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## 7 **The impacts of Metaverse on tourist behaviour and marketing implications**

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## 33 **The impacts of Metaverse on tourist behaviour and marketing implications**

### 34 **Abstract**

35 Metaverse is expected to deeply affect the travel and tourism industry and requires a dearth of  
36 empirical research. In this investigation, two exploratory qualitative research studies were  
37 conducted to fill this gap. The first research explored the potential impacts of Metaverse on the  
38 travel and tourism industry by interviewing tourism academics. Findings revealed that  
39 Metaverse could be used for marketing, CRM, and HRM by hospitality organizations, while it  
40 would be useful for marketing and sustainability of destinations. It could also influence tourist  
41 behaviour before, during, and after travel experiences. One of the notable findings was related  
42 to the close relationship between Gen Z and virtual events. The second research identified the  
43 motivations of Gen Z individuals to attend a concert organized in Metaverse. Accordingly,  
44 novelty-seeking, escape, fun and excitement, and socialization were the most significant push  
45 factors to use Metaverse. Metaverse-specific characteristics, accessibility, and availability were  
46 the important pull factors to attend a Metaverse concert.

47 **Keywords:** Metaverse, tourism industry, tourist behaviour, tourist motivation, Generation Z

### 48 **1. Introduction**

49 Metaverse enables immersive experiences based on mixed reality (MR) i.e., augmented reality  
50 (AR) and virtual reality (VR) technologies. Metaverse eventually provides a three-dimensional  
51 (3D) fictional world, where people can experience a real-world simulation of the social,  
52 economic, and even physical environment (Dwivedi et al., 2023). Moreover, Metaverse can  
53 form a social bridge between the real and virtual worlds (Buhalis et al., 2022), thereby allowing  
54 tourists to create content and organize their fictional world to make their tourism experiences  
55 more personal and profound (Buhalis & Karatay, 2022). Metaverse is expected to revolutionize  
56 the travel and tourism industry (Buhalis et al., 2023) more than its VR and AR predecessors  
57 (Dwivedi et al., 2023). Hitherto, Metaverse literature mostly consists of conceptual papers (e.g.,  
58 Buhalis et al., 2022) and opinion pieces (e.g., Go & Kang, 2023; Wei, 2023), while there is an  
59 emerging literature of empirical studies (e.g., Jafar & Ahmad, 2024; Zhang et al., 2024).

60 This paper reports the findings of two consecutive exploratory studies that explore the  
61 potential impacts of Metaverse on the tourism industry and tourist behaviour. Study 1 examined

62 the opinions of tourism academics about whether and how Metaverse can influence the tourism  
63 industry and tourist behaviour. One of the dominant themes that emerged from Study 1  
64 concerned the enthusiasm of Generation Z (hereafter Gen Z) individuals for new technologies  
65 and their technology acceptance behaviour. Drawing on push and pull motivation theory, Study  
66 2 was conducted to clarify the motivations of Gen Z individuals for attending a concert held in  
67 Metaverse. These studies provide in-depth findings regarding the impacts of Metaverse on both  
68 the tourism industry and tourist behaviour.

## 69 **2. Metaverse: definition and overview**

70 Metaverse is a digital universe allowing people to move and contact each other through their  
71 avatars in a virtual environment (Huang, 2023). Unlike any preceding technology, Metaverse  
72 creates an MR or extended reality (XR) that combines the physical and digital worlds (Dwivedi  
73 et al., 2023). Therefore, it is possible to define Metaverse as a hybrid universe, in which  
74 technologies create immersive experiences through realistic interactions. By 2030, every  
75 physical device that can be connected digitally will be eligible to be in Metaverse (Buhalis et  
76 al., 2023). Supporting this prediction, Disney has attempted to create a metadata experience  
77 where users can experience a 3D virtual world on a real-world theme park trip without requiring  
78 wearable hardware. Thus, Disney will use the simultaneous localization and mapping (SLAM)  
79 technique, without headsets, to introduce visitors the Disney characters that can interact with  
80 them while moving in the real world (Dwivedi et al., 2022).

81 Studies on Metaverse mostly examine the possible impacts of Metaverse on tourist  
82 experiences and social interactions (e.g., Buhalis et al., 2023, Chakraborty et al., 2023) as well  
83 as the changes it will create in the tourism industry (Hassan & Saleh, 2024). For example,  
84 Koohang et al. (2023) argue that Metaverse will offer an opportunity for people with physical  
85 or financial disabilities to participate in tourism events and will create an additional source of  
86 revenue for destinations or businesses, e.g., by holding virtual events for larger audiences that  
87 cannot be hosted due to capacity constraints. Similarly, Dwivedi et al. (2022) anticipate that  
88 Metaverse can create value in the tourism industry by changing the understanding of service,  
89 and magnifying social connections among consumers, peers, and suppliers in the industry.

90 Despite its benefits, some researchers are still sceptical about Metaverse's ability to  
91 replace a real tourism experience (Dwivedi et al., 2022, 2023). Due to the difficulty of using  
92 Metaverse headsets during travel (Kwok & Tang, 2023), many researchers consider Metaverse  
93 as a supporting service to improve tourist experiences (Dwivedi et al., 2023). Virtual  
94 environments, such as Metaverse, are vulnerable to being hacked and other types of cybercrime,

95 which can pose risks to users' personal and financial information (Wang et al., 2022). The  
96 anonymity of virtual spaces can also lead to bullying and other forms of online abuse and  
97 harassment (Dwivedi et al., 2023).

### 98 **3. The impacts of Metaverse on tourism industry and tourist behaviour**

99 Metaverse is a limitless virtual universe that can increase accessibility to destinations and other  
100 people regardless of time and place. Thus, it can enrich tourist experiences before, during, and  
101 after travel, and reshape tourist experiences by enabling users to interact with other users  
102 virtually (Buhalis et al., 2023). The potential impacts of Metaverse on tourist behaviour and  
103 tourism businesses are summarized in Figure 1.

104 \*\*\*Insert Figure 1 here

#### 105 ***3.1. Use of Metaverse by tourists and tourism businesses before travel***

106 Metaverse can allow tourists to experience the destination virtually beforehand, beyond just  
107 imagining it. Through Metaverse's immersive and lively environments, prospective tourists can  
108 make sense of what they encounter before and during their travel and learn if destinations can  
109 meet their needs and wishes (Buhalis et al., 2023). Thus, while preparing an itinerary or making  
110 a travel decision, tourists can virtually experience products and services through Metaverse  
111 realistically and interactively, inspiring their physical travel (Zhong et al., 2024). Through the  
112 information they obtain in Metaverse, potential tourists can decrease purchasing risks and  
113 complete decision-making processes in Metaverse, such as booking and payment. They can use  
114 the extensive pre-travel metadata to select suitable tourism products and destinations according  
115 to personality traits (Chakraborty et al., 2023), try out different service providers, such as hotels  
116 and restaurants, and determine the quality of services (Buhalis et al., 2022). This can both  
117 prevent unpleasant surprises for visitors in the actual servicescape and reduce unpredicted  
118 cancellation rates.

