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ADAPTIVE REUSE POTENTIAL OF CULTURAL HERITAGE: THE CASE OF ISTANBUL DRAPERS' BAZAAR

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Abstract

The main objective of the study is to investigate the possibilities of adaptive reuse for the protection of cultural heritage buildings. It aims to set Istanbul Drapers' Bazaar (IDB), as an example of the buildings with similar characteristics and importance and for the cities hosting those structures upon an application of the AdaptSTAR method, which was developed to assess the conversion potential of buildings. Focused on a bazaar complex, an important example of modern architectural heritage, the present study contributes to the healthy transfer of the building to future generations and the improvement of its international recognition by investigating it in the context of convertibility. In this study, a mixed-mode research methodology including a two-stage approach was adopted. The first stage includes detailed qualitative interviews conducted with the architect and the administrative unit manager of the bazaar complex. The second stage consists of a survey conducted with a group of 45 experts, composed of scholars and professionals in Turkey. The results of the study suggest that it is necessary to develop IDB, especially in physical and technological terms and its function should be reconsidered. In particular, it was seen that economic issues constituted one of the major obstacles via-a-vis the continuity of use of large-scale buildings. Furthermore, it was realized that the artworks across the building group increased the importance of preserving the buildings and contributed to the possibility of their new functions being envisaged in the culture-art axis.

Keywords: **Adaptive reuse, Modern architectural heritage, İstanbul Drapers Bazaar (IDB), AdaptSTAR.**

1. INTRODUCTION

Currently, sustainability approaches are no longer a preference but have become a necessity in all areas of life. The reflections of the said situation have manifested for a long time now in both theoretical studies and practical applications within the discipline of architecture. One of the projections of the sustainability idea incorporated into the architectural discipline is to extend the lifetime of and protect the cultural heritage buildings that have not completed their physical life yet by means of introducing novel or supplementary functions and accommodating necessary interventions [1]. This approach, which presents a holistic perspective with its ecological, economic and social dimensions, thus responding to all three dimensions of sustainability, is conceptualized under the name of "adaptive reuse" [2].

In the adaptive reuse approach, the use of resources, waste production, and transportation energy are decreased compared to new construction from scratch due to the use of existing infrastructure and building stock. In addition, contract periods are reduced and

loan costs are decreased, while the implementation is accelerated. Accordingly, reuse supports energy efficiency and contributes to the ecological and economic dimensions of sustainability. Furthermore, it also supports social sustainability elements, including the protection of the existing fabric, improving the sense of identity and belonging, reviving collapsed neighbourhoods, increasing the living standards in those sites, and adding prestige to the city [3].

Adaptive reuse has been implemented throughout history [4]. The relevant examples include the conversion of properties confiscated during wartime into hospitals or headquarters, the conversion of religious structures after conquests not in functional terms but to accommodate the needs of different religions and the conversion of monuments from ancient times in the Renaissance period for new uses. Those practices, which failed to regard preserving the heritage, were carried out on the basis of functional and economic rationales [5]. Today, adaptive reuse is conceptualized in the context of both the increased importance of sustainability and the change and expansion of the scope of cultural heritage and reconsidered with a more comprehensive approach. The boundaries of the values that need to be protected further expanded upon the introduction of the cultural heritage concept within the scope of social sustainability. Many buildings are now included in the scope of cultural heritage not only because of their historical value or monumental attributes, but on the grounds that they featured different and unique features, including having witnessed a certain period of time, representing the local identity, and setting an example for certain construction technology. Adaptive reuse has become an important and widely adopted design approach with an aim to transfer those buildings to future generations. The number of theoretical studies increased and applications started to transform into a systematic practice rather than random attempts. There are examples, where both universal, local, historical, cultural and industrial heritage buildings are reused across many different geographies [6, 7, 8].

Qualified conversion in adaptive reuse practices is ensured upon an examination of all the aspects of the buildings and an assessment of their convertibility. In particular, it is premature to address the cultural heritage buildings merely from an architectural perspective, including physical and functional status and urban context. A detailed study of the buildings vis-a-vis social and economic context, legal processes, and political conjuncture is required to ensure that the right functions are incorporated by means of congruent and prudent interventions.

The present study used AdaptSTAR, which was developed to assess the conversion potentials of buildings, as a method intended for informing qualified adaptive reuse applications, in the Istanbul Drapers' Bazaar (IDB) example, an important modern architectural heritage work in Istanbul. Therefore, it aimed to contribute to the adaptive reuse studies and to set an example for determining the conversion potentials of modern architectural works into significant cultural heritage products in Istanbul and similar cities. Another importance of the study is to draw attention to the importance of preserving local examples of modern architecture and make a contribution as regards improving the international recognition of and preserving one of the modern architectural works of both local and universal value in Istanbul.

2. İSTANBUL DRAPERS' BAZAAR

An invaluable cultural heritage for Istanbul with its location, scale, function, historical context, design approach, and artworks, the Istanbul Drapers' Bazaar has been subject to ongoing debate since the day it was projected and has been studied by various disciplines from different perspectives. Notwithstanding the above, the international recognition of the complex as one of the most prominent examples of modern architectural heritage in Istanbul is not at a deserved level. The reason for this may be associated with disadvantages and functional problems with regard to the current physical condition of the complex. In the context thereof, it is highly important to make the right assessments in terms of resource allocation in relation to repair, maintenance and conversion of the building with an aim to improve the international reputation of IDB, to eliminate the incompatibility between urban location and function, and to rectify the physical condition of the building, and to assess and suggest the potentials of the building for the future.

