

THE SILK ROAD AT BUKHARA (UZBEKISTAN). ENHANCING HERITAGE AND LOCAL DEVELOPMENT

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Abstract: At present, four historical centers in Uzbekistan are included in the list of World Cultural Centers, which are located in different regions. Each center had its particular significance on the Silk Road (SR) development by the splendorous time when they were built and those historical buildings have been preserved till now. In particular, 264 historical buildings have been preserved in the historical center of Bukhara, some of which are still in use. It besides has the great potential to attract many foreign and local tourists. However, there is a low number of visitors. Therefore, three historical buildings located in the heart of the Bukhara Historical Center were observed and studied as a result of field research. The three historic buildings – the Kalyan Minaret, the Kalyan Mosque, and the Mir Arab Madrasah – were surveyed, the available literature was analyzed, and a complete inventory works of the facilities was prepared. Following the relevant analyzes, the increase and development of their tourism potential are demonstrated through the SWOT analysis. It is concluded that all three buildings are in good condition and are located in an center on the SR, which has an opportunity to increase after the applying enhancement tools.

Keywords: Silk Road resources, enhancement, local development, built heritage

1. Introduction.

The Silk Road (SR) trade played a significant role in the development of the civilizations of Asia and Europe opening long-distance political and economic relations between the civilizations. Through SR many other goods and ideas were exchanged, including religions, syncretic philosophies, sciences, and technologies like paper and gunpowder. Besides, to economic trade, the SR was a cross point route for cultural trade among the civilizations along with its network (Jerry Bentley, 1993).

This historical road throughout Uzbekistan is presented at many cities such as Bukhara, Samarkand and Khiva. So far, four cultural centers: Itchan Kala (1990), the Historic Center of

Bukhara (1993), the Historic Center of Shakhrisyabz (2000), Samarkand as a Crossroad of Cultures (2001), and the natural site of Western Tien-Shan, 2016 – in the territory of Uzbekistan had been included in the list of World Heritage list by UNESCO under the ii, iv, vi, criteria (UNESCO, 2020). This fact gives a general idea about the importance of cultures and heritage in this country not only because of its contribution to trade but culture, arts and heritage.

From a geographical perspective, Uzbekistan and its strategic position in Central Asia have been taken advantage by many countries alongside history, especially for commercial purposes. This is the reason why the SR starting in China passed through many central cities of Uzbekistan and, as a result, science, culture, education, the arts, and trade flourished in these cities and centers with a rich history formed and inherited to serve the present generation.

One proves that the historical buildings belong from ten till nineteen century attracting foreign visitors which has to contribute to enhancing local development and tourism will be part of this contribution. According to the State Committee for Tourism Development of Uzbekistan, 6.748 thousand tourists visited Uzbekistan and exported tourism services worth 1.313 million \$ in 2019 (Tourism development committee of Uzbekistan, 2019). The main tourist destinations are Bukhara, Samarkand, Khiva, Tashkent and Fergana Valley.

The existing historical sites in these cities are located on the SR and are considered socio-economically significant. One of such cultural heritage is the buildings of "Poyi Kalyan Ensemble" located in Bukhara. There are three buildings in the ensemble, Poyi Kalyan Minaret (1127-1129), Kalyan Mosque (1514), Mir Arab Madrassah (1526-1537), which are still used for their original purpose. This paper explores, evaluates the current situation, diagnoses the tourism potential of Poyi Kalyan Ensemble (three objects) and its contribution to local development.

2. The SR at Bukhara and its relationship with the UNESCO World Heritage List

The UNESCO declared the city of Bukhara as a World Heritage Site in 1993. The reasons that motivate its inclusion at the World Heritage List responded to the big extension of the city, the area of the historical center is 216 hectares, with a buffer area of 339 hectares (Figure 1) and the existence of more than 70 religious buildings devoted to Islam including all kinds of architectural monuments related to oriental architecture.

The Historic Centre of Bukhara is more than two thousand years old. It is best examples of well-conserved Islamic cities of Central Asia of the 10th to 17th centuries, with an urban fabric that has remained mostly intact. Bukhara was long an important economic and cultural center in Central Asia. The ancient Central Asian city functioned as a major center of Islamic culture for many periods and became a leading cultural center of the Caliphate in the 8th century (UNESCO, 2020).



