Research Paper

Metaverse Driven Social Media and Company Image in Tourism Industry: A Sustainable Path for Business Development in Russia

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Abstract

Metaverse tourism in Russia offers virtual explorations of iconic landmarks, permitting global visitors to experience the rich culture as well as history from anywhere. This innovative approach enables immersive travel experiences leading to revolution in the tourism industry. However, the metaverse tourism is ignored by previous studies. To address this gap, objective of this study is to examine the role of metaverse driven social media in tourism business development along with the mediating role of company image in Russia. The questionnaire was developed to measure metaverse driven social media, company image and business development. The 398 responses were collected from the employees of tourism industry in Russia. Results of the study highlighted valuable insights. According to the findings, metaverse technology has vital importance in Russian tourism industry. The promotion of metaverse enabled social media marketing can lead to quick business development. Therefore, this study has implications for the practitioners to enhance business development by focusing on metaverse driven social media.

Introduction

Over the past few decades, a growing number of individuals have used social media, sparking discussion over the medium's assistances as well as drawbacks (Björkman et al., 2007; Briandana et al., 2020; Mahfooz et al., 2017; Yang et al., 2018). Since the internet and other digital skills proliferate, contemporary businesses are progressively turning to social media to communicate with their several stakeholders, including consumers globally. Growing the number of users on social media to widen a company's reach (Abbas et al., 2019; Basri, 2020). Additionally, during the online work, all shareholders and business owners asserted it necessary to use social media for the advancement and discernibility of their organization, particularly in the tourism industry. The number of modern businesses implementation social media for a variety of determinations is incessantly increasing (Aliyu et al., 2019; Rajakumar & Banumathi, 2017).

In the recent decade, the social media is advanced with the help of metaverse technology. Now it is emerging in the tourism industry and influencing business activities (Chen, 2013; Lynch, 2012). The Metaverse is essentially the idea of computer scientists who believe it is the next generation of the internet - a shared, permanent, singular, and 3D virtual realm where humans can experience life in ways they cannot in the physical world (Dioniso et al., 2013; Reyes, 2020). The use of social media through metaverse technology is increased. Science, the metaverse has vital importance in business activities (Cagnina & Poian, 2008; Lee et al., 2011) and business are increasing to adopt metaverse technology in social media while advertising the businesses. Therefore, by considering the growing importance,

this study introduced metaverse technology in social media usage for business activities Russia. The metaverse has several benefits for social media which are reported in Figure 1.

Figure 1: Metaverse-based Social Media Advantages.
Source: Blockchain Council.

It is now regularly accepted technology, as shown by several examples, that social media has outdated conventional media such as newspapers, magazines and television as well as radio as the major medium for brand acknowledgement and product promotion in the present day (Liao et al., 2017; Naylor et al., 2012; Wang & Kim, 2017). Due to the minimalism with which information about the firm's advantages may be

extended and progressed on social media, it is a great stage for this purpose. In this use of social media, the technology of metaverse is increasing in Russian business activities. Contrasting conventional media (Creasy & Carnes, 2017; Frandsen et al., 2016), metaverse enabled social media advances user interaction. Because social media is based on two-way, information may be uploaded, messaged, as well as exchanged between the firm and its consumers along with investors.

Therefore, this study attempting to highlight the important role of metaverse driven social media in business activities of Russia. Although other studies have considered metaverse technology (Cagnina & Poian, 2008; Dioniso et al., 2013; Rathore, 2017; Reyes, 2020) and social media in business activities (Ayub et al., 2013; Björkman et al., 2007; Chikazhe et al., 2020; Hameed et al., 2017; Karami et al., 2013; Yang et al., 2018), however, the role of metaverse in social media was not addressed. Previous studies have not addressed business promotion with the help of metaverse driven social media.

Hence, objective of this study is to examine the role of metaverse driven social media in business development along with the mediating role of company image in Russia.