A literature review was performed on previous studies on the Istanbul Drapers' Bazaar spanning the year 2000 and beyond, when the efforts about reuse were intensified, and to the best knowledge of the authors, there was no study, which systematically investigated the conversion potential of the complex among the studies accessed during the review (Table 1). The previous studies aimed to investigate the values and qualities of the complex that needed to be protected,

Table 1.
Publications on IDB after 2000 (created by authors)

Study	Author	Type	Date	Focus
Creation of the Memory through The Usage of Art in Architectural Design & IMC [9]	Sena Özeren	Master Thesis	2008	IDB's architectural history, design, art works
From Istanbul Drawers' Bazaar to Unkapanı Plakcı's Bazaar: A Historıcal Assessment on Spatial Organızatıon [10]	Gökçe Kaan Demirkıran	Article	2013	Turkish music and IDB
Architecture at the Intersection of Continuity and Change: Three Structural Approach Processes in the City of Istanbul [11]	Tuba Sarı	Congress Paper	2015	How the contemporary design approach can follow in keeping the past up to date through IDB and two other buildings
Assessment Of 20th Century Modern Architecture Heritage: The Case Of IMC [12]	Saadet Kök	Master Thesis	2016	The values and qualities of IDB that need to be maintained
Mat-Building And The Case Of "İstanbul Manifaturacılar Çarşısı" [13]	Hüseyin Ali Korkut	Master Thesis	2016	Relation of IDB and mat-building approach
A Hidden Open Air Museum: Istanbul Drapers' Bazaar [14]	Şehnaz Şişmanoğlu	Article	2016	Foundation, construction, environmental context, works of art and functions of IDB
At the Intersection of Local and Global: İstanbul Manifaturacılar Çarşısı [15]	İdil Erkol	Article	2017	"Modernist form language with reference to the locality" of the building, the context and architectural character of IDB
An Architecture of Arabesk: The (Re)making of İstanbul Manifaturacılar Çarşısı, 1967–2017 [16]	Pınar Şenol	Master Thesis	2017	The relationship between IDB and its users in terms of the modernisation process in Turkey
Two Unique Protected Sites with a Modern Heritage in Historical Peninsula in Istanbul [17]	Gülhan Benli & Aysun Ferrah Güner	Book Chapter	2017	Characteristics of Süleymaniye (covering IDB) and Zeyrek
Can't We Protect Our Republican Period Heritage? [18]	Doğan Tekeli	Article	2018	Problems with the preservation of IDB
Investigation of Shopping Spaces in the Istanbul Historic Peninsula through Three Buildings: Grand Bazaar, Istanbul Manifaturacılar Market and Historia Shopping Center [19]	Meltem Özçakı	Article	2020	IDB's and two other buildings' relationship with the city, architectural features, and interior constructions in terms of a shopping centre in Turkey
Measuring Architecture and Urban Fabric: The Case of the İMÇ and the SSK Complexes [20]	Mario Lodeweik Lionar & Özgür Ediz	Article	2021	Visual complexities of the IDB and the SSK Complexes and the urban fabric of the District of Zeyrek adjacent to these two complexes
In Search of Local Modernism The Istanbul Drapers' and Furnishers' Bazaar [21]	İdil Erkol Bingöl	Book Chapter	2021	Context and architectural character of IDB

emphasize the in-situ artworks, point out to the contemporary design approach, study the bazaar in terms of its environment and historical context, document the stages of project design and construction, investigate the spatial organization and user profile, and underscore the importance of the protection of the complex.

2.1. History of Istanbul Drapers' Bazaar

It is necessary to preliminarily investigate the history of the building and its place in the immovable cultural assets in Istanbul to assess the adaptive reuse potential of Istanbul Drapers' Bazaar and to improve its recognition. The project and construction process of the bazaar was completed between 1957–1967, a politically turbulent period in Turkey. This is the time period, when a zoning initiative, which was widely criticized by both the architectural circles and the society in general, was implemented by Adnan Menderes, the then Prime Minister of Turkey. Accordingly, construction of wide boulevards was launched in Istanbul demolishing a number of buildings and coastal roads around the historical peninsula were constructed. The drapers, who held their commercial activities inside the narrow streets and old inns around Eminönü and Sultanhamam districts of the historical peninsula of Istanbul, took action

