). H3 indicated that source credibility was positively and significantly predicting their perceptions about the perceived usefulness of the mentioned technologies ($\beta=0.231$, $t=3.999$, $p<0.001$). Moreover, H4 confirmed that interactive engagement was a very significant precursor for the respondents’ perceptions about the usefulness of the websites ($\beta=0.456$, $t=6.729$, $p<0.001$). Table 4 presents the results of the hypotheses of this study. It tabulates the findings of the standardized beta coefficients (original sample), the standard deviations, the confidence intervals, t statistics and the significance values. Table 5 features the indirect effects within this research model.
Table 4. The investigation of the hypotheses

| Path Coefficient                                      | Original Sample (O) | Standard Deviation (STDEV) | Confidence Intervals Bias Corrected 2.50% | T statistics (|O/STDEV|) | P Values | Decision   |
|-------------------------------------------------------|---------------------|----------------------------|------------------------------------------|--------------------------|----------|------------|
| H1 Perceived usefulness -> Intentions to use the technology | 0.530***            | 0.038                      | 0.448 | 0.597 | 14.017 | 0.000 | Supported |
| H2 Information quality -> Perceived usefulness        | 0.141***            | 0.050                      | 0.049 | 0.243 | 2.819 | 0.005 | Supported |
| H3 Source credibility -> Perceived usefulness         | 0.231***            | 0.058                      | 0.124 | 0.349 | 3.999 | 0.000 | Supported |
| H4 Interactive engagement -> Perceived usefulness     | 0.456***            | 0.068                      | 0.295 | 0.564 | 6.729 | 0.000 | Supported |

***Critical Values $P<0.01$, $T>1.96$
Table 5. The indirect effects

| Path Coefficient                                      | Indirect Effects | Confidence Intervals Bias Corrected | T statistics (|O/STDEV|) | P Values |
|-------------------------------------------------------|------------------|-------------------------------------|----------------|----------|
|                                                       | Original Sample (O) | Standard Deviation (STDEV) | 2.50% | 97.50% |                        |                      |
| Information quality -> Intentions to use the technology| 0.075***         | 0.028                              | 0.028 | 0.136  | 2.673                | 0.008                |
| Source credibility -> Intentions to use the technology | 0.122***         | 0.033                              | 0.059 | 0.190  | 3.693                | 0.000                |
| Interactive engagement -> Intentions to use the technology | 0.242***        | 0.040                              | 0.170 | 0.320  | 5.992                | 0.000                |

***Critical Values P<0.01, T>1.96
4.3 Discussion

This study sought to identify the most significant factors that are affecting the online users’ perceptions about the usefulness of interactive websites. It also investigated whether they were willing to continue utilizing these service technologies in the future. The statistical results reported that the research hypotheses were all confirmed. The ‘perceived usefulness’ - ‘intentions to use the technology’ link was the most significant in this research model. This is consistent with previous findings (Salehi-Esfahani et al., 2016; Erkan and Evans, 2016; Shu and Scott, 2013), as perceived usefulness of information/technology can be a significant antecedent of revisiting interactive websites (Arghashi and Yuksel, 2022), writing positive reviews (Cheung et al., 2008; Filieri & McLeay, 2014) or may even induce online users to lay down their credit card to make a purchase (Chen and Chang, 2018).

This research sheds light on the factors that are influencing the acceptance and use of interactive websites, namely, information quality, source credibility as well as their engagement capabilities. A highly significant effect was found between interactive engagement and perceived usefulness. Evidently, the individuals’ perceptions about the attributes of interactive websites including their ease of use, appealing content that captures the attention of online users, and their responsive capabilities, were influencing their utilitarian motivations to use them.

Moreover, the study also suggests that ‘information quality’ and ‘source credibility’ were found to be significant antecedents for the respondents’ ‘perceived usefulness’ of interactive websites. These findings are congruent with past studies, particularly those that are focused on ELM/IAM (Chen and Chang, 2018; Cao and Yang, 2016; Choi et al., 2007; Erkan and Evans, 2016; Park and Lee 2008; Park et al., 2007; Salehi-Esfahani et al., 2016; Shu and Scott, 2013). Similar results were also reported in previous research, where other colleagues found that the individuals’ processing of information could involve elements of central (e.g. information quality) and/or peripheral routes (like source credibility) (see Cao
and Yang, 2016; Choi et al., 2007; Petty and Cacioppo, 1986; Petty et al., 1983; Salehi-Esfahani et al., 2016; Shu and Scott, 2013; Sussman and Siegal, 2003).