Literature Review

Tourism industry is growing in Russia (Andrades & Dimanche, 2017; Zaitseva et al., 2016), Russian Tour Operators Association (ATOR) predictions that the internal tourism flow in 2024 will upsurge by 10–15% compared to 2023, reaching the number of 90 million trips. The tourism was increasing in Russia; however, it was declined in COVID-19. In this era, virtual tourism was started with the use of metaverse. Therefore, this study focusses on how metaverse driven social media can help to improve tourism business development in Russia. In this case, company image is considered as a mediating variable between metaverse driven social media and tourism business development. Figure 2 is the study framework showing the relationship between metaverse driven social media, company image and tourism business development.

Figure 2: Study Framework Showing the Relationship Between Metaverse Driven Social Media, Company Image and Tourism Business Development.

Hypotheses Development

Organizations employee social media as a central communication tool since it advances public participation in two-way communication. It is deemed reliable and more credible than traditional media networks (Bharati et al., 2015; Ikram et al., 2019; Karami et al., 2013). Consequently, numerous companies have decided to use social media to encourage their projects. Various organizations can actively review public responses to other projects by connecting with them via social media (Orji et al., 2020). It is considered the most critical channel for achieving a new way of engaging with stakeholders is the social media platform. It allows stakeholders to engage with the company about activities (Perera & Hewege, 2016). It assists in creating a bond between an individual as well as business company (Ajina et al., 2020). Additionally, researchers also certified the use of social media for effective communication for engaging stakeholders (Camilleri, 2015).

In Russia, social media is also used in various companies to foster business activities. Especially in the tourism industry, the use of social media is increasing with more speed, and it is covering most of the important activities of tourism companies for the purpose of revenue generation. Russian tourism industry is growing with great speed (Kyrylov et al., 2020; Larionova et al., 2017; Studzieniecki et al., 2016), that is the reason the management is using various new technologies to meet with the speed of growth and increase the activities. Figure 3 highlighted that comparison of tourism infrastructure of Russian with the other countries such as Spain, France and United States.
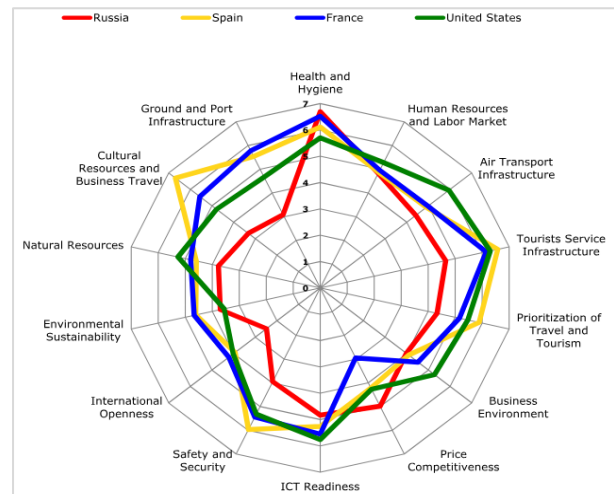

Figure 3: A comparison of Russia with Spain, France and the United States in Terms of Tourism.
Source: Andrades and Dimanche (2017)

Since, the tourism industry is growing in Russia, they are using the metaverse technology in tourism activities which is very attractive for the tourists beyond the world. The integration of Metaverse-driven social media in Russia has positively induced tourism business development by offering immersive virtual experiences that attract global audiences. These platforms allow prospective tourists to investigate about the Russian targets virtually, boosting interest as well as bookings. It provides the important opportunities for the promotion of various places

through virtual reality. Social media in the Metaverse fosters community commitment and specified marketing, enhancing the familiarity of lesser-known tourist spots. Since metaverse and social media are very popular in marketing activities (Balakrishnan et al., 2014; Chi, 2011; Gadalla et al., 2013; Lee & Lau, 2019; Liao et al., 2020; Rathore, 2018; Valos et al., 2016; Zhang & Mao, 2016), it has influence on tourism activities. It also assists the creation of the virtual travel communities, pushing collaborative campaigns. Largely, Metaverse increases the appeal as well as accessibility of Russia's tourism industry, influencing to its growth and innovation.