119 Tourism businesses can also market their services more effectively by using the  
120 persuasive power of this technology. Metaverse can increase brand awareness by differentiating  
121 products or services from competitors in the market (Dwivedi et al., 2023). For example,  
122 MullenLowe Singapore partnered with Millennium Hotels and Resorts in Singapore to launch  
123 M-Social Decentraland, the world's first hospitality group to operate a hotel in Metaverse.  
124 Taking different M Social hotels around the world as examples, the new meta hotel aims to be  
125 a place where everyone can gather through their avatars to obtain services. The company sees  
126 this initiative as an opportunity for tourists to have a more flawless real hotel experience with  
127 the knowledge gained from Metaverse experience (Brandinginasia, 2022).

128

### 129 *3.2. Use of Metaverse by tourists and tourism businesses during travel*

130 Tourist experiences are no longer limited to on-site encounters and services. Instead, they can  
131 be expanded across both physical and virtual experience areas and be augmented (Buhalis et  
132 al., 2023) through Metaverse which can also act as a real-time interactive guide and provide a  
133 suitable environment for tourists to share user-generated content about the places they visit  
134 (Zhong et al., 2024). For example, cultural heritage sites can offer a platform that allows visitors  
135 to freely navigate historical content. The system can be adapted to individual needs and tastes  
136 supporting personalization. Thus, Metaverse can make tourists' visits more meaningful,  
137 memorable (Yang & Zhang, 2022) and enjoyable.

138 Metaverse can provide tourists with virtual restorations so they can visualize missing or  
139 damaged artefacts in a destination in their original state (Rivero et al., 2021). By virtually  
140 presenting historical artefacts in ancient ruins and other cultural sites, Metaverse allows visitors  
141 to feel the atmosphere of that period. Ancient cultures can be presented to visitors as living  
142 museums, not just simulations (Buhalis & Karatay, 2022). Thus, immersion and illusion  
143 effectively transport visitors and allow them to feel like they are in the past. For example, they  
144 can watch live religious ceremonies performed at the pyramids in Egypt or the temple of Athena  
145 at the Acropolis in Athens (Dwivedi et al., 2023).

146 Tourists expect to have fun while visiting destinations, often through learning something  
147 new (Dunleavy & Dede, 2014). Restaurants, for example, can use Metaverse to add edutaining  
148 elements to their virtual presentations to enable tourists to experience unfamiliar food before  
149 they taste it. Visitors cannot only see the food but also view the ingredients, the production,  
150 preparation, and cooking processes (Rejeb et al., 2021).

151 Metaverse can enhance or complement real travel experiences. While Metaverse may  
152 not replace the real travel experience, it provides many benefits to users by offering virtual  
153 travel opportunities, especially for individuals who are unable to physically travel (Buhalis et  
154 al., 2023). For example, it is possible in Metaverse to attend the concert of a deceased artist  
155 using hologram technology (Dwivedi et al., 2023). Metaverse can also enable individuals with  
156 physical disabilities or those who cannot afford to travel to take part in activities virtually.  
157 Through their chosen avatars, tourists can travel in a preferred body, participate in activities,  
158 and socialize. In early 2022, for example, Saudi Arabia announced that it was running a project  
159 in Metaverse to simulate a visit to the Kaaba, the holiest pilgrimage site for Muslims. Saudi  
160 Arabia could thereby provide individuals who cannot physically fulfil their religious  
161 obligations with the opportunity to perform them in Metaverse (Gulen, 2022).

### 162 ***3.3. Use of Metaverse by tourists and tourism businesses after travel***

163 After travel, tourists can use Metaverse to share content about their experiences, evaluate these  
164 experiences, and even create their content repository (Buhalis et al., 2023). Experiences  
165 supported by Metaverse can be more memorable for tourists as they can effectively re-live them  
166 in an immersive environment. Moreover, tourists can interact in real-time with tourism  
167 providers, destination marketing organizations and other tourists in Metaverse. This can  
168 increase their engagement with tourism destinations and organizations and involvement with  
169 local resources during their travel, leading to transformative experiences after their travel  
170 (Buhalis et al., 2023). When tourists reconstruct their travel experiences by sharing them in  
171 Metaverse, they can in turn shape the pre-travel phase for other tourists and prepare platforms  
172 where they can get inspiration, information, and opinions that are critical for travel decisions.

## 173 **4. Study 1: Tourism academics' perspectives on the impacts of Metaverse**

### 174 ***4.1. Data collection***

175 In Study 1, a semi-structured in-depth interview was used for data collection. After a  
176 comprehensive literature review, an interview protocol was prepared and examined by three  
177 tourism academics. Then a pilot study was conducted with three digital technology experts to  
178 determine whether the protocol was comprehensive and whether the respondents could clearly  
179 understand the questions. Based on the feedback, minor adjustments were made to the protocol.

180 Purposive and snowball samplings were used to enable an in-depth study of phenomena  
181 characterized by more context-specific information (Marvasti, 2004). The sample consisted of  
182 academics who work on digital tourism. A total of thirty respondents from 11 different countries  
183 (e.g., Spain, China, Turkey and the UK) participated in the interview conducted between March  
184 and October 2022. The average interview length was 40 minutes, and all were recorded with  
185 participants' consent. Data collection ended once data saturation occurred (Glaser & Strauss,  
186 1967).

### 187 ***4.2. Data analysis***

188 The interview recordings were transcribed before the content analysis. This process was  
189 performed in three phases, namely open, axial, and selective coding, as suggested by Corbin  
190 and Strauss (2015). Open coding involved a line-by-line analysis of the transcripts. Then, axial  
191 coding was performed to identify sub-themes and determine any relationships between codes.  
192 Finally, selective coding was applied to assign the initial codes to themes and main categories,  
193 which led to the formation of a codebook.

194 As suggested by Cranmer et al. (2020), all the interviews were conducted and  
195 transcribed by one of the authors to maintain consistency. To ensure the reliability and  
196 methodological rigour of the findings, the triangulation of the investigator was applied in the  
197 coding process. Given that reliability is crucial in content analysis, we evaluated both intracoder  
198 and intercoder reliability, following Gremler (2004). Two authors (i.e., the two intracoders)  
199 independently analysed and interpreted the interview transcripts to identify themes and sub-  
200 themes (Cranmer et al., 2020). One author used MAXQDA software while the other coded  
201 manually before their findings were compared. To ensure validity, the selective coding was  
202 evaluated and repeated by another researcher (the intercoder), who is an expert in qualitative  
203 data analysis. The average intracoder and intercoder reliabilities were 95% and 87%  
204 respectively, which exceeds the acceptable level of 80% (Gremler, 2004).