Figure 1. Historic centre of Bukhara – Old city (WHC, 1993). Taken from UNESCO official webpage

The old town bears witness to the urbanism and architecture of the Sheibani period of Uzbek rule, from the early 16th century onwards. From the 11th century Karakhanid period comes the impressive Kalyan Minaret, a masterpiece of decoration in brick. With the advent of the Sheibanids came some of the most prominent buildings of Bukhara: the Poi-Kalyan group (ensemble) (UNESCO, 2020). The central cities along the SR are rich in cultural and historical resources (Camilo Lois R, Del Rio Araujo, M.L, Kim A, 2016). Cities united along the SR combine culture, history, and art in addition to power and wealth. The SR was a crucial factor in the development of religious centers. Technology, art, language, social beliefs, and religious knowledge spread throughout the SR (Tim Williams, 2015). The rich history and preserved resources are an essential source of attracting foreign and domestic tourists today. The development of tourism depends not only on the material wealth of the region but also on its rich history and culture (Gulnara Ismagilova, Lenar Safiullin, Ilshat Gafurov, 2015). Bukhara is not only a city with a rich history on the SR, but also has a deep significance in Islam and the Islam world. Very famous Islamic scholars, philosophers lived and learned in this soil. Evidence of this can be seen in the fact that Bukhara was chosen as the capital of Islamic culture in 2020. Islamic Educational, Scientific and Cultural Organization (ISESCO) had announced and decided on its ninth conference with member states (ISESCO, 2019).

3. SR built heritages in Bukhara.

The SR was a linkage of trade roads that connected the east and west, and was central to the economic, cultural, political, and religious interactions between these regions from the 2nd century BCE to the 18th century (Elisseff Vadime, 2001). This means that the SR covered many countries. That is why today many tourism destinations connect their tourism products with the SR and carry out propaganda and advertising work under the brand "SR". As a result, the distinctive features of the

regions are confused or invisible (Camilo Lois R, Del Rio Araujo, M.L, Kim A, 2016). Researchers Camilo Lois and Del Río Araujo have expressed the following views: we might say that visitors to Uzbekistan are mainly interested in historical and cultural tourism. This presumption can be explained by the presence of some of the most ancient cities in the world and by the fact that the country was the hub of the Great SR, plus the fantastic architectural masterpieces of different historical periods of Central Asian development.

According to the resolution of the Cabinet of Ministers of the Republic of Uzbekistan dated October 4, 2019 No 846, the total number of real estate objects of tangible cultural heritage in the Republic is 8208. Of these, the number of archaeological monuments is 4748, the number of architectural monuments is 2250, the number of monumental art monuments is 678, and the number of monuments is 532. In particular, in the Bukhara region, as mentioned above, there are 829 archaeological and architectural monuments, ancient objects that testify to history and ancient culture (Cabinet of Ministers of Uzbekistan, 2019). Of these, 264 built heritages are currently listed in the UNESCO-listed area (Figure 1) in the Old City of Bukhara. These facilities are divided into two categories (republican, local) in terms of protection and management. Sixty-five objects are Republican, 199 are local objects, 97 are private, and 167 are state-owned.

The above figures show that Bukhara has a high potential for attracting tourists that overall could affect economic and social development. However, the lack of empirical research (Camilo Lois R, Del Rio Araujo, M.L, Kim A, 2016) and the incomplete assessment of the tourist potential of existing cultural heritage sites limit the possibility of making full use of the existing potential.

3.1. Type of built heritage in the historic center (Old city) of Bukhara

Archaeological excavations of Bukhara began in the late 19th and early 20th centuries. Information about the fact that Bukhara is more than 4,000 years old has been recorded in Narshahi's (10th century) book "History of Bukhara" (Shavkat Bobojonov, 2017). As a result of archaeological research and taking into account the importance of Bukhara in the world the 28th session of the UNESCO General Conference in Paris in October-November (1995) decided to celebrate the 2,500th anniversary of Bukhara worldwide (Cabinet of Ministers of Uzbekistan, 1996). Following this decision, the condition of historical buildings in Bukhara was partly restored, depending on its historical, cultural importance. Currently, there are 264 historical construction sites in the UNESCO-listed historical part of Bukhara, as mentioned in the previous paragraph. Of these buildings, 31 are madrassas, 43 are mosques, 14 are caravanserais, 101 are old, ancient courtyards and others.