ELM researchers noted that individuals may be influenced by subjective signals or heuristic inferences like source attractiveness and brand image. Very often, they contended that individuals may be affected by large volumes of information including by consumer testimonials, as well as by online reviews and recommendations, among other cues (Filieri and McLeay, 2014; Salehi-Esfahani et al., 2016). In this case, the research participants were affected by ELM’s peripheral issues relating to source credibility. They indicated in their responses that the websites were curated by skilled and experienced professionals. In addition, the findings from SEM-PLS reported that source credibility had stronger effects than information quality on the perceived usefulness of interactive travel websites. Nevertheless, the results confirmed that to a certain extent, the research participants felt that their online content was satisfying their needs for information, in terms of its completeness, timeliness and accuracy, as they were willing to revisit them again, in the future (according to the direct and indirect effects that were reported in Tables 4 and 5).

5.1 Theoretical contribution

Previous studies reported that interactive websites ought to be accessible, appealing, convenient, functional, secure and responsive to their users (Crolic et al., 2021; Hoyer et al., 2020; Kabadayi et al., 2020; Klaus and Zaichkowsky, 2020; Rosenmayer et al., 2018; Sheehan et al., 2020; Valtakoski, 2019). Online service providers are expected to deliver a personalized customer service experience and to exceed their consumers’ expectations at all times, to encourage repeat business and loyal behaviors (Li et al., 2017; Tong et al., 2020; Zeithaml et al. 2002).

Many service marketing researchers have investigated the individuals’ perceptions about price comparison sites, interactive websites, ecommerce / online marketplaces, electronic banking, and social media, among other virtual domains (Donthu et al., 2021; Kabadayi et al., 2020; Klaus and Zaichkowsky,
Very often, they relied on measures drawn from electronic service quality (e-SQ or e-SERVQUAL), electronic retail quality (eTailQ), transaction process-based approaches for capturing service quality (eTransQual), net quality (NETQual), perceived electronic service quality (PeSQ), site quality (SITEQUAL) and website quality (webQual), among others.

Technology adoption researchers often adapted TAM measures, including perceived usefulness and behavioral intentions constructs, among others, or relied on psychological theories like the Theory of Reasoned Action (Fishbein and Ajzen, 195) and the Theory of Planned Behavior (Ajzen, 1991), among others, to explore the individuals’ acceptance and use of different service technologies, in various contexts (Park et al., 2007; Chen and Chang, 2018). Alternatively, they utilized IAM’s theoretical framework to investigate the online users’ perceptions about the usefulness of information or online content. Very often they examined the effects of information usefulness on information adoption (Erkan and Evans, 2016; Liu et al., 2017).

A review of the relevant literature suggests that good quality content (in terms of its understandability, completeness, timeliness and accuracy) as well as the sources’ credibility (with regard to their trustworthiness and expertise) can increase the individuals' expectations regarding a business and its products or services (Cheung et al., 2008; Li et al., 2017; Liu et al., 2017). ELM researchers suggest that a high level of message elaboration (i.e., argument quality) as well as the peripheral cues like the credibility of the sources and their appealing content, can have a positive impact on the individuals’ attitudes toward the conveyors of information (Allison et al., 2017; Chen and Chang, 2018; Petty et al., 1983), could affect their intentions to (re)visit the businesses’ websites (Salehi-Esfahani et al., 2016), and may even influence their purchase intentions (Chen and Chang, 2018; Erkan and Evans, 2016).

This contribution differentiates itself from previous research as the researchers adapted key measures from ELM/IAM namely ‘information quality’ (Filieri and McLeay, 2014; Salehi-Esfahani et al., 2016).
2016; Shu and Scott, 2013; Tseng and Wang, 2016) and ‘source credibility’ (Ayeh, 2015; Leong et al., 2019; Wang and Scheinbaum, 2018) and integrated them with an ‘interactive engagement’ construct (McMillan and Hwang, 2002), to better understand the individuals’ utilitarian motivations to use the service businesses’ interactive websites. The researchers hypothesized that these three constructs were plausible antecedents of TAM’s ‘perceived usefulness’ and ‘intentions to use the technology’. Specifically, this research examines the direct effects of information quality, source credibility and interactive engagement on the individuals’ perceived usefulness of interactive website, as well as their indirect effects on their intentions to continue using these service technologies.

To the best of the researchers’ knowledge, there is no other research in academia that included an interactive engagement construct in addition to ELM/IAM and TAM measures. This contribution addresses this gap in the literature. The engagement construct was used to better understand the respondents’ perceptions about the ease-of-use of interactive websites, to ascertain whether they are captivating their users’ attention by offering a variety of content, and more importantly, to determine whether they consider them as responsive technologies.