### 205 **4.3. Findings of Study 1: Impacts of Metaverse on the tourism industry and tourist behaviour.**

206 The findings from Study 1 fell into two categories: (1) impacts of Metaverse on the tourism  
207 industry; and (2) impacts of Metaverse on tourist behaviour. Based on the codebook, the  
208 conceptual scheme shown in Table 1 was created to interpret the study's findings.

209 \*\*\*Insert Table 1 here

#### 210 **4.3.1. Impacts of Metaverse on the tourism and hospitality industry**

211 The exploratory interviews revealed three Metaverse impact themes specific to the tourism  
212 industry: the accommodation sector, destinations and cultural heritage sites, and the event  
213 sector. These impacts are presented in more detail in the following sub-sections.

##### 214 *Impacts on the accommodation sector*

215 Most respondents focused on the advantages of using Metaverse as a tool as they did not believe  
216 it could replace real accommodation, travel, visits, or dining experiences in the near future.  
217 They suggested that the best way was to use it as a tool for marketing, Customer Relationships  
218 Management (CRM), and Human Resources Management (HRM). These categories are  
219 represented below by key quotations to add transparency to our interpretation (Patton, 2014).

220 *Metaverse as a tool for marketing:* Most of the respondents emphasized the importance of using  
221 Metaverse as a tool for marketing in terms of 'advertising', 'promotion', and 'brand  
222 awareness'. A respondent stated that '...hotels can sell their services by attracting people to  
223 preview their hotels in Metaverse' (R26), while many other respondents suggested that this  
224 could make tourism products tangible (Buhalis et al., 2022). This may facilitate the job of  
225 marketers in terms of customer communication: 'The presence of a hotel in Metaverse will

226 *allow the individual to have the opportunity to examine that hotel without going there.*  
227 *Therefore, that intangibility feature will change in a sense’ (R26). Others suggested using*  
228 *Metaverse to raise brand awareness: ‘Hotels can use this to create brand awareness. ...*  
229 *Someone who has never been in this hotel may know this brand’ (R6). This in turn could help*  
230 *hotels increase bookings (Hotelmize, 2023).*

231 *Metaverse as a tool for CRM:* Respondents suggested that Metaverse could help organizations  
232 establish better relations with both potential and loyal customers: *‘The advantage could be able*  
233 *to contact the guest more directly.’ (R5). ‘Recently some hotels are trying this by virtual*  
234 *employees to engage with tourists’ (R26). This interaction may increase consumer engagement*  
235 *(Wei, 2023). Metaverse can also be used as a tool for improving customer experience,*  
236 *particularly in the decision-making process (Han et al., 2022). The respondents referred to this*  
237 *with terms like ‘less risk of obscurity’, ‘experience beforehand’ and ‘realistic look’. For*  
238 *example, R24 thought that Metaverse would help decrease risk perceptions: ‘Some will use it*  
239 *for sales as it can help with pre-purchase to reduce the customer’s risk of obscurity. ... Now*  
240 *the person himself can enter there and control the environment of a room. In a way, it will affect*  
241 *sales very positively as it gives a chance to experience beforehand’, that is, by providing a more*  
242 *realistic view (Dwivedi et al., 2023; Buhalis et al., 2023). As R23 put it: ‘The hotel has one*  
243 *target, selling a room. Does it change the person’s mind to buy if he/she enters with VR glasses,*  
244 *and sees the place? It changes because it gives him/her a more realistic look, it’s better than a*  
245 *photograph’. Many respondents explained this advantage by looking from the customers’*  
246 *viewpoint: ‘As a tourist, before I make the booking of a hotel room, I can have a look. How this*  
247 *hotel looks like and how the hotel feels like – I can see the hotel rooms; I can see the view, so I*  
248 *can understand what I will get (R19). This can be explained in terms of enhanced booking*  
249 *experience, that is, offering detailed information that cannot be accurately delivered through*  
250 *other means like a website.*

251 *Metaverse as a tool for HRM:* Metaverse can also be used as a tool for HRM within an  
252 accommodation facility for training purposes. For example, R26 suggested: *‘Hotels can work*  
253 *together with developers, and also prepare staff training’*. Similarly, R24 said: *‘Especially*  
254 *large chain groups can use it for personnel training, as we saw at the Hilton’*. The common  
255 idea regarding Metaverse’s impacts on the accommodation sector was its use as a tool of CRM  
256 and HRM to enable tourism companies to remain competitive. Most respondents concluded  
257 that Metaverse cannot replace the real hotel experience, especially in terms of services or  
258 physical features like spas. Instead, they focused on how hotels can use these technologies to

259 gain a competitive advantage. They recommended that hotels appear in Metaverse, but with  
260 solid investment and infrastructure to meet customers' real-life expectations.

261 *Impacts on destinations and cultural heritage sites*

262 The impacts of Metaverse on destinations and cultural heritage sites are explained with two  
263 sub-themes: a tool for marketing and a tool for sustainability.

264 *Metaverse as a tool for marketing:* The respondents claimed that Metaverse could provide a  
265 'revolutionary' and 'innovative' marketing tool for destinations and cultural heritage sites.  
266 Abass & Zohry (2022) as well as Buhalis & Karatay (2022) suggest that enhancing cultural  
267 heritage sites with immersive experiences can add value to the entire customer experience.  
268 Authorities of cultural heritage sites can benefit from Metaverse by using it as a tool for  
269 customer engagement. As R3 suggested, Metaverse can be used for marketing destinations and  
270 attracting people: *'I think [it can be used] to give more information and motivate people more*  
271 *to go to the physical site. Destinations can use [Metaverse] for marketing, attracting people to*  
272 *go there.* Likewise, Buhalis et al. (2023) assert that visiting a destination in Metaverse may  
273 motivate people for real travel. It can also provide economic benefits for destinations *'in an*  
274 *innovative way'* (R26). Hence, Metaverse *'will play a very important role in the promotion of*  
275 *destinations'* (R22). The respondents also suggested ideas for content about destinations in  
276 Metaverse: *'It should be fancy content for the introduction part. You make it mysterious and*  
277 *attractive. So, you stimulate visitors' needs'* (R3). However, they also acknowledged some  
278 doubts because creating good content is expensive: *'Destinations need a big investment to make*  
279 *that happen. And I don't know if destinations see this as profitable for them right now* (R12).  
280 Hence, R10, for example, suggested: *'Destinations must somehow become virtual by being*  
281 *modelled in digital universes ... It must be so because instead of having to change my whole*  
282 *life just to be able to live in Bodrum for one day, yes, I can have Bodrum experience in*  
283 *Metaverse'*. Others suggested 3D modelling or gamification of destinations, which is in line  
284 with the World Travel Market Report (2011) that emphasized gamification as a major near-  
285 future trend in tourism: *'A character can enter with his own identity, and if such a thing is*  
286 *designed, role modelling can be made like in a movie scene. It could be like gamification'* (R14).  
287 As asserted by the participants, tourism organizations (Go & Kang, 2023) and DMOs might  
288 develop games for visitors in Metaverse as DMOs in Thailand, Cape Town, South Africa,  
289 Ireland, and China have already done so using social media (Xu et al., 2016).