The word madrasa is defined in the Oxford Dictionary as follows the Arabic expression for any type of scholastic institution, secular or religious (of any religion), whether for fundamental instruction or advanced learning. The word is variously converted madrasah, medresa, madrassa, madraza, medrese, etc. The fact that 31 madrassas have survived on an area of 206 hectares is a testament to the development of religious and secular science in Bukhara. Correspondingly, the presence of 43 mosques and 14 surviving caravanserais allows us to understand that Bukhara has long been a center of religion, trade and culture. Caravanserais express the stream of commerce, information and people through the network of trade roads covering Asia, North Africa and Southeast Europe, most outstandingly the SR (Dictionary.com, 2020).

4. Methodology

The results of this study were formulated using qualitative and empirical methods. The necessary information was collected and analyzed in the following sequence of steps: a) the available secondary data about the heritage; b) the objects were studied directly and compared with the information provided by their current status and historical sources; c) the current condition of the object has been studied regarding its authenticity, attractiveness are studied and analyzed; d) amenities, environment, infrastructure, which are important in the visit of tourists, are analyzed; e) As a result of empirical research conclusions and recommendations are developed.

In order to collect and compile information about the sites, inventory sheet from Viñals et al. (2017) has been followed. The inventory sheet consists of 13 sections, which provide a comprehensive overview of the built heritage. Items 9 and 10 of the inventory sheet serve to assess the tourist value of the object, which studies the aspects of attractiveness, resistance, availability, on-site accessibility, feasibility, educational values, the functionality of the built heritage. The paper also analyzes the SWOT of each facility in the process of assessing the tourist value. As a result of research - current state of facilities and possibilities of their maintenance, management and economic and social benefits were considered and conclusions were drawn.

Based on the above, empirical research was conducted to study the Poyi Kalon ensemble heritages of Bukhara: Kalyan Minaret, Kalyan Mosque, Mir Arab Madrassah which is used today for its original purpose and has the potential to attract many tourists.

4.1. An ensemble of Poyi Kalyan diagnosis

Poi Kalyan (Uzbek – Poi Kalon ansambli) is an architectural ensemble located at the foot of the Kalyan minaret. The complex consists of three structures built in the XII-XVI centuries: the Kalyan Minaret, the Kalyan Mosque and the Miri Arab Madrasah. Poi Kalyan is located on the ceremonial Registan square and is the central architectural ensemble of Bukhara.

A mosque with a minaret has been in Bukhara since the conquest of Transoxania by the Arabs in VIII. There was a mosque at the foot of the city fortress. In the XII century, Arslan Khan conceived a grandiose reorganization of the city: he dismantled the city palace, recreated the fortress, which had turned into ruins by that time and moved the city mosque. A new mosque built about one hundred and fifty meters southeast of the fortress, and a minaret erected at it. The Minaret was, according to Narshakhi's (10 century) testimony, "beautifully made" (Ремпель Л.И., 1978), but it was made fragile: immediately after the construction completed, the Minaret falls on the Mosque and destroys two-thirds of it. In 1121 a new mosque was completed, and in 1127 - a minaret that has survived to this day.

On the site of Arslan Khan mosque, current Kalyan mosque erected in the 15th century, its decoration completed in 1514, the inscription on the facade of the building says about this. The ensemble takes its modern form in 1536 when Ubaydulla Khan builds a madrasah on the advice of his confidant Miri Arab Yemensky. After the death of Miri Arab madrasah named in his honour. The Poyi Kalyan ensemble consists of 3 historic buildings (Figure 2), which today are located in Bukhara. It is the pride, the heart, of Bukhara.



**Figure 2. View of Poyi Kalyan Ensemble and square: Mir Arab on the left, Kalyan mosque on the right
– Source: the authors**

4.1.1 Kalyan Minaret

The Kalyan Minaret, also known as the Bukhara Minaret (Figure 3) is the Minaret of the Friday mosque in the historical center of Bukhara, built-in 1127 by the Karakhanid Arslan Khan (1102-1130), famous for his urban planning activities. The Kalyan Minaret is a symbol of Bukhara, the tallest (46.5 m) and one of the oldest architectural monuments in the city, one of the most impressive structures of this kind in the Muslim East.