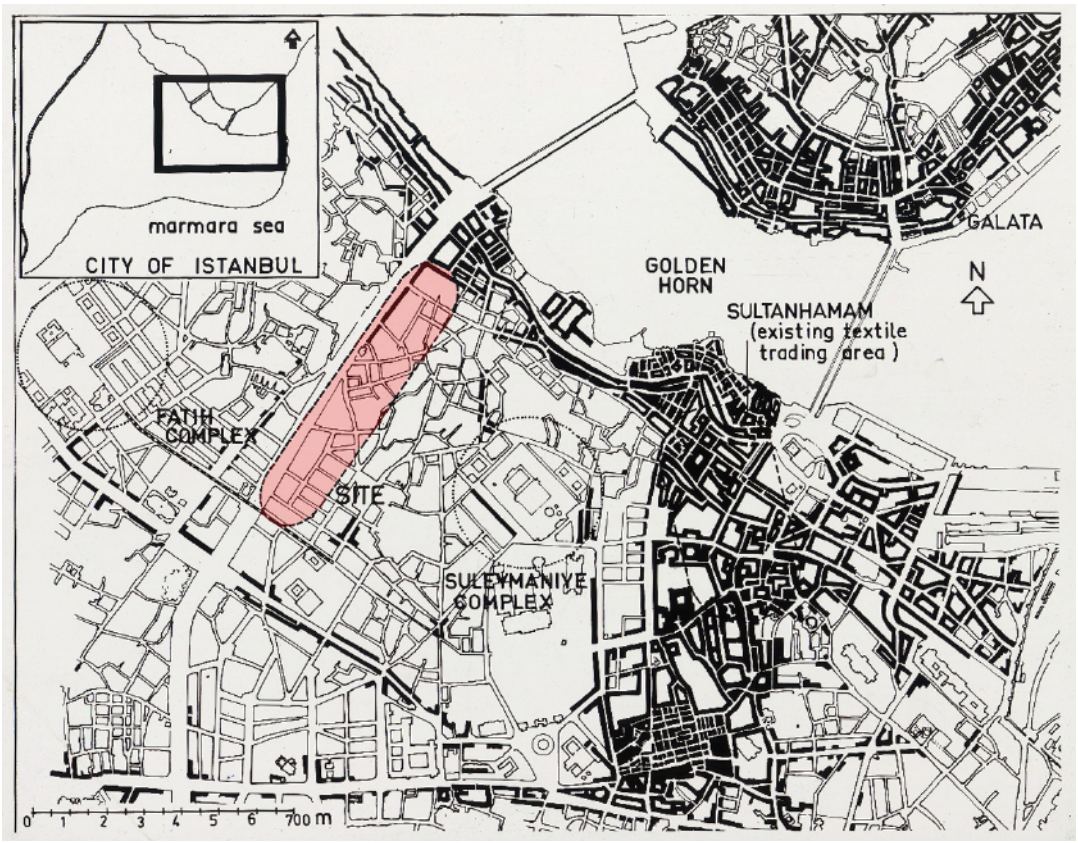


Figure 1.
Location of IDB (Doğan Tekeli Archive)

with this zoning initiative and started to seek a new settlement. An approximate number of 1100 drapers founded a drapers' cooperative and started to look for a place in the vicinity of the Haydarpaşa neighbourhood on the Anatolian side of Istanbul due to the logistical facilities it would provide. The governor and mayor of the time, Fahrettin Kerim Gökay, proposed and sold to the cooperative a 45.000 m^2 sloping land (Figure 1), which belonged to the Istanbul Municipality and extended from Unkapanı to Saraçhane alongside Atatürk Boulevard, with an aim to find resources for the zoning expenditures [22].

The municipality first opted for an urban development competition to develop a plan for the neighbourhood, where there was no zoning plan, on the grounds that the land on which the bazaar complex would be built was located in one of the important historical districts of Istanbul, i.e., at the skirts of the Süleymaniye Mosque, and as a result of the competition, it was decided to finalize the project by means of a second architectural competition. The project by Cihat Fındıkoğlu, Kamil Bayur, Tarık Aka, Niyazi Duranay, and Özdemir Akverdi, who won the urban development competition, was amended a number of times by the Municipal Planning Directorate and finally completed in 1960 under supervision of Luigi Piccinato, the Urban Development Consultant. The proposed layout plan consisted of units of similar sizes clustered along the boulevard and interconnected by courtyards, and an empty space was created in and around the Şebsafa Hatun Mosque [15].

For the second stage, i.e., the architectural competition, pioneering architects of the period, including Emin Onat, the architect of Atatürk's Mausoleum (Anıtkabir), were invited in addition to the teams that ranked in the top three in the urban development competition. A team of young architects, including Doğan Tekeli, Sami Sisa, and Metin Hepgüler, who the third in the first competition, was selected as the winner of the architectural competition and was entitled to implement the bazaar complex project. Upon interventions of Prof. Dr. Luigi Piccinato from the Zone Planning Directorate, and the fact that seven tombs were found near the Şebsefa Hatun Mosque, there were revisions in the project and the implementation phase started in 1961 [22].