290 *Metaverse as a tool for sustainability:* Using Metaverse for destination sustainability purposes  
291 is in line with Go & Kang's (2023) assertion. The respondents stated that Metaverse can help  
292 raise awareness about a place: '*For destinations, it is good to have such virtual trips. But it*  
293 *would be designed to stimulate travel, to raise tourism awareness about the destination*' (R9),  
294 and thus lead to more conscious visits. The respondents also drew attention to overtourism:  
295 '[Metaverse] *seems to be a tool that can be used for the sustainability of destinations. I think it*  
296 *will be beneficial to get rid of the harmful aspects of mass tourism such as overtourism*' (R10).  
297 Others mentioned the benefits of preserving destinations: '*Definitely Metaverse is a good way*  
298 *to protect the environment and protect heritage*' (R3). In line with Huggett (2020), who  
299 suggests using Metaverse to turn passive heritage experiences into more active and dynamic  
300 experiences, some respondents claimed that Metaverse could be very useful for '*storing the*  
301 *memory*' by '*supporting heritage interpretation*'. As R8 put it: '*In Syria during the war; people*  
302 *destroyed ancient sites, so you have a place where you can store the memory and you can foster*  
303 *heritage interpretation*' for the next generations.

#### 304 *Impacts of Metaverse on the event sector*

305 This theme had two sub-themes: business events and leisure events. The respondents stated that  
306 the first field to move to Metaverse would be events because it offers many advantages, such  
307 as convenience. As Bardzell et al. (2006) argue, virtual events are not just game interactions;  
308 rather, they have become more meaningful and almost a universal phenomenon.

309 *Metaverse as a tool for business events:* The respondents claimed a majority of people have  
310 become used to virtual events and online event tools as a result of the Covid-19 pandemic,  
311 particularly for professional meetings: '*For the conference and seminar sector, I believe*  
312 *Metaverse has the biggest impact on them. ... People already get used to it during the*  
313 *pandemic*' (R27). The respondents claimed that Metaverse events can attract a larger audience,  
314 be cheaper to attend, and be more sustainable by preserving natural and environmental  
315 resources. Like Go & Kang (2023), some respondents suggested that Metaverse tourism may  
316 be a new way of promoting sustainability in tourism: '*There are activities that increase carbon*  
317 *emissions because people use cars to get on planes to go to congresses. From a sustainability*  
318 *standpoint, Metaverse has a huge advantage*' (R22).

319 *Metaverse as a tool for leisure events:* The respondents used phrases like '*economic return*',  
320 '*wider audience*', and '*more quality entertainment*'. Regarding '*wider audience*' and '*economic*  
321 *return*', R21 stated: '*You can get 90-100 thousand people in a stadium, but when we look at*

322 *those who attend a Metaverse concert or watch their recordings later, the numbers exceed*  
323 *millions.* Another respondent described attending a concert in Metaverse as ‘*holopresence*’ and  
324 claimed that it would be an opportunity for those who cannot attend an event in a different  
325 country: ‘*I can’t travel from New Zealand to Canada to go to my favourite singer’s concert. If*  
326 *these technologies can make you feel being there and increase the feeling of being there,*  
327 *‘holopresence’, as we say, it would be perfect*’ (R16). This is very similar to Wei (2023), who  
328 suggests that Metaverse tourism may either provide a substitute for certain types of travel like  
329 space tourism or complement real travel to support the sustainability of destinations. Some  
330 respondents also mentioned potential disadvantages, such as the lack of feelings, interaction,  
331 and socialization in Metaverse: ‘*Socialization may decrease. Problems may arise in terms of*  
332 *meeting new people*’ (R10). However, as McLuhan (1962) notes, every technology tends to  
333 create a new social environment. The respondents also claimed that Metaverse leisure events  
334 would mostly attract Gen Z or younger people: ‘*Gen Z would prefer it more than other*  
335 *generations*’ (R7).

#### 336 **4.3.2. Impacts of Metaverse on tourist behaviour**

337 The impacts of Metaverse on tourist behaviour are divided into three themes: tourist  
338 motivations, tourist experiences, and tourist segments.

##### 339 *Tourist motivations*

340 The findings revealed that the motivations to use Metaverse fall into five sub-themes, namely:  
341 curiosity, showing off, socialization, learning, and education which are similar to those  
342 suggested by Buhalis et al. (2023). By stimulating curiosity, Metaverse can encourage potential  
343 customers to try new things (Xu et al., 2016). Some respondents claimed that potential users  
344 could enter Metaverse to show off or make themselves feel special by trying something new:  
345 ‘*The people just want to show they know what Metaverse is. ... meaning ‘Look I am a*  
346 *trendsetter!’* (R9). According to Go & Kang (2023), Gen Z are keen on sharing their  
347 experiences in Metaverse to show off, given their curiosity about it. Other respondents,  
348 however, suggested that some people would use it for socializing, education, or learning:  
349 ‘*Associating Metaverse with tourism will also be through socialization. Getting to know new*  
350 *people will be through being in new environments*’ (R6); ‘*Metaverse is used for educational*  
351 *purposes. If you just want to learn the history of a place, and reading books is not enough,*  
352 *yeah, then you can use it for learning purposes*’ (R11). Because Metaverse can offer a more  
353 vibrant atmosphere and greater cognitive enhancement (Wei, 2023), the users’ creativity and

354 learning desire will increase: '*I think education's purpose in the schools ... [is] to teach people*  
355 *about culture or places. Metaverse is really good in that way because it will eventually lead*  
356 *them to want to visit the real place'* (R6). This could result in the formation of a new conscious  
357 tourist type and more sustainable destinations, heritage sites, and preserved areas (Go & Kang,  
358 2023).

### 359 *Tourist experiences*

360 Tourist experiences consist throughout the customer journey, i.e.: before, during, and after the  
361 travel experience.

362 *Before travel experience:* Prospective travellers can search for and view places, hotels,  
363 transportation, restaurants, and other important facilities. For example, they could even inspect  
364 virtually their plane seats in Metaverse before flying to that destination, which would provide  
365 a realistic (Koo et al., 2022) '*trial experience*' (R26). As Wei (2023) suggests, Metaverse makes  
366 'try before you buy' easier, which can enhance the pre-purchase and decision-making  
367 experience through '*more stimulating experiences*' (R26). Similarly, R15 said: '*Before we go*  
368 *to a country we will visit, we can see the places to visit and adjust our time and budget*  
369 *accordingly*'. In terms of information seeking, one respondent explained: '*Metaverse would*  
370 *become an information centre*' (R19) while others highlighted its informativeness: '*Now we*  
371 *can only look for online reviews and just read a text. But you can really see that through*  
372 *Metaverse*' (R11).