The Kalyan Minaret was erected at the cathedral mosque during the Karakhanid Arslan Khan, under the guidance of the master architect Bako. It originally had a wooden crowning lantern. Soon after the completion of the construction, the Minaret fell for some unknown reason. It was rebuilt again in 1127, this time entirely of baked bricks. The Minaret has been preserved almost unchanged.

At one time, the Minaret performed several functions: the Tower at the Mosque, from where the call to prayer (azan) was chanted (calling Muslims to prayer), sentinel tower; a lighthouse visible far outside the city. In 1920, during the assault on Bukhara by the Red Army, the Minaret suffered from targeted artillery fire – a shell demolished almost half of the lantern, which was soon restored, except for the two upper tiers of the crowning cornice. Since then, the cornice consists of three tiers of stalactites and its height has changed accordingly, which turned out to be on the general appearance of the Minaret. In 1924, a small part of the wall and the muqarnas of the Minaret were restored. In 1960, masters repaired and strengthened the underground part (foundation and base) of the Minaret. In 1997, for the 2500th anniversary of Bukhara, the Minaret was thoroughly reconstructed and restored by the best craftsmen.



Figure 3. View of the Kalyan Minaret – Source: the authors

Analysis of the tourism value of the Kalyan Minaret (1127-1129)

Attributes of the sheet (9 th section) ↓	Strength (S)	Weakness (W)	Opportunity (O)	Threats (T)
Attractiveness	It is beautiful, attractive; It is unique in the region; The fact that the object is located in the old town, along with ancient buildings, adds to the charm of the ensemble; It is located on the crossroad of SR; Designated by UNESCO.	Competition with existing heritages in the cities along the SR. For example, Islam-khoja Minaret in Khiva (1908-1910)	Using a variety of illuminations to enhance the ensemble's appearance that attract visitors.	The sale of various souvenirs around and near the ensemble hide the attractiveness; Occasional construction works in restaurants, hotels, apartments located around the complex.

Resistance	The buildings are well maintained on the basis of repeated restoration work. Restoration will be carried out on the recommendation of UNESCO in 1996-1997.	There are no clear standards for the restoration and maintenance of buildings.	Strengthening buildings on the basis of UNESCO assistance programs; Use modern technology to encompass the life of built heritage.	Salinization in the Bukhara region; (Figure 6) the foundation of Minaret Kalyan; The approach of groundwater to the surface; Strong wind and rain from the south.
Availability	The Kalyan Minaret is located in the city center; Public transportation runs through all areas around the old city; The nearest bus stop is 500 meters away; The international airport is 5.9 km away and takes 15-20 minutes by car.	The quality of public transport services is satisfactory (vehicles are not modern; Difficulty making visits from the capital and other regions; The condition of roads for visits from the regions is not good; The regional railway is 14.5 km long.	The increasing number of tourist vehicles for tourists - urban roads are suitable for this; Provide information about public transport in different languages at bus stops (stations, the direction of movement, distance).	
On-Site accessibility	It is easy to see and going around the Minaret.	There are no facilities for the disabled. It is challenging to make their visit inside the heritage;	Provide access to the top of the Kalon Minaret (46.5 meters) and benefit economically from it; Establish amenities that allow tourists to see the old city and modern Bukhara above the Bukhara.	The increase in the number of tourists during pick season affects the facilities;
Feasibility	The objects are part of UNESCO and are state property and well protected;	Lack of a clear, planned roadmap for the repair and restoration of facilities;	Opportunity to organize tours, individual visits to buildings.	Establishment of many hotels and entertainment centers on the

	It is managed by the Bukhara Regional Department of Cultural Heritage.	There is no charge for viewing and accessing facilities, which in turn reduces economic effectiveness; Visitor statistics are not maintained.		way to the facilities and in the old city area; The increase in additional services is increasing population density - which in turn affects the environment and buildings.
Educational values	Information about the Kalyan Minaret is given in the 10th century Narshakhi's book named "History of Bukhara"; Also, data were created during archaeological excavations during the Soviet era.	The local population has little knowledge of the history and significance of the Minaret; There are no particular web pages for the objects – there are different information in different webpages; There are few number of books in Uzbek language which possible to get all information about the Minaret.	Based on the information, it is possible to prepare various brochures, prospectuses, booklets for tourists; Create a database based on accurate and reliable data that needs to use guides from that.	From an economic point of view, archaeological work is expensive; The lack of digitalization of existing literature increases the risk of their loss.
Functionality	Using electronic amplifiers, the Minaret is being used for its one original purpose, i.e. Muslims are chanting the for prayer. (can hear this voice five times a day).		By staging theatrical scenes depicting historical periods possible to capture tourists in real history and show its charm; Allow visitors to the top for an amount of money.	Lack of appreciation by the local community.