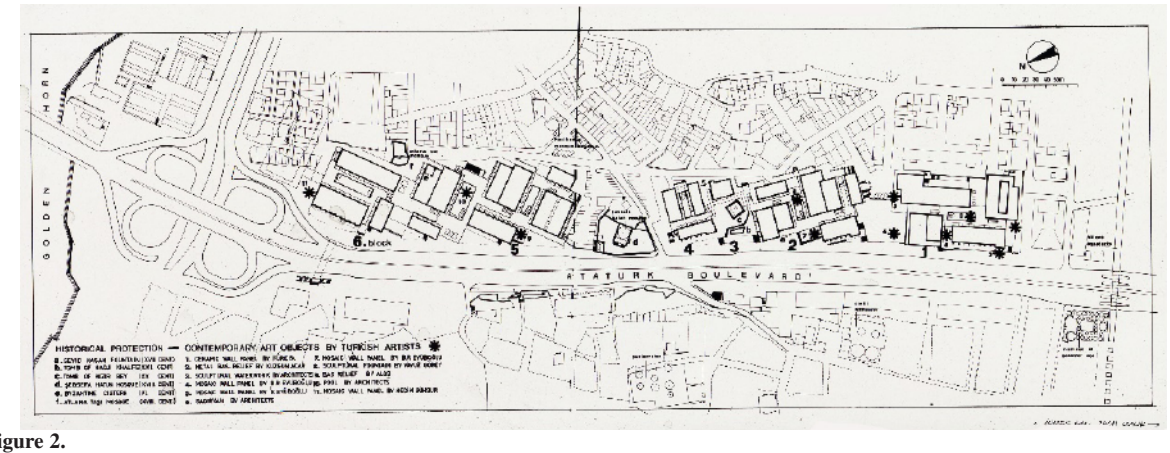


Figure 2.
Siteplan of the building complex (Doğan Tekeli Archive)

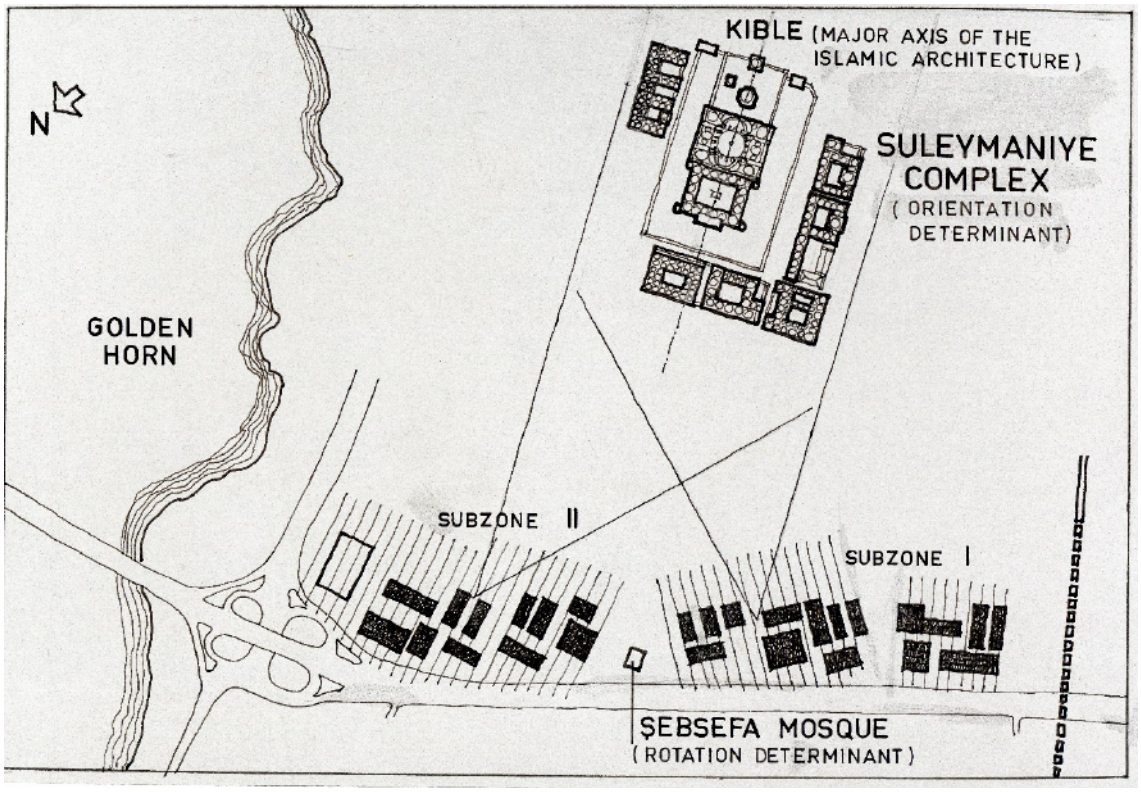


Figure 3.
The setting of the masses (Doğan Tekeli Archive)

The bazaar project consisted of six blocks with courtyards alongside the Atatürk Boulevard (Figure 2). There are approximately 1100 shops, warehouses, offices as well as restaurants and kiosks in common areas, and indoor and outdoor car parks to serve the bazaar. The six blocks interconnected by courtyards and streets, maintain a relationship with both the fabric of Süleymaniye neighborhood and Atatürk Boulevard thanks to transitions along the axes perpendicular to the direction of the plot (Figure 3). Despite the fact that the 3 to 4-floor blocks of equal size differ from the fabric of the Süleymaniye neighbourhood due to both their scale and modern design language, they exhibit an attitude that emphasizes Süleymaniye by remaining in the background of the silhouette through a horizontal spatial layout (Figure 4). The bazaar complex with a total of 8 courtyards, one spared for a fountain, and one for the