373 *During travel experience:* The respondents suggested that by using Metaverse before travelling,  
374 tourists can learn about all aspects of their trip to make effective decisions whilst at the  
375 destination (Buhalis et al., 2023). This in turn can lead to a more stress-free and enjoyable  
376 vacation. For example, R29 thought that Metaverse '*can be a good complement while*  
377 *travelling*', an auxiliary tool like a smartwatch used while exercising. Wei (2023) argues that  
378 Metaverse technologies can provide instant on-site data regarding users' experiences and  
379 preferences. This was echoed by some of the respondents: '*For example, in Rome, I don't have*  
380 *time to see everywhere, so I go with Metaverse technology to decide what is best for me in this*  
381 *timeline when I am in Rome. So even in the destination, it can be used*' (R16).

382 *After travel experience:* In line with Dwivedi et al. (2023), the respondents suggested that  
383 tourists who used Metaverse for their trip could have '*more memorable*' and '*more meaningful*'  
384 experiences. '*I think that Metaverse is a compliment, never a substitute for traveling. So, I think*  
385 *Metaverse will increase our experience, make our experience more memorable*' (R20).

386 Metaverse could enable better storage of memories like a photo album. Hence, Metaverse could  
387 be a tool for documenting and recalling past experiences or even sharing user-generated content  
388 (Buhalis et al., 2023). This in turn could increase return intention and word-of-mouth.

### 389 *Tourist segments*

390 Different tourist segments use Metaverse differently as illustrated by different lifestyles,  
391 personalities, special segments, and demographics.

392 *Lifestyles* were illustrated by respondents mostly with the examples of ‘*digital nomads*’ and  
393 ‘*busy people*’. Some suggested that Metaverse was useful for busy people who could afford to  
394 use it but did not have time to travel: ‘*Some work very hard and do not have the opportunity to*  
395 *physically go to a distant place, even if they have time and money*’ (R24). Others claimed that  
396 the technology would suit digital nomads: ‘*It might also enable the digital nomads to live away*  
397 *from work*’ (R28).

398 *Personalities* are also a factor. Chakraborty et al. (2023) explain that the Big Five personality  
399 theory shows that openness has the highest impact on users’ intention to adopt Metaverse,  
400 followed by extraversion and agreeableness. Personal innovation and hedonic motivation  
401 variables present evidence of positive moderation with personality traits. Further, generation  
402 differences between cohorts and users’ personalities affect their willingness to adopt Metaverse.  
403 The majority of the respondents suggested that both ‘*introverts*’ and ‘*adventurers*’ would be  
404 attracted to Metaverse more than other people. Some suggested this could relate to the difficulty  
405 in establishing relationships with others in the real world: ‘*People with low social skills would*  
406 *use it*’ (R8); ‘*... introverts, people who don’t want to speak with other people. And also, others*  
407 *who are actually the gamers*’ (R9). Some respondents claimed that Metaverse would be more  
408 attractive for outgoing people: ‘*More adventurers would likely to try more new things. So, no*  
409 *matter what kind of tourism they are interested in, they may try a new way*’ (R3).

410 Some *special segments* may find it more difficult to travel, such as ‘*people with disabilities*’ or  
411 ‘*people with restrictions*’. As R19 suggested: ‘*For those people who have accessibility*  
412 *problems, for example, disabled people, it would be a very good opportunity for them to have*  
413 *this experience.*’ Some suggested it would be useful for people with low incomes who had no  
414 opportunity to travel or take vacations: ‘*Travelling [in Metaverse] will be much cheaper. That*  
415 *means those people who are poor, will probably have a chance to travel*’ (R11) because many  
416 respondents suggested that the gadgets would be more common and more affordable in the near  
417 future.

418 *Demographics*: According to Buhalis & Karatay (2022), Gen Z are more likely to use  
419 Metaverse because it can respond to their desire for fast, interactive interactions that satisfy  
420 their curiosity while providing instant gratification (Zhang et al., 2024). Most respondents  
421 asserted that the involvement in Metaverse activities depended on consumers' socioeconomic  
422 status and age. Regarding age, many claim that young people, specifically Gen Z individuals,  
423 are more familiar with digital tools and gamification. They feel more comfortable living and  
424 travelling in Metaverse *'because they were born into technology'* (R22). Some respondents  
425 claimed that Metaverse would be a better travel tool for older people: *'Some of the very old*  
426 *people ... are too old to travel, but if they don't travel to a place where they would regret it'*  
427 (R11). However, R8 offered a different explanation: *'I can see that new generations are more*  
428 *introverted, and they have a very strong relationship with these machines. Younger generations*  
429 *are much more prone to live parallel lives or parallel realities'*. Another significant sub-theme  
430 was the relationship between events and Gen Z. Many respondents predicted that events would  
431 be the first main sector to develop in Metaverse, especially festivals and music concerts. Hence,  
432 Gen Z would be the segment most likely to attend events or play games, given their personality  
433 characteristics: *'Generation Z can act bolder. I think we should expect consumption like 'Let's*  
434 *spend money on Metaverse', 'Let's go to a concert', etc. from the Z generation'* (R24).

## 435 **5. Study 2: Gen Z perspectives on the impacts of Metaverse on tourist motivation**

### 436 **5.1. Data collection**

437 Study 2 was conducted based on the prominent association established between Gen Z and  
438 virtual events in Study 1. The focus was the demand side of the Metaverse, specifically targeting  
439 Gen Z, defined as individuals born between the mid-1990s and the early 2010s. In this  
440 qualitative study, interviews were conducted to allow the participants to express their  
441 motivations in their own words. For this aim, the study drew on the push and pull theory, which  
442 is frequently used in event studies (Qi et al., 2019). The interview protocol included questions  
443 about the respondents' technology usage habits and demographic characteristics, as well as  
444 three open-ended questions: (1) Which personal reasons would push you to attend a concert in  
445 Metaverse? (2) What features would you look for in a concert in Metaverse? (3) Why would  
446 you choose Metaverse to attend a concert? Following a pilot study conducted with 14 university  
447 students, the interview protocol was revised and refined.

448 For Study 2, it was deemed appropriate to combine purposive and convenience sampling to  
449 determine the sample. The sample selection criteria were as follows: (1) having physically  
450 attended a concert; (2) having used at least one AR or VR application; (3) being familiar with

451 virtual gaming; and (4) being at least 18 years old. Data collection was carried out in the largest  
452 amusement park in Antalya, Türkiye in September and October of 2022. Ultimately, 100  
453 respondents completed the interview form. In terms of demographics, 62% of the participants  
454 were male; the average age was 21 years; 55% of the participants had previously used VR or  
455 AR applications for gaming and 23% for travel purposes. Almost half (47%) had experienced  
456 Metaverse. Of these, one-fifth (20%) had attended a concert.