Table 1. Developed by the authors as a result of research.

4.1.2. Mir Arab madrassa

Miri Arab Madrasah is an Islamic educational, spiritual, educational and memorial and cult building of the 16th century in Bukhara. In 1993, among other sights of Bukhara, it was included in the UNESCO World Heritage List in Uzbekistan. "Miri Arab" was founded during the reign of the Uzbek Shibanid dynasty in the 16th century. It was one of the major religious centers of the Bukhara Khanate. After the capture of Bukhara by the Red Army in 1920, the madrasah abandoned and closed in the late 1920s, and the clergy were repressed. The madrasah was reopened only in 1946 at the initiative of the chairman of the SADUM (Spiritual Administration of Muslims of Central Asia and Kazakhstan) Sheikh Eshon Babakhan, and until 1989 it remained the only functioning madrasah in the USSR.



Figure 4. Main entrance gate of the and general internal view of Madrassah (north side) – Source: the authors

The exact date of the start of the building of the madrasah is controversial. For a long time, the historiography of the Soviet period was dominated by a version based on the conclusions of the famous archaeologists and orientalist scholars M.E. Masson and G.A. Pugachenkova, according to which the construction of the building was carried out in the period from 1530 to 1535/1536. However, recent research in this area has shifted the construction start date by almost two decades earlier than this date. The Madrassah was one of the centers of science on the SR. In the madrasa, secular knowledge was imparted along with religious knowledge. The madrasa is still home to the Mir Arab Islam institute, where students receive religious instruction. This madrasah is fully operational. Even the dormitories on the top floor of the madrasah still perform the same function. While the Madrassah produced some of the most famous people in the Islamic world, those who have studied here are still widely recognized. This increases its role and attractiveness in public life.

Analysis of the tourism value of the Mir Arab Madrassah

Attributes of the sheet (9 th section) ↓	Strength (S)	Weakness (W)	Opportunity (O)	Threats (T)
Attractiveness	It is beautiful, attractive; It is the most prominent and most historical Madrassah in the region; The fact that the object is located in the old town, along with ancient buildings, adds to the charm of the ensemble; It is located on the crossroad of SR; Designated by UNESCO	Competition with existing heritages in the cities along the SR. For example, Madrassah that is located along the SR	Using a variety of illuminations to enhance the ensemble's appearance.	The sale of various souvenirs around and in front of the ensemble hide the attractiveness; Occasional construction works in restaurants, hotels, apartments located around the complex.
Resistance	The historical building well maintained on the basis of repeated restoration work. Last restoration work held in 1998.	There are no clear standards and data for the restoration and maintenance of buildings.	Strengthening buildings based on UNESCO assistance programs; Use modern technology to encompass the life of built heritage.	Salinization in the Bukhara region; The approach of groundwater to the surface of the ground; Strong wind and rain that comes from the south.
Availability	The Madrassah is located in the city center; Public transportation runs through all areas around the old city; The nearest bus stop is 500 meters away; The international airport is 5.9 km away and takes 15-20 minutes by car.	The quality of public transport services is satisfactory (vehicles are not modern; Difficulty making visits from the capital and other regions; The condition of roads for visits from the regions is not good; The regional railway is 14.5 km long.	The increasing number of tourist vehicles for tourists - urban roads are suitable for this; Provide information on public transport in different languages at bus stops (stations, the direction of movement, distance).	