Furthermore, the role of metaverse enabled social media in tourism has an important relationship with the company image. Metaverse-driven social media improves the image of tourism companies by providing immersive, shared experiences that entrance potential travelers. It is very important because these virtual environments admit companies to showcase the destinations in compelling way, advancing the stronger brand recognition as well as appeal. The tourism company image is very important to attract tourists from various places of the country as well from various places of globe (Jin et al., 2015; Kim et al., 2017; Loi et al., 2017; Ramos & Mafé-García, 2019; Sürücü et al., 2019). By engaging users in exceptional, personalized experiences, tourism firms can differentiate themselves from contenders. This innovative approach ultimately leads to a more modern, dynamic company image that resonates with tech-savvy audiences.

Moreover, along with the positive effect of metaverse driven social media on company image, company image also has the important direct effect of tourism business development. Tourism business can be improved by using company image and improvement of company image is important. A strong tourism company image invites the more customers by introducing trust as well as credibility (Eid et al., 2019; Hahm et al., 2018; Liu & Huang, 2020), making potential travelers more likely to choose their services. Therefore, it is very critical to enhance tourism image. A positive image improves differentiate company from competitors, drawing in larger audience through efficient branding and reputation. It is recommended to enhance the tourism image by various previous studies (Ferrucci et al., 2017; Omar et al., 2020; Vinh & Phuong, 2017). This, in turn, increases customer loyalty

and repeat business, driving sustainable growth. Company image also playing a mediating role between metaverse driven social media and tourism business development. Eventually, a well-regarded company image increases the market presence and fosters long-term tourism business development. Finally, following hypotheses are proposed:

Hypothesis 1: *Metaverse driven social media has positive influence on tourism business development.*

Hypothesis 2: *Metaverse driven social media has a positive influence on company image.*

Hypothesis 3: *The company image has a positive influence on tourism business development.*

Hypothesis 4: *The company image mediates the relationship between metaverse driven social media and tourism business development.*

Methodology

The selection of the right research design is most significant because it is most critical to obtain original results. Selecting the right research design influences the quality of the conclusions as well as recommendations drawn from the research outcome (Brink & Wood, 1998; Dolma, 2010). Business research is considered established on techniques along with functions such as experiments, surveys, as well as observational studies (Pucheta-Martínez et al., 2018). It is very decisive for the accomplishment of research to select a suitable research design. Similarly, numerous scholars says that there are no authoritative means for concluding and choosing the best research design (Creswell, 2009; Rahi, 2017; Shuttleworth, 2008).

Deciding the right research design decides the quality of the conclusions and suggestions drawn from the research outcome. By considering the objective, this study chooses quantitative research design which is most suitable to examine the relationship between variables. After carefully selection of the research design, this study developed a survey research questionnaire. This study measured three variables which include: metaverse driven social media, company image and tourism business development. Therefore, scale items were selected based on literature review, and a complete instrument was developed. All the scale items are reported in Table 1.

Table 1: Measures.

Variables	Items
Metaverse Driven Social Media	Metaverse is important for social media.
	Metaverse can enhance the operations of social media
	Metaverse technology can increase the effectiveness of social media.
Company Image	The company image is important for tourism activities.
	The company image can attract tourists.
	The company image increases tourism activities.
Tourism Business Development	Tourists are increasing gradually.
	Business operations are increasing gradually.
	Business activities of tourism are increasing.