## 457 **5.2. Data analysis**

458 Before the content analysis, one author read the survey forms several times to become familiar  
459 with the data. Then, 764 expressions were extracted using open coding. Subsequently, axial  
460 coding was performed for the secondary analysis and recoding of the information. The  
461 expressions were then categorized and merged into 71 sub-categories. Through selective  
462 coding, a codebook was created with support from the relevant literature. The 71 sub-categories  
463 were placed into the relevant motivation categories by two authors acting as independent  
464 intracoders while another researcher was the intercoder. A similarity rate of 96% and 86% were  
465 achieved between the intracoders and between the independent intercoder, respectively. The  
466 obtained 14 motivational factors were divided into two groups: push factors and pull factors  
467 (Tables 2 and 3).

## 468 **5.3. Findings of Study 2: Impacts of Metaverse on tourist motivation**

### 469 **5.3.1. Push factors for Gen Z to use Metaverse**

470 The push factors were categorized into eight dimensions. Table 2 shows how many participants  
471 expressed the related motivational statement with each push factor. *Novelty-seeking* emerged  
472 as an important push factor ( $f=84$ ), followed by *escape* ( $f=81$ ). Over half of the participants  
473 stated motivations related to *fun and excitement* ( $f=60$ ) and *socialization* ( $f=53$ ) for attending  
474 a concert in Metaverse. Other dimensions consist of *self-development* ( $f=40$ ), *prestige* ( $f=22$ ),  
475 *well-being and relaxation* ( $f=20$ ), and *uninhibited behaviour* ( $f=17$ ). These findings are in line  
476 with previous research (Buhalis et al., 2023). For example, Bardzell et al. (2006) claimed that  
477 the five main motivations for participating in virtual events were meeting new people and  
478 extending social networks, winning in-game currency, learning things, purchasing services, and  
479 experiencing something different.

480 \*\*\*Insert Table 2 here

481 The participants' open-ended responses provided more detail about these patterns.  
482 Regarding novelty-seeking, one participant mentioned trying something different: *'I would like*  
483 *to attend events there because there are very interesting settings like concerts in the sky, above*

484 *the clouds, or underwater*' (P43), also highlighting the technical capabilities of Metaverse. As  
485 suggested by Buhalis & Karatay (2022), young people expect MR to enable dynamic  
486 interaction. Thus, designing such environments would create more immersive and memorable  
487 experiences like *'walking on the moon or Mars'* (Abass & Zohry, 2022: 135). *Escape* is another  
488 significant dimension in Metaverse discussions (Wei, 2023). This was reflected in one  
489 participant's comment: *'Sometimes I just want to go away, like getting away from my reality  
490 for a while. Metaverse can offer this, a getaway from my routine life and an escape from reality'*  
491 (P8). Metaverse can offer a lack of organization or regulation by the social norms, rules, and  
492 standards of the real world. Escaping from the real world can give a person freedom, although  
493 it can also lead to the formation of a *'shadow self'* (Wei, 2023). Another significant finding  
494 concerning meeting new people in Metaverse was suggested by P88: *'I have met many people  
495 there and most are living in different countries. Some can be forever friends as talking and  
496 chatting with them is fun'*. Bardzell et al. (2006) already noted that the socialization dimension  
497 of virtual events was highly emphasized in earlier versions of the technology. Because the  
498 structure of a virtual event enables private chat, instant messaging, and personal conversations  
499 regardless of actual physical location, people can make friends and establish more personal  
500 bonds through Metaverse. One participant referred to uninhibited behaviour as: *'I can reveal  
501 my identity, which I have to hide from everyone, in Metaverse through avatars. In this way, I  
502 can avoid social pressure'* (P32).

### 503 **5.3.2. Pull factors for Gen Z to use Metaverse**

504 The pull factors were categorized under six dimensions (Table 3). The most frequently  
505 mentioned pull motivation was related to *concert-specific characteristics* ( $f=121$ ), such as  
506 *'better sound quality of a concert in Metaverse'* (P53). *Metaverse-specific characteristics* ( $f$   
507  $=102$ ) were identified as the second most important pull factor for attending a concert in  
508 Metaverse because of *'storing memories more easily in digital form'* (P4) or *'providing data  
509 security'* (P17). According to Bardzell et al. (2006), the technical characteristics of Metaverse  
510 encourage and enhance human-human interaction, which is also related to socialization as one  
511 of the push factors revealed in the current study. This can be explained by the realistic or unique  
512 designs of avatars, as mentioned by P21: *'Designing an avatar which looks like me is fun and  
513 meeting people with this second me is great'*. P6, for example, said: *'I prefer to create myself  
514 as Darth Vader in Metaverse.'* These technical features are indeed very significant because  
515 Metaverse can offer an environment that can be either realistic or unreal fantasy worlds.

516 \*\*\*Insert Table 3 here

517 Another pull factor was *financial and temporal convenience* ( $f=52$ ) which is in line with  
518 Buhalis & Karatay (2022) reporting that temporal convenience is an important advantage for  
519 young tourists, as well as financial convenience because of their limited or dependent income.  
520 As one participant commented: ‘*I can’t attend music festivals or concerts because of economic*  
521 *difficulties but in Metaverse they may be cheaper*’ (P23). *Comfort and safety* ( $f=26$ ) and  
522 *customization* ( $f=20$ ) were other pull factors which were mentioned by fewer participants.  
523 However, some participants claimed: ‘*A concert in Metaverse provides a relaxed atmosphere.*  
524 *At a real concert, I feel uncomfortable because of the crowd*’ (P27). ‘*It makes me feel*  
525 *comfortable and safe when only people I know take part in a concert*’ (P41). Given that many  
526 tourists preferred virtual tourism experiences because they thought it was safer than traditional  
527 travel (Koohang et al., 2023), *comfort, safety* and *customization* were also connected in terms  
528 of the ‘*discretionary environment*’. Events can be designed to allow participants to engage with  
529 others and in activities based on their comfort level. Metaverse can achieve this by gathering  
530 like-minded people to participate in event activities while feeling comfortable. Metaverse also  
531 offers advantages of customization, such as designing an event individually or choosing other  
532 attendees, as one participant commented: ‘*I would like the concert to be designed as if it was*  
533 *an exclusive event specially arranged just for me*’ (P67). The desire for personalization through  
534 customization is also a common finding in previous research (Buhalis & Karatay, 2022;  
535 Dwivedi et al., 2023).