On-Site accessibility	All parts of the buildings have been preserved; All tourists could (local, foreign) visit.	There are no facilities for the disabled. It is challenging to make their visit inside the heritages; Special permission is required to organize an excursion into the Mir Arab Madrassah that it demands by Bukhara Islam institute. Visitors could see inside Madrassah only by looking in front of the gates of the Madrassah.	Organizing and permitting scheduled tours in some parts of the day and weekends.	The increase in the number of tourists during pick season affects the facility.
Feasibility	The objects are part of UNESCO and are state property, well-protected; It is managed by the Bukhara Regional Department of Cultural Heritage.	Lack of a clear, planned roadmap for the repair and restoration of facilities; There is no charge for viewing and accessing facilities, which in turn reduces economic effectiveness; Tourist visit statistics are not maintained; Mir Arab Madrasah was leased to Bukhara Islamic Institute free of charge at zero cost.	Opportunity to organize tours, individual visits to the building.	Establishment of many hotels and entertainment centers on the way to the facilities and in the old city area; The increase in additional services is increasing population density - which in turn affects the environment and building.

Educational values	Data were created during archaeological excavations during the Soviet era; Some information are gathered before creating the cadastral plan of the Madrassah.	The local population has little knowledge of the history and significance of the site; There are no particular web pages for the objects – there are different information in different webpages or not full.	Based on the information, it is possible to prepare various brochures, prospectuses, booklets for tourists; Create a database based on accurate and reliable data that needs to use guides from that.	From an economic point of view, archaeological work is expensive; The lack of digitalization of existing literature increases the risk of their loss.
Functionality	Madrassah is used for it is an original purpose that several students are studying religious knowledge in Madrassah. Furthermore, the second floor of the Madrassah is using as a dormitory for students who come from a far distance.	No statistical dates about visitors.	By staging theatrical scenes depicting historical periods on the in the madrassah square that possible to capture tourists in real history and show its charm.	Bukhara Islamic institute should appreciate the building and visitors who want to see the heritage.

Table 2. Developed by the authors as a result of research.

4.1.3 Kalyan Mosque

The Kalyan Mosque (Uzbek Masjidi Kalon - "Great Mosque") is the main Friday mosque in Bukhara. The second-largest, after Bibi-Khanum, of the Juma mosques preserved in Central Asia. It has a capacity of up to 12,000 people at a time. According to archaeological research, under the present-day Mosque are the remains of two more. The lower one is the building of Arslan-khan (1102-1130).

The Arslan-khan mosque had the same dimensions as the existing building. It was the largest Mosque in Maverannahr before the construction of the Bibi-Khanum mosque in Samarkand in 1399-1404. The second Mosque, from the first quarter to the middle of the XIV century, was of the same type, but entirely made of brick. The third, now existing, the building of the Mosque was built under the Timurids, it is believed, during the reign of Mirzo Ulugbek (1409-1449). In 1514, during the reign of the representative of the Uzbek dynasty of the Sheibanids, Ubaydulla Khan, a significant renovation of the Kalyan mosque was undertaken: the facade was overhauled and decorated with majolica and tiles. The perimeter of the Mosque (130x80 meters) has a traditional rectangular plan with four ayvans.



Figure 5. Inside the Kalon Mosque, view from the west part and monumental decorative pylons –
Source: the authors

The checkpoint, the eastern ayvan at the entrance is decorated with an external portal, facing the Poi-Kalyan square, the internal portal facing the courtyard of the Mosque. The support of the ceiling for the vaulted galleries with 288 domes, bypassing the courtyard of the Mosque along the perimeter, is 208 monumental pylons. The longitudinal axis of the courtyard ends with a maksura - a portal-domed volume of a building with a cruciform hall, above which a massive blue dome on a mosaic drum rises. Two large blue domes mark the location of the prayer niche. According to the Decree of the First President of the Republic of Uzbekistan No. 207-May 1 22, 1996, the Kalyan Mosque was repaired, a 100-kilogram gold colour dome is mounted on the dome of the Mosque, more than 3,700 originals of the blue tiles in the dome have been preserved, and about 1,600 have been replaced. Two hundred eighty-eight small domes were repaired. The foundations of 239 columns were strengthened, 40 columns were restored, more than 300 builders worked on these repairs (Shavkat Bobojonov, 2017). The Mosque is very majestic and is used by the locals for its function. Many people visit this Mosque, especially on Islamic holidays. Based on the data collected and studied as a result of empirical research, the following table was formed.