After the development of the questionnaire, it was used to collect data. 700 questionnaires were distributed among the employees. Employees of various companies in Russia were selected. The companies related to tourism were selected. Only

those employees were selected which had knowledge related to the metaverse use in tourism services. Questionnaires were distributed by self-visit to these companies. After that, variation inflation factor (VIF) was considered to examine

multicollinearity (Ahmad et al., 2006; Thompson et al., 2017; Vu et al., 2015). All the values of VIF are less than 5.0 which confirmed no presence of multicollinearity. It is reported in Table 2 and Figure 4.

Table 2: Variance Inflation Factor (VIF).

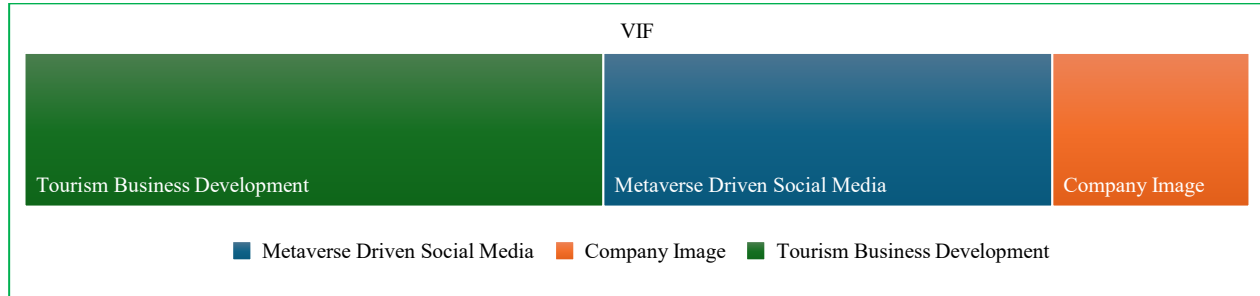| Variables	Variance Inflation Factor (VIF)
Metaverse Driven Social Media	3.55
Company Image	1.56
Tourism Business Development	4.58

Figure 4: Variance Inflation Factor (VIF).

Data Analysis and Findings

Data screening was carried out before data analysis to test the study hypotheses (AlAnazi et al., 2016; Shehu & Mahmood, 2014; Won et al., 2017) which is important to ensure the accuracy of the data. It has the potential to effect the results of the hypotheses. From the data screening, it was ensured that data is free from different types of errors. Therefore, data was brought to check the reliability and validity through statistical tool. First of all, factor loadings were checked to examine the reliability of

the scale items (Henderson et al., 2016; Henseler & Chin, 2010; Henseler et al., 2014). It is observed that all the scale items are reliability. Construct reliability was examined through composite reliability and convergent validity through average variance extracted (AVE) (Alarcón et al., 2015). All the values achieved minimum satisfactory level. Results are reported in Table 3 and Figure 5. In addition, discriminant validity is given in Table 4 and Figure 6 which is achieved through Heterotrait-Monotrait ratio of correlations (HTMT).

Table 3: Factor Loadings.