## 536 **6. Conclusions**

### 537 **6.1. Theoretical implications**

538 The findings of the current research provide several contributions to tourism and Metaverse  
539 literature. Previous studies on Metaverse discuss theoretically how Metaverse may affect the  
540 tourism industry by reviewing research about AR or MR (e.g., Buhalis & Karatay, 2022) and  
541 news or the industry reports of professional organizations about Metaverse (e.g., Buhalis et al.,  
542 2023; Wei, 2023). This study addresses the research agendas introduced by previous studies  
543 and represents an early empirical research attempt to identify the impacts of Metaverse on  
544 tourism demand and supply. Findings reveal that tourism and hospitality organizations can  
545 benefit from Metaverse for marketing, CRM, and HRM. Metaverse can also contribute to the  
546 marketing and sustainability of destinations and cultural heritage sites, whilst it is highlighted  
547 that the event sector would be first and most affected by Metaverse. Although literature, as well  
548 as the current study’s findings, suggested that the event sector could be most affected by  
549 Metaverse, to the best of the authors’ knowledge, no empirical research exists related to

550 motivations for participating in Metaverse events. In addition, this research provides a detailed  
551 insight into the impacts of Metaverse on tourist behaviour. Interviews indicate that Metaverse  
552 may stimulate push motivations of potential tourists whilst affecting the tourist experience  
553 before, during, and after travel. Different tourist segments can use Metaverse more intensively  
554 depending on lifestyle, personality, and demographics. Among them, Gen Z was mostly  
555 highlighted by the respondents, especially in terms of event participation in Metaverse.

556 This investigation enriches the literature by exploring the push and pull motivations of  
557 Gen Z to attend a concert organized in Metaverse. Novelty-seeking, escape, fun and excitement,  
558 socialization, and self-development were identified as the most significant push factors; whilst  
559 prestige, well-being and relaxation, and uninhibited behaviour were mentioned by fewer  
560 participants. Concert-specific characteristics, Metaverse-specific characteristics, accessibility  
561 and availability, financial and temporal convenience, comfort and safety, and customization  
562 emerged as the pull factors that attract people to participate in a concert in Metaverse. While  
563 push factors are similar to those affecting offline music concert attendance (e.g., Perkins, 2012),  
564 most of the pull factors are specific to Metaverse. Metaverse offers some opportunities that an  
565 offline music event cannot by allowing people to have uninhibited appearances and uninhibited  
566 gender through their avatars.

567 In conclusion, Metaverse propels a range of opportunities that enhance the tourist  
568 experience before, during and after travel and allow tourists to interact psychologically and  
569 physiologically while exploring different resources on digital platforms through their avatars.  
570 While it cannot fully replace the authentic and tangible experience of real travel, findings  
571 revealed that the Metaverse could serve as a valuable tool for both the supply and demand sides  
572 of the industry. Its effectiveness will depend on the widespread adoption of gadgets and the  
573 establishment of legal regulations pertaining to Metaverse users.

574

575

## 576 ***6.2. Managerial implications***

577 New insights provided in this study indicate implications for hospitality and tourism managers.  
578 First, by highlighting possible usage areas of Metaverse in tourism organizations, the findings  
579 provide a road map to managers in the adoption of Metaverse. Second, clarifying the impact of  
580 Metaverse on tourist behaviour provides managers with an opportunity to influence it. The  
581 findings reveal that potential tourists use Metaverse to obtain detailed information related to  
582 businesses or destinations so that they can decrease their risk perception. Thus, it is not an

583 option but a dire need for companies to use Metaverse. Third, by identifying Gen Z's  
584 motivations to attend a concert organized in Metaverse, managers should be able to design  
585 hybrid products and services that can better fit customers' needs and expectations. Concert-  
586 specific characteristics were identified as an important pull factor, indicating that Gen Z not  
587 only want to be in Metaverse, but they also care about the technical features. Thus, to promote  
588 events, managers are advised to consider hybrid options and also provide information about  
589 their technical quality. Exemplary videos and customer testimonials can be used for this  
590 purpose.

### 591 ***6.3. Limitations and recommendations for future research***

592 Study 1 participants consisted of academics who work on digital tourism, which may lead to  
593 sampling bias. In future studies, a more comprehensive sample should be used consisting of  
594 both supply (e.g., tourism professionals) and demand (e.g., tourists) side participants. Although  
595 using AR or VR applications was a criterion for being a participant in Study 2, more than half  
596 of them had no Metaverse experience. For this reason, the study revealed the participants'  
597 motivations and intentions to be in Metaverse rather than their actual behaviour. Thus, in future  
598 studies, it is recommended to interview participants who have had Metaverse experience. The  
599 sample of Study 2 included participants from a single nationality and cultural background. To  
600 verify the robustness of the findings, the identified motivations in this study should be tested in  
601 different groups. Future research should also investigate the willingness to pay for virtual  
602 services and events. Finally, future studies can focus on the possible negative impacts of  
603 Metaverse on tourist behaviour and the tourism industry.

### 604 **Disclosure statement**

605 The authors report there are no competing interests to declare.

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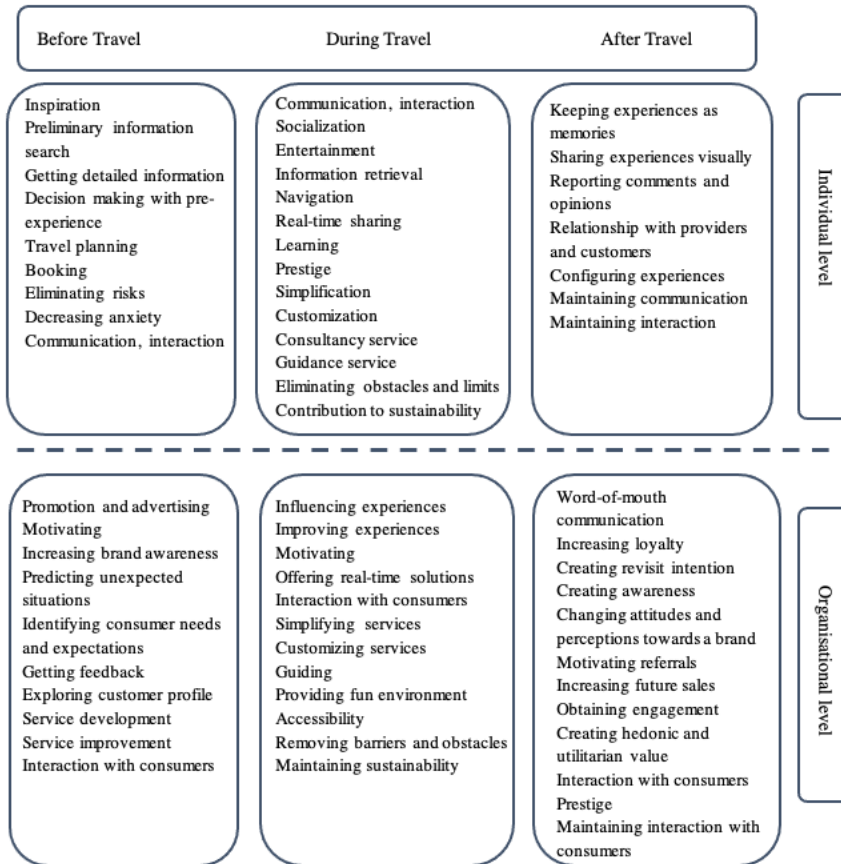
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**Figure 1.** Impacts of Metaverse on tourist behaviour and tourism businesses before, during, and after travel (compiled by the authors).