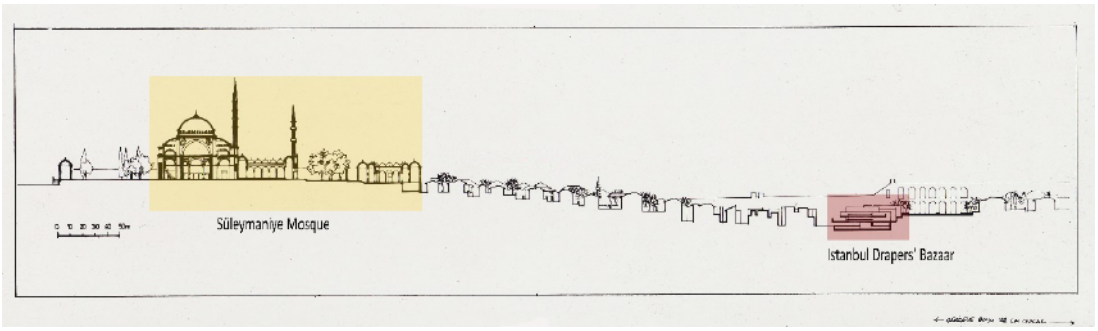


Figure 4.
Section of the project (Doğan Tekeli Archive)



Figure 5.
Art works in IDB (Doğan Tekeli Archive)

cemetery, is also one of the mat-building examples of the period [23]. It was one of the first examples of pedestrianized bazaar projects inspired by the old inns and shopping malls that started to be built in the United States. IDB, which was the largest building complex built at a time in Istanbul when it was erected, contains nine works of art from eight different artists (Figure 5) [15].

Featuring the traces of locality both through the bay windows and balconies on the facades and the works of the local artists and respecting history by its relationship with the fabric of the surroundings, the bazaar project also stands out with its modern materials and language of form. Thanks to all the foregoing attributes, it is both an important modern architectural product and a valuable cultural heritage in the universal and local sense, respectively (Figure 6).

2.2. Istanbul Drapers' Bazaar Today

A qualitative interview was held with Doğan Tekeli, one of the architects of the project, and Otmar Sermet Çifter, A Civil Engineer in the IDB administrative



Figure 6.
Istanbul Drapers' Bazaar (Doğan Tekeli Archive)

unit, with an aim to obtain information about the current situation of the bazaar complex and data on the conversion possibilities. This method was chosen in order not to put constraints on the interviewee, to allow a two-way interaction between the researcher and the interviewee, and to enable the latter to convey their own experiences and knowledge on the subject without any direction or definition [24].

During the one-hour interview held with Doğan Tekeli in his office, the prominent issues regarding the current physical condition of the bazaar complex were structural robustness, installations, facades and courtyards, and artworks inside the complex. Thanks to the high-quality workmanship and supervision during the construction, the bazaar complex did not sustain any damage as demonstrated by the samples taken following the Marmara earthquakes in 1999 and 2019. Nevertheless, the bazaar complex with reinforced concrete project dated back to 1960, fails to comply with the current earthquake regulation. Furthermore, the reinforced concrete fabric of the



Figure 7.
A Façade of IDB from the first (on the left) and recent period (on the right) (created by authors with photos from Doğan Tekeli Archive)



Figure 8.
Sadi Diren's ceramic panel, invisible due to various elements (photo by authors)

buildings is "very delicate" due to the design language in the words of the architect. There are also problems associated with the installation systems, which were designed according to the requirements of about sixty years ago. The lighting specification of the Ministry of Public Works required an illuminance value of 60 lux for the shops during the period, when the bazaar was built, yet much higher values are needed today. Cooling units were also introduced much later than the construction of the bazaar and inflicted an extra load on the electrical installations in place. The buildings feature original exterior facades with mosaic cages with 5 m x 3.30 m (h) structural modulation and small building elements such as bay windows and terraces. The main showcases and entrances of the 15–25 m deep shops are located on the courtyard facades. Whereas, there are mainly office and storage areas of the shops on the exterior facades (Figure 7).

Some of the mosaic cages on the glass surfaces of the exterior facades that were preferred with an aim to prevent image pollution and to facilitate sun control, ensuring shops receive light from both facades, were broken over time. Furthermore, the cages on the boulevard facade were destroyed and image pollution was created upon placement of irregular signs in various sizes as a result of the desire for the inward-facing shops to be visible from the facade facing the boulevard (Figure 7). The courtyards are mostly used for storage purposes. The şadırvan (old fountain) in the courtyard is operated as a buffet.

The Bazaar complex hosts nine works of art supervised by the Hagia Sophia Museum as instructed by the Ministry of Culture. Subsequent to many years of persuasive efforts, a competition was organized with the consent of the IDB administration, and artworks were selected together with the administration and took their place in the buildings. The Ministry of Culture also had Mimar Sinan Fine Arts University set up a laboratory for the protection of the artworks. Currently, restoration efforts for one of the artworks are underway. The artworks undersigned by Bedri Rahmi Eyüboğlu, Eren Eyüboğlu, Yavuz Görey, Ali Teoman Germaner, Sadi Diren, Nedim Günsür, Füreya Koral, and Kuzgun Acar protected the structures like an amulet in the words of the architect. Notwithstanding the above, today, they are hidden behind the shop materials or buffets, and remain idle and neglected (Figure 8).