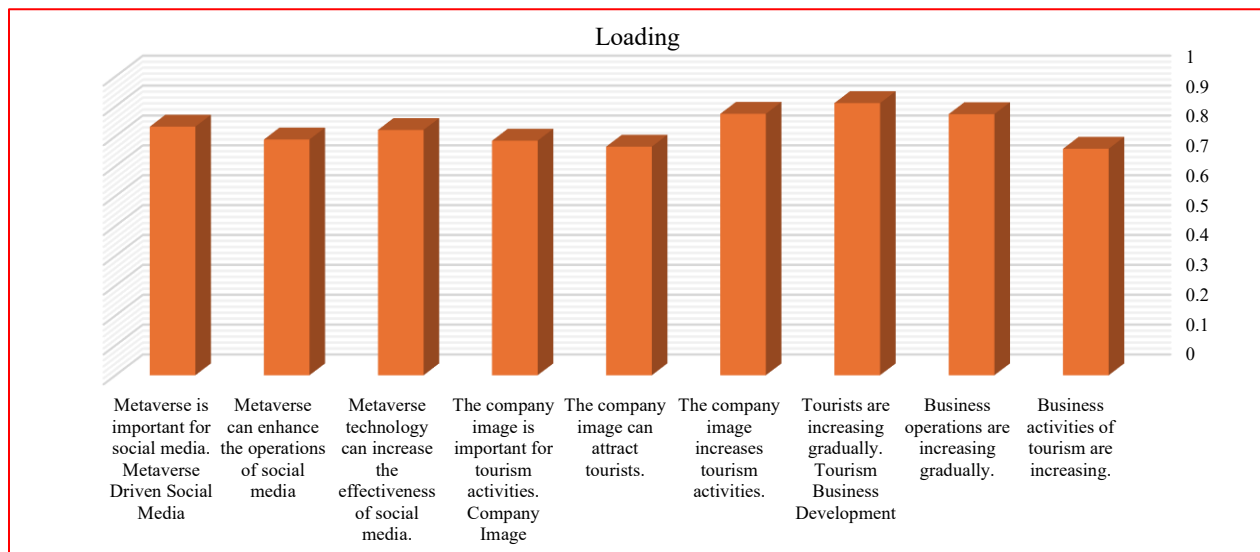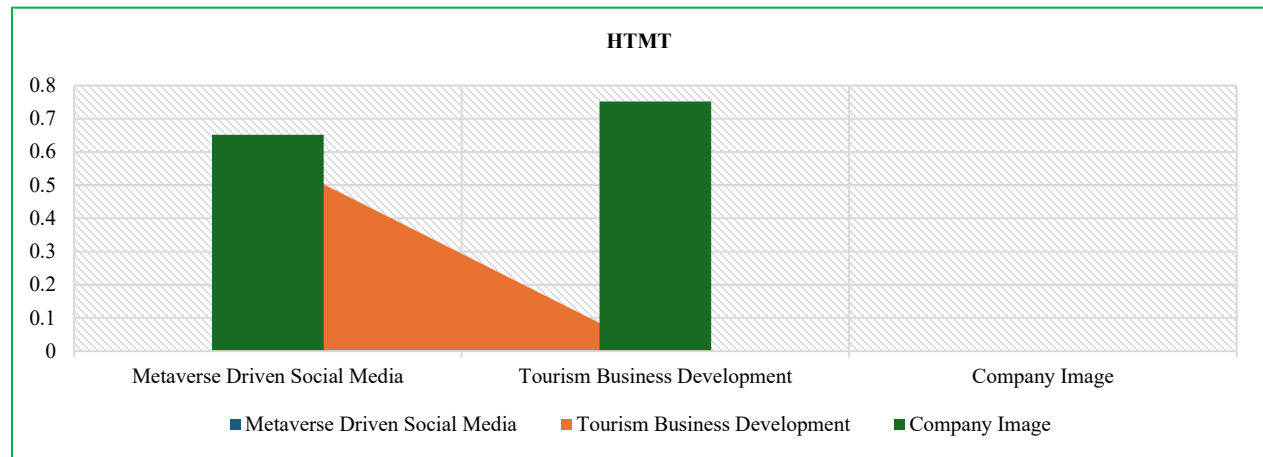| Variables	Items	Loadings
Metaverse Driven Social Media	Metaverse is important for social media.	0.832
Composite Reliability = 0.855	Metaverse can enhance the operations of social media	0.789
AVE = 0.601	Metaverse technology can increase the effectiveness of social media.	0.821
Company Image	The company image is important for tourism activities.	0.785
Composite Reliability = 0.823	The company image can attract tourists.	0.765
AVE = 0.535	The company image increases tourism activities.	0.875
Tourism Business Development	Tourists are increasing gradually.	0.911
Composite Reliability = 0.789	Business operations are increasing gradually.	0.874
AVE = 0.513	Business activities of tourism are increasing.	0.758

Figure 5: Factor Loadings.

Table 4: Discriminant Validity.