5.2 Managerial implications

This study sheds light on the travel websites’ interactive capabilities during an unprecedented crisis situation, when businesses received higher volumes of inquiries through different channels (to change bookings, cancel itineraries and/or submit refund requests). At the same time, it identified the most significant factors that were affecting the respondents’ perceptions and motivations to continue using interactive service technologies in the future.

In sum, this research confirmed that the respondents were evaluating the quality of information that is featured in interactive websites. The findings reported they were well acquainted with the websites’ content (e.g. news feeds, product information, differentiated pricing options, images, video clips, and/or
web chat facilities). The researchers presumed that the respondents were well aware of the latest developments. During COVID-19, a number of travel websites have eased their terms and conditions relating to cancellations and refund policies (EU, 2020), to accommodate their customers. Online businesses were expected to communicate with their customers and to clarify any changes in their service delivery, in a timely manner.

The contribution clarified that online users were somehow influenced by the asynchronous content that is featured in webpages. Therefore, service businesses ought to publish quality information to satisfy their customers’ expectations. They may invest in service technologies like a frequently answered questions widget in their websites to enhance their online customer services, and to support online users during and after the sales transactions. Service businesses could integrate events’ calendars, maps, multi-lingual accessibility options, online reviews and ratings, high resolution images and/or videos in their interactive websites, to entertain their visitors (Cao and Yang, 2016; Bastida and Huan, 2014).

This research underlines the importance for service providers to consistently engage in concurrent, online conversations with customers and prospects, in real-time (Buhalis and Sinarta 2019; Chattaraman et al., 2019; Rihova et al., 2018; Harrigan et al., 2017). Recently, more researchers are raising awareness on the provision of live chat facilities through interactive websites or via SNSs like WhatsApp or Messenger (Camilleri & Troise, 2022). Services businesses are expected to respond to consumer queries, and to address their concerns, as quickly as possible (McLean and Osei-Frimpong, 2019), in order to minimize complaints.

AI chatbot technologies are increasingly enabling service businesses to handle numerous interactions with online users, when compared to telephone conversations with human customer services representatives (Adam et al., 2021; Hoyer et al., 2020; Luo et al., 2019; McLean and Osei-Frimpong, 2019; Van Pinxteren et al., 2019). The most advanced dialogue systems are equipped with features like omnichannel messaging support, no code deployment, fallback options, as well as sentiment analysis.
These service technologies are designed to improve the consumers’ experiences by delivering automated smart responses, in an efficient manner. Hence, online businesses will be in a better position to meet and exceed their customers’ service expectations. Indeed, service businesses can leverage themselves with a responsive website. These interactive technologies enable them to improve their positioning among customers, and to generate positive word-of-mouth publicity.

5.3 Limitations and future research avenues

This study has included a perceived interactivity dimension, namely an ‘interactive engagement’ construct within an information adoption model. The findings revealed that the respondents believed that the websites’ engaging content was a significant antecedent of their perceptions about the usefulness of interactive websites. This study also reported that the interactive engagement construct indirectly affected the individuals’ intentions to revisit them again.

In conclusion, the authors recommend that future researchers validate this study’s measures in other contexts, to determine the effects of interactive engagement on information adoption and/or on the acceptance and usage of online technologies. Further research is required to better understand which attributes and features of interactive websites are appreciated by online users. Recent contributions suggest that there are many benefits for service businesses to use conversational chatbots to respond to online customer services. These interactive technologies can offer increased convenience to consumers and prospects (Thomaz et al., 2020), improved operational efficiencies (Pantano and Pizzi, 2020), reduced labor costs (Belanche et al., 2020), as well as time-saving opportunities for customers and service providers (Adam et al., 2021).

Prospective empirical research may consider different constructs from other theoretical frameworks to examine the individuals’ perceptions and/or attitudes toward interactive websites and their service technologies. Academic researchers are increasingly relying on the expectancy theory/expectancy
violation theory (Crolic et al., 2021), the human computer interaction theory/human machine communication theory (Wilkinson et al., 2021), the social presence theory (Tsai et al., 2021), and/or the social response theory (Adam et al., 2021), among others, to investigate the customers’ engagement with service technologies.

Notwithstanding, different methodologies and sampling frames could be used to capture and analyze primary data. For instance, inductive studies may investigate the consumers’ in-depth opinions and beliefs on this topic. Interpretative studies may reveal important insights on how to improve the efficacy and/or the perceived usefulness of interactive service technologies.

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https://doi.org/10.1016/j.techsoc.2022.101881

https://doi.org/10.1016/j.techsoc.2022.102098