According to Tekeli, the parking lot on the basement floors and the pockets facing the back facades are far from meeting the requirements today. There are no inaccessible areas in the buildings, which eases the maintenance efforts. There is also deterioration in physical and social terms in the fabric of the region on the Süleymaniye side of the bazaar complex. Despite the fact that great sensitivity and efforts aimed to prevent the IDB from standing out in the



Figure 9.
Existing air conditioner and cables (photo by authors)

silhouette due to its location on the foothills of Süleymaniye, 4-5-storey concrete blocks are now rising on the plots adjacent to the IDB.

Tekeli pointed out that functional change in the bazaar complex buildings started with their use. Various restaurants and workshops started to take place in some of the blocks as a result of the death of four of the drapers before the completion of the project, who were on the board of directors of the bazaar and pioneers in its construction, and the fact that some drapers did not move to the complex. During the eighties, recording shops started to take part in the complex parallel to the economic changes and developments across the music world. As a matter of fact, the bazaar was also called the "Unkapanı Recording Companies" Bazaar" was an important centre of Turkish music, which is frequently referred to in Turkish films.

Finally, as regards the conversion of the complex, Tekeli generally suggested that the complex could be converted into a modern life centre by mending physical problems and incorporating of technology by preserving the main character of the buildings. He also underlined the likelihood of holding educational activities in some of the buildings, referring to Istanbul Kadir Has University, located nearby, which considered purchasing a block or two in the complex and relocating certain departments of the university there.

During the approximately one-hour interview with Otmar Sermet Çifter in his office at IDB, the prominent issues, including installations and general physical ageing, were especially associated with economic problems. Problems associated with electrical and water installations were being solved by means of makeshift solutions such as using pans and pipes from outside due to the lack of installation shafts. As regards the ventilation system, especially the outdoor units of the air conditioners posed a major problem. Given that the aforementioned systems were not initially included in the project, there was a need for space to accommodate the units (Figure 9).

Since the bazaar has a huge floor space, a radical change proves to be extremely costly. Therefore, the effects of ageing and deterioration were mended as they occurred. There are decays in woodworks and moisture problems associated with groundwater in Blocks 5 and 6. Flooring and stairs in terrazzo were replaced by mosaic tiles due to ageing over time. The current regulations require fixing the ground network issue and installation of a sprinkler system in the bazaar.

Çifter suggested that although the bazaar was architecturally easy to maintain, the maintenance work was rather costly. Age-related deterioration surfaced over time although the quality of workmanship was high when the complex was first constructed. The huge size of the bazaar is associated with prolonged maintenance times combined with the maintenance cost. Çifter also complained that they did not receive financial support from local governments, and contrarily, that the governments wanted their contribution instead. As a result of increased online shopping, face-to-face trade is on the wane and the bazaar

tradespeople experience economic difficulties, yet the drapers and recording companies still functionally dominate the bazaar. The fact that the subway as a means of important public transportation is within a certain walking distance makes pedestrian transportation difficult despite the central location of the bazaar. Although the İstanbul Kültür ve Sanat Vakfı (Istanbul Foundation for Culture and Arts – IKSV) and the bazaar administration occasionally collaborated to organize miscellaneous cultural events, the planned activities are temporary events that would take place in the existing areas. An architect was hired for physical renovation activities. There is ongoing work for a new facade system to accommodate the air conditioning units and shades, preserving the authenticity of the original facade. Çifter underscored that the economic problems were the biggest obstacle to total change.

3. ADAPTIVE REUSE POTENTIAL OF ISTANBUL DRAPERS' BAZAAR

3.1. AdaptSTAR

The success of a conversion project is immediately associated with the economic, social, and physical sustainability of the selected building. Therefore, one of the major challenges during the conversion process of existing buildings is the assessment of the conversion potential of the building and what criteria should be considered during the said assessment.

AdaptSTAR model is a decision-making model designed to make up for this deficiency and serve as a rating tool for the purposes of the assessment of a given building for the potential of adaptive reuse against certain criteria. Developed by Sheila Conejos in 2013, AdaptSTAR enables to categorize the building considered for conversion upon scoring the same pursuant to twenty-six sub-criteria listed under seven main headings, i.e., physical, economic, functional, technological, social, legal, and political [25]
[26]. With an aim to maximize the adaptive reuse potential of future buildings, the criteria adopted for the purposes of this model were determined upon a review of award-winning conversion projects. Subsequently, specific weighting coefficients were assigned to those criteria upon interviews with experts [27]. Accordingly, the rating system is used to assess the adaptive reuse potential of the buildings considered for conversion [28]. For the purposes of this model, the buildings with a total score of 85–100 are defined as excellent or 5 stars, where as those with a score of 25–39 are categorized as minimum or 1 star. Buildings with a score below 25 points are excluded from the assessment.

AdaptSTAR was previously used to calculate the adaptive reuse scores of historical buildings and its reliability was tested upon comparison with different decision-making models.