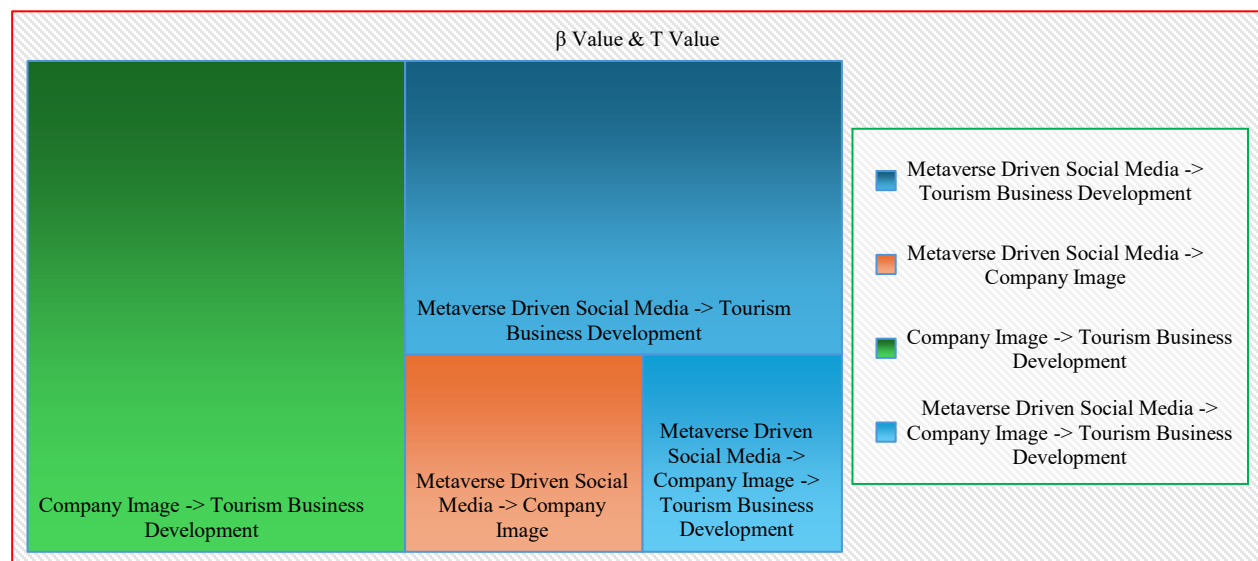|	**Metaverse Driven Social Media**	**Tourism Business Development**	**Company Image**
Metaverse Driven Social Media			
Tourism Business Development	0.587		
Company Image	0.652	0.752	

Figure 6: HTMT.

Results of the study were generated by using structural model (Hair et al., 2011; Hair Jr et al., 2016; Hair Jr et al., 2017; Yusif et al., 2020). In structural model, this study considered the significance of the relationship. Significance was addressed by using t-value statistics. Furthermore, the nature of the relationship (negative or positive) was considered through beta value. In this part of analysis, the effect of metaverse driven social media on tourism business development and company image was considered. Furthermore, the effect of company image was considered on tourism business development. Results are shown in Table 5 and Figure 7. It is found that metaverse driven social media has positive effect on tourism business development. Furthermore, the positive effect of the company image was found on tourism business development. Additionally, the mediation effect of company image between metaverse driven social media and tourism business development was found significant.

Table 5: Path Analysis.

Relationship	Beta Value	T-value	Decision
Metaverse Driven Social Media -> Tourism Business Development	0.245	5.211	Supported
Metaverse Driven Social Media -> Company Image	0.0895	0.215	Supported
Company Image -> Tourism Business Development	0.354	0.852	Supported
Metaverse Driven Social Media -> Company Image -> Tourism Business Development	0.0751	1.999	Supported

Figure 7: Path Analysis (Beta Value and T-value).