Analysis of the tourism value of the Kalyan Mosque

Attributes of the sheet (9th section) ↓	Strength (S)	Weakness (W)	Opportunity (O)	Threats (T)
Attractiveness	Kalyan mosque is attractive and large one in Bukhara; It is unique in the region by its capacity; The fact that the object is located in the old town, along with ancient buildings, adds to the charm to the ensemble; It is located on the crossroad of SR;	Competition with existing heritages in the cities along the SR such as Bibikhanum madrassah in Samarkand and etc.	Using a variety of illuminations to enhance the Mosque appearance.	The sale of various souvenirs around and in front of the ensemble hide the attractiveness; Occasional construction works in restaurants, hotels, apartments located around the complex.

	Designated by UNESCO.			
Resistance	The building is well maintained based on repeated restoration work – last restoration work held in 1996.	There are no clear standards and time table for the restoration and maintenance of the building.	Strengthening buildings based on UNESCO assistance programs; Use modern technology to encompass the life of built heritage.	Salinization in the Bukhara region; The approach of groundwater to the surface; Lack of appreciation by local people; Strong wind and rain.
Availability	The ensemble is located in the city center; Public transportation runs through all areas around the old city; The nearest bus stop is 500 meters away; The international airport is 5.9 km away and takes 15-20 minutes by car.	The quality of public transport services is satisfactory (vehicles are not modern; Difficulty making visits from the capital and other regions; The condition of roads for visits from the regions is not good; The regional railway is 14.5 km long; Around the heritage people park their cars, it affects the movement of pedestrians and visitors (figure 8).	The increasing number of tourist vehicles for tourists - urban roads are suitable for this; Provide information about public transport in different languages at bus stops (stations, the direction of movement, distance).	

On-Site accessibility	All parts of the buildings have been preserved; All tourists (local, foreign) able to visit.	There are no facilities for the disabled. It is challenging to make their visit inside the heritages.	Opening the eastern gate of the Mosque could make an opportunity for disabled people to enter.	The increase in the number of tourists during pick season affects the facilities.
Feasibility	The objects are part of UNESCO and are state property and well protected; It is managed by the Bukhara Regional Department of Cultural Heritage.	Lack of a clear, planned roadmap for the repair and restoration of the facility; There is no charge for entering the Mosque and accessing facilities, which in turn reduces economic effectiveness; Tourist visit statistics are not maintained.	Opportunity to organize tours, individual visits to buildings.	Establishment of many hotels and entertainment centers on the way to the facilities and in the old city area; The increase in additional services is increasing population density - which in turn affects the environment and buildings.
Educational values	Data were created during archaeological excavations during the Soviet era; During creating a cadastral map of the Mosque information gathered in the Russian language in 2014.	The local population has little knowledge of the history and significance of this site; There are no particular web pages for the objects – there are different information in different webpages.	Based on the information, it is possible to prepare various brochures, prospectuses, booklets for tourists; Create a database based on accurate and reliable data that needs to use guides from that; Publishing books and other materials in a different language could bring some income and new, full knowledge for local and foreign visitors.	From an economic point of view, archaeological work is expensive; The lack of digitalization of existing literature increases the risk of their loss.

Functionality	The Mosque is used for their original purpose; Local people visit here for prayer; Mosque considered one of attractive place and open for visitors as a cultural tourism facility.	Statistical data does not exist to the objects;		
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Table 3. Developed by the authors as a result of research.

5. Results

By empirical research has studied the current state, history and originality of the Poyi Kalyan ensemble buildings. At the same time, the primary purpose was to analyze the opportunities of the three-building of the ensemble to attract tourists and their tourist value. The analyzes were performed in the form of a SWOT. Built heritages assessment sheet developed by Maria Jose Vinals and Lola Teruel Serrano were used to assess the value of the facilities from a tourism perspective. It mainly evaluates the attractiveness, resistance, availability, on-site accessibility, feasibility, educational values, the functionality in the above tables.

Also, the existing tourist services around the ensemble were analyzed, namely:

- There are more than six hotels around the complex 200-300 meters away;
- Nowadays almost 100 hotels, hostels, national houses which are providing accommodation in the old city are;
- In front of the ensemble on the north side have an open-air restaurant on the top floor of the house. Visitors have the opportunity to taste the national meal and feel the beauty of Poyi Kalyan. The restaurant has a capacity of about 50 people;
- During the season, the area around the complex is crowded for the sale of various souvenirs.

During the research, a visit was made to each facility and the state of their preservation and storage was analyzed. Almost three buildings can be seen in Bukhara as a result of salinization. Continuation of this situation is likely to cause severe damage to the foundations of buildings and ultimately to cultural heritage sites (Figure 6).