3.2. AdaptSTAR Score of Istanbul Drapers' Bazaar

The expert survey approach, a quantitative research method, was adopted with an aim to assess the AdaptSTAR score of Istanbul Drapers' Bazaar. A 34-item structured anonymous electronic survey was developed and sent to a group of 45 experts, i.e., scholars and professionals, including architects, interior designers, urban and regional planners, and art historians in Turkey. Before the survey, all participants were clearly informed about the data to be used in the research. It is clearly stated what the survey is about and that no personal data will be used. Participants were warned that the survey was only on a voluntary basis and only those who allowed their answers to be used in the research should participate in the survey. In addition to all these, they were told that if they felt uncomfortable for any reason, they could end the questionnaire immediately and their answers would not be used and would be destroyed immediately.

The survey asked the participants to assess IDB using a five-point Likert scale based on the criteria of the AdaptSTAR model. Accordingly, the results of the survey were used to obtain the AdaptSTAR score and building category of IDB.

The AdaptSTAR score of IDB based on the survey results is tabulated in detail (Table II). Accordingly, with a score of 79.15 points within the scope of the AdaptSTAR model, IDB was categorized under four-star (good) buildings vis-a-vis its adaptive reuse potential.

The responses of the experts to the survey items were shown with separate histograms for the item groups in each main category. The question numbers are indicated with the "Q" abbreviation in the histograms. A detailed review of the expert responses is indicative of the fact that the most powerful aspects of the building complex were manifest in the economic (location value of the building), social, and functional categories.

As regards the economic status (location value) of the bazaar, 84% of the participant experts in the survey fully agreed that the bazaar was located in an area with a high population density and close to the city

Table 2.
AdaptSTAR weightings of İstanbul Drapers' Bazaar (created by authors)

AdaptSTAR Criteria [26]		İstanbul Drapers' Bazaar
Main category (max.)	Sub-category (max.)	Rating
Physical (16.08%)		12.05%
	Structural integrity and foundation (5.58%)	(Q5) 4.17%
	Material durability and workmanship (5.33%)	(Q6) 4.00%
	Maintainability (5.17%)	(Q7) 3.88%
Economic (locational value) (13.40%)		12.55%
	Density and proximity (4.47%)	(Q8) 4.31%
	Transport and access (4.52%)	(Q9) 4.12%
	Plot size and site plan (4.41%)	(Q10) 4.12%
Functional (15.23%)		12.73%
	Flexibility and convertibility (3.42%)	(Q11) 3.21%
	Disassembly (2.96%)	(Q12) 1.97%
	Spatial flow and atria (3.00%)	(Q13) 2.79%
	Structural grid (3.03%)	(Q14) 2.56%
	Service ducts and corridors (2.82%)	(Q15) 2.20%
Technological (14.85%)		10.87%
	Orientation and solar access (2.80%)	(Q16) 2.33%
	Glazing and shading (2.54%)	(Q17) 1.96%
	Insulation and acoustics (2.49%)	(Q18) 1.46%
	Natural lighting and ventilation (2.67%)	(Q19) 2.15%
	Energy rating (2.31%)	(Q20) 1.30%
	Feedback on building performance and usage (2.04%)	(Q21) 1.67%
Social (14.37%)		12.33%
	Image and history (4.69%)	(Q22) 4.58%
	Aesthetics and townscape (5.04%)	(Q23-Q24) 4.80%
	Neighbourhood and amenity (4.64%)	(Q25-Q26) 2.95%
Legal (13.28%)		8.92%
	Standard of finish (4.36%)	(Q27) 3.21%
	Fire protection and disability access (4.65%)	(Q28-Q29) 2.82%
	Occupational health, IEQ, safety and security (4.27%)	(Q30) 2.90%
Political (12.79%)		9.69%
	Ecological footprint and conservation (4.05%)	(Q31) 2.62%
	Community support and ownership (4.35%)	(Q32) 3.21%
	Urban master plan and zoning (4.39%)	(Q33) 3.86%
TOTAL (100%)		79.15%
STAR RATING (0-5)		4 Stars (Best Practice)

centre (Question 8). While 73% of the experts fully agreed that the buildings were readily accessible (Question 9), 78% fully agreed that the continued use of IDB would be important considering the land size and layout plan (Question 10).

As regards the social status, 93% of the participant experts in the survey fully agreed that the imaginative and historical value of the bazaar was high (Question 22), 78% believed it was aesthetic (Question 23), 87% considered it an important urban landscape (Question 24), and 96% regarded it a part of valuable urban fabric (Question 25). Furthermore, 73% of the participant experts in the survey were completely opposed to the omission of improvement in the region, where the IDB was located (Question 26).