Discussion and Conclusion

Despite the growing importance of metaverse in all fields and extensive focus of previous studies, metaverse tourism is ignored by previous studies. Little intention has been paid by the researchers to address the connection between metaverse and tourism activities, particularly in Russia. To address this gap, objective of this study is to examine the role of metaverse driven social media in tourism business development along with the mediating role of company image in Russia.

Three hypotheses were proposed to examine the relationship between metaverse driven social media, company image and business development. Three hypotheses were based on direct effect and one was based on indirect effect. Social media provides a great degree of flexibility in terms of how and when communications are distributed. Social media draws a varied audience due to its versatility (Basri, 2020; Saeidi et al., 2015). As a result, modern organizations are starting to concentrate on it. It is progressively widespread at healthcare conferences as well as functions as a knowledge-sharing Centre. Another significant component in the transition is the rapid and widespread transmission of information to a substantial audience through social media. Social media programs such as Facebook, Twitter, and WhatsApp, among others, may help organizations in reaching a broad range of consumers as well as reaching a wide range of communication ambitions and objectives (Alsanie, 2015).

The social media metaverse will take user interactions on existing platforms beyond chats and calls which can help the tourists in different ways. Just like in the real world, excluding in a 3D space where everyone can intermingle, share ideas, work, shop, play, or do anything together. Metaverse-driven social media can be the considerably enhance business improvement by creating immersive and communicating environments for customer engagement. This new dimension permits businesses to showcase products, host virtual events, and offer identified experiences (Falchuk et al., 2018), fostering concentrated connections with customers. The metaverse also provides unique marketing prospects, driving innovation as well as expanding market reach.

According to this study, metaverse driven social media technology can influence positively the image of the company. Therefore, company reputation can be increased leading to increase in tourism activities in Russia. Additionally, an increase in company image can increase business development in the domine of tourism. Therefore, company image can play a mediating role between metaverse driven social media and business development. Although social media is considered by previous studies in relation to tourism activities (Amaral & Rodrigues, 2020; Chan & Guillet, 2011; Kim et al., 2017; Martínez-Pérez et al., 2016; Nguyen et al., 2017; Radwan & Radwan, 2016), however, it was rarely addressed in relation to the metaverse technology.

The advent of the Metaverse, a virtual world in which users may interact with one another and digital objects in a shared or private virtual environment, is triggering the significant shift in social media. With the increasing recognition of virtual as well as augmented reality technology, the Metaverse is swiftly altering reality. Especially in the field of social media and metaverse, it has vital potential to influence the traditional structure and convert it into a modern structure. It has the potential to significantly impact how people engage with one another and spend content on a regular basis. Therefore, metaverse driven social media has the potential to enhance tourism business development in Russia.

Implications, Limitations and Future Directions

Theoretically, this study has vital importance because this study covered the important literature gap. Previous studies have not addressed business promotion with the help of metaverse driven social media. Although social media is considered by previous studies in relation to tourism activities, however, it was rarely addressed in relation to the metaverse technology. Thus, this study filled an important gap in the literature which started a new debate in the field of social media enhanced metaverse tourism in Russia. Practically, results of the study are helpful for the tourism development companies in Russia to increase tourism business activities by implementing the metaverse technology in tourism activities. This study has not addressed how metaverse can be implemented to the tourism industry. Future studies should include the variables which can demonstrate how metaverse can be employed in tourism industry. Interviews of experts related to social media and tourism should be included to approach the better findings.

CRediT Authorship Contribution Statement

Parsegova Anna: Conceptualization, Data curation, Formal analysis, Funding acquisition, Investigation, Methodology, Project administration. Koriagina Anna: Resources, Software, Supervision, Validation, Visualization, Writing – original draft, Writing – review & editing.

Declaration of Competing Interest

We confirm that we have no financial or personal conflicts of interest associated with this work.

Ethical Statement

The research complied with ethical principles, and no approval was required due to the absence of human biological materials.

Data Availability Statement

Data used in this study are accessible upon reasonable

request by contacting the corresponding author.

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