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**Table 1.** Conceptual scheme for the impacts of Metaverse

**Table 2.** Push factors

**Table 3.** Pull factors

**TABLES**

**Table 1.** Conceptual scheme for the impacts of Metaverse

| <b>Categories</b>  | <b>Themes</b>   | <b>Sub-Themes</b>   | <b>Axial Coding</b>   |  |
|--|---|---|---|--|
| <b>Impacts on tourism and hospitality industry<br/>(supply side)</b> | <b>Accommodation sector</b>                           | As a tool for Marketing   | digital marketing, preview, sales-marketing channel, tangibility, advertising, promoting, brand awareness   |  |
|  |   | As a tool for CRM   | engaging, contact risk of obscurity, experience beforehand, realistic look, decision-making process   |  |
|  |   | As a tool for HRM   | personnel training sales and marketing,   |  |
|  | <b>Destinations, cultural heritage sites</b>          | As a tool for Marketing   | marketing places, attracting people, marketing tools, promoting destinations, income generator,   |  |
|  |   | As a tool for Sustainability                                    | awareness about destination, protecting the environment and heritage, conscious visitation, heritage interpretation, sustainability of destinations |  |
|  |   | <b>Event sector</b>   | Business  | Covid effect, cost reduction, less effort  |
|  |   |   | Leisure   | economic return, wider audience, ‘holopresence’, more quality entertainment, less socialization, Gen Z |
|  | <b>Impacts on tourist behaviour<br/>(demand side)</b> | <b>Tourist motivations</b>                                      | Push factors  | curiosity, showing-off, socialization, learning, education   |
|  |   | <b>Tourist experiences</b>                                      | Before travel   | information seeking and gathering, ‘trial’ experience, organizing                                      |
|  |   |   | During travel   | simultaneous visits, complementary   |
| After travel   |   |   | more memorable, more meaningful   |  |
| <b>Tourist segments</b>  |   | Lifestyles<br>Personalities<br>Special segments<br>Demographics | digital nomads, busy people<br>adventurers, introverts<br>people with disabilities<br>socioeconomic status, age                                     |  |

**Table 2. Push factors**

| <i>Themes</i>  | <i>f</i>  |
|--|-----------|
| <b>Novelty-seeking</b>   | <b>84</b> |
| Experiencing things that are impossible to experience in real world                                | 25        |
| Trying new things and discovering new places   | 20        |
| Seeking difference   | 18        |
| Seeing different places and venues   | 8         |
| Participating in events that are not possible in real life (e.g., listening to a concert in space) | 8         |
| Participating in a unique event  | 4         |
| <b>Escape</b>  | <b>81</b> |
| Distancing oneself from the crowd  | 20        |
| Avoiding physical contact  | 19        |
| Escaping from loneliness   | 14        |
| Escaping from real world   | 10        |
| Escaping from the sense of reality   | 8         |
| Listening to the band/singer alone   | 6         |
| Escaping from tiring aspects of attending a real-world concert                                     | 3         |
| <b>Fun and excitement</b>  | <b>60</b> |
| Having fun   | 20        |
| Indulging in   | 14        |
| Getting more adapted and completely immersed in the concert  | 12        |
| Feeling excited  | 6         |
| Experiencing the atmosphere in Metaverse   | 6         |
| Having a good time   | 2         |
| <b>Socialization</b>   | <b>53</b> |
| Socializing  | 22        |
| Meeting new people   | 14        |
| Spending time with close friends   | 8         |
| Meeting with missed acquaintances who live far away  | 6         |
| Exchanging ideas or having a conversation  | 3         |
| <b>Self-development</b>  | <b>40</b> |
| Keeping up with what is new  | 12        |
| Wondering about things   | 11        |
| Learning   | 8         |
| Improving oneself  | 8         |
| <b>Prestige</b>  | <b>22</b> |
| Telling others about the experience  | 16        |
| Gaining an image or achieving prestige   | 6         |
| <b>Wellbeing and relaxation</b>  | <b>20</b> |
| Feeling peaceful   | 8         |
| Feeling good   | 6         |
| Taking private time for oneself  | 4         |
| Relaxing   | 2         |
| <b>Uninhibited behaviour</b>   | <b>17</b> |
| Feeling the need to fictionalize oneself   | 12        |
| Bringing one's hidden character traits to the fore through avatars                                 | 5         |

**Table 3.** Pull factors

| <i>Themes</i>  | <i>f</i>   |
|--|------------|
| <b>Concert-specific characteristics</b>  | <b>121</b> |
| High lighting and image quality  | 42         |
| Good sound quality   | 34         |
| Nice and effective atmosphere  | 18         |
| Authentic atmosphere   | 10         |
| Fun environment  | 8          |
| Involvement of attendees from a variety of cultures and countries  | 4          |
| Inclusion of different activities in the event program   | 3          |
| Participation of many attendees  | 2          |
| <b>Metaverse-specific characteristics</b>  | <b>102</b> |
| Lifelike design of avatar  | 16         |
| Unique environment far from reality  | 16         |
| Opportunity to see artists or bands that cannot be seen in real life   | 12         |
| Inclusion of innovative applications   | 12         |
| Platform where data is secure and confidential   | 12         |
| Realistic platforms (high-fidelity spaces)   | 10         |
| Designing realistic avatars for attendees  | 10         |
| Opportunity to record and store experiences as memories more easily  | 8          |
| Confidentiality of recordings  | 4          |
| Appealing to many senses simultaneously  | 2          |
| <b>Accessibility and availability</b>  | <b>64</b>  |
| Easily accessible (no physical distance)   | 40         |
| Equality between the attendees   | 18         |
| Accessibility (e.g., proximity to stage)   | 6          |
| <b>Financial and temporal convenience</b>  | <b>52</b>  |
| Financial convenience  | 40         |
| Temporal convenience (no queue, no wasted time parking, participating in the event at the desired time etc.) | 12         |
| <b>Comfort and safety</b>  | <b>26</b>  |
| Comfortable environment for attendees  | 10         |
| Safe environment   | 10         |
| Non-contact environment away from a physical crowd   | 6          |
| <b>Customization</b>   | <b>20</b>  |
| Preventing strangers from participating in the event   | 8          |
| Being able to choose other attendees   | 6          |
| Sense of attending a private event   | 4          |
| Customizable   | 2          |