In a review of the responses to the items associated with its functional condition, 98% of the participant experts in the survey agreed that the bazaar was flexible and convertible (Question 11), and 96% agreed that it had an open plan type with spatial flow and continuity (Question 13). While 49% of the experts fully agreed that the openings available in the buildings were suitable for mass and economic production

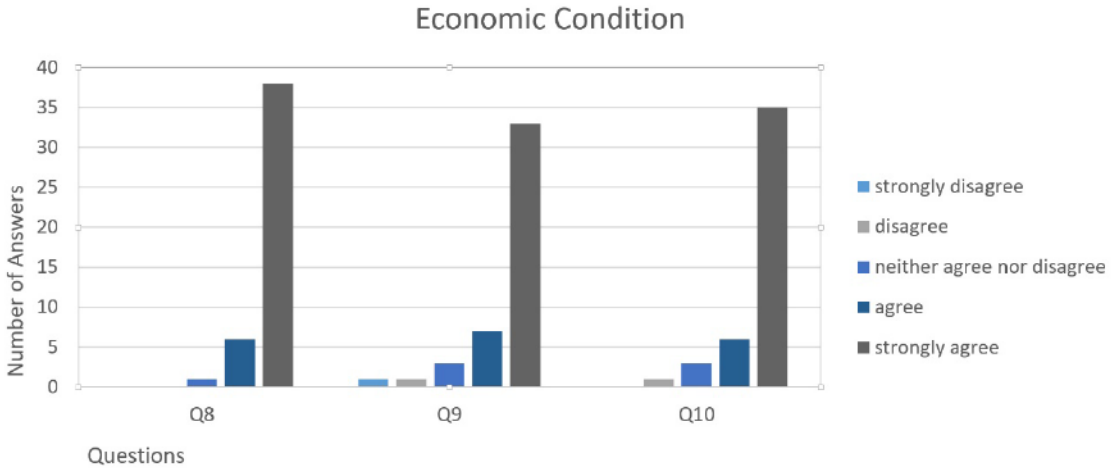


Figure 10.
Histogram of IDB's economic condition (locational value) (created by authors)

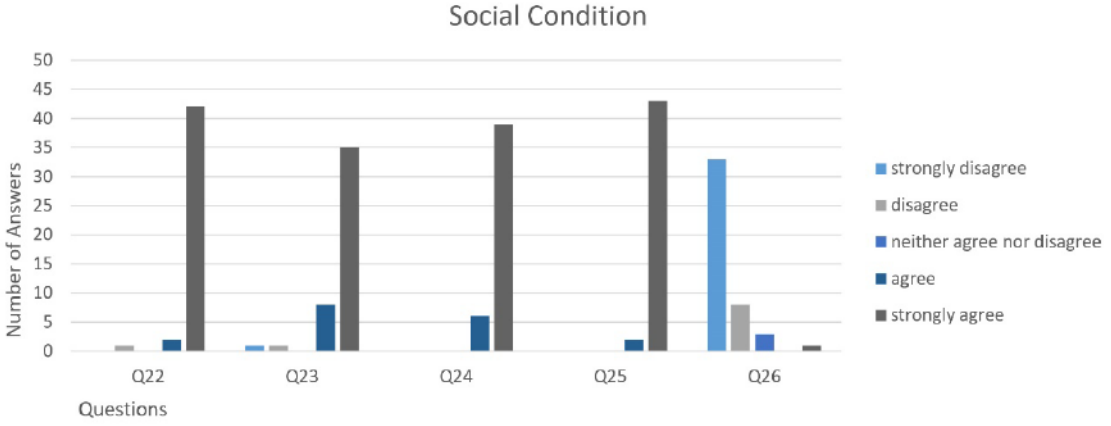


Figure 11.
Histogram of IDB's social condition (created by authors)

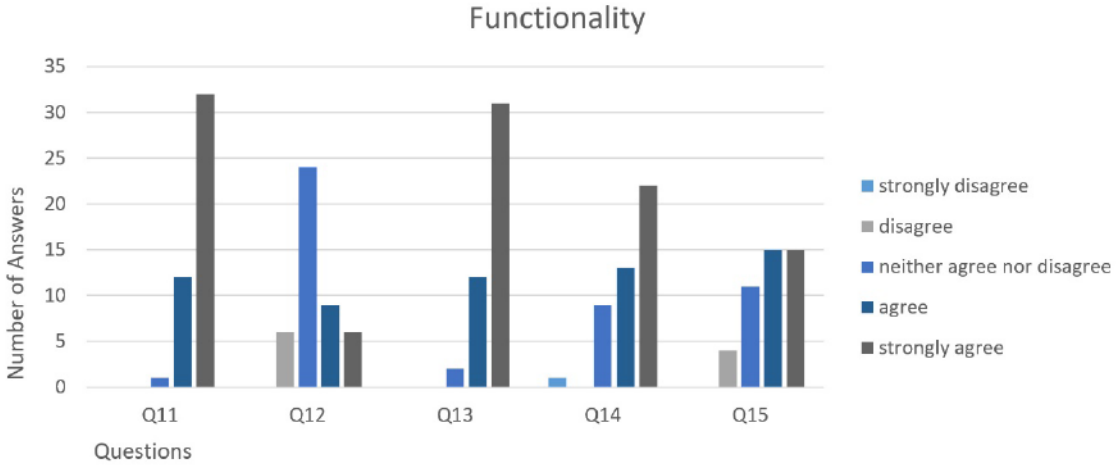


Figure 12.
Histogram of IDB's functionality (created by authors)

(Question 14), only 33% fully agreed that service channels and corridors were sufficient (Question 15). 53% of the experts neither agreed nor disagreed with the ease of dismantling the buildings (Question 12).

The data obtained as a result of the survey suggested that the weakest aspect of the bazaar complex was