Figure 6. View of Salinity effect to the Kalyan Minaret fundament – Source: the authors



Figure 7. Kalyan Mosque, Right-hand pylons, affect of humidity to the walls and its decoration – Source: the authors



Figure 8. Poyi Kalyan ensemble, cars of locals and vendors – Source: the authors

6. Discussion and conclusion.

It should be noted that all the heritage sites of construction in the historical center of Bukhara today provide information about the SR and the importance of Bukhara in it. So far, historians and other scholars have studied the historical and architectural significance of these objects. This empirical study, for the first time, assesses the tourism potential of these cultural facilities and the opportunities to enhance it.

According to the above information, the buildings 1127 (Kalyan Minaret), 1514 (Kalyan Mosque), 1530-1536 (Mir Arab Madrassah) were built and saw different times. Therefore, it is advisable to develop enhancement measures with an individual approach to each object.

The facilities are state-owned and are well-protected. However, there are no measures or standards for their planned restoration. Therefore, it is essential to use ways to prevent possible damage to buildings in the first place when tourism improvement measures applied. For this, firstly, must develop a particular program, road map, plan for the protection and preservation of buildings. Precise planned work for each building should be carried out based on clearly developed standards. Furthermore, along with the human factor the natural environment is also damaging buildings such as salinity, groundwater level and seismicity. Once this task is fully implemented, it is advisable to focus on the next precautionary measures.

Roads outside the city and from different regions need to be improved because of their current condition not good. It is necessary to take measures to install information about the movement of urban public transport at the stations, create a special webpage for online access about transport facilities, to hold special masterclass, lessons for drivers who work in the public sector for increasing their service behaviour and improve language skills.

Around the ensemble, souvenir vendors, restaurant staff, hotel staff park their cars (Figure 8). By limiting this situation, the attractiveness and historicity of the surroundings of the facilities can be improved. Instead of it, there is a parking place around 300 meters away from objects that repairs based on high standards will eliminate the problems associated with cars.

Many hotels are being opened or old private homes are changing to accommodation in the Old Town area taking advantage of government subsidies. The changes taking place in these hotels are affecting the city's historicity. The new but ancient-style entertainment venues built around the Poi Kalyan ensemble are losing the historical significance of the area. Steps must be taken to preserve the historicity.

Monuments have been studied from a scientific point of view. It is imperative to create information about their importance, legend and interest (book, booklet, prospect, website) and to promote it in Uzbekistan and around the world. It is recommended to carry out propaganda work among the locals about their value in order to arouse good attention and respect for the monuments by the local people. Historical data needs to be digitized and preserved in the future, and materials for tour guides need to be developed based on data collected during scientific research.

It is crucial to support the special courses for all staff in all areas, namely Kalyan Minaret, Mir Arab Madrassah, Kalyan Mosque for improving the quality of tourism services.

At present, all three facilities belong to the Bukhara Department of Cultural Heritage and the Mir Arab Madrasah is leased free of charge to Bukhara Islam institute. Admission to Mir Arab Madrasah (Tourists are introduced only by standing at the gate. The administration of the institute does not allow access) and Kalyan Mosque is free of charge. In our opinion, paid access to the facilities will result in

additional workplaces and economic benefits. It will also be possible to raise funds for the protection of the facility.

It is necessary to register tourist visits to the facilities, otherwise, the massive flow of tourists may damage the buildings. Also, the implement of ensemble enhancement measures through visitor statistics will increase the effectiveness of the plan.

These buildings play an essential role in promoting Bukhara as the capital of Islamic culture to the whole Islamic world. According to the Committee on Tourism of the Republic of Uzbekistan, most foreign tourists in 2019 came from Russia, Turkey, Afghanistan, China, South Korea, India, Germany, Japan, Italy and France (Tourism development committee of Uzbekistan, 2019). It means that the great potential for the development of religious tourism in Bukhara is not used. These three cultural facilities have the potential to serve as a major brand of Bukhara in SR.

In order for Bukhara to be known as the "Main Crossroads of the SR" and the "Pearl of the Orient", it is necessary to develop and implement plans to preserve the existing cultural heritage and increase its tourism potential by creating special enhancement programs.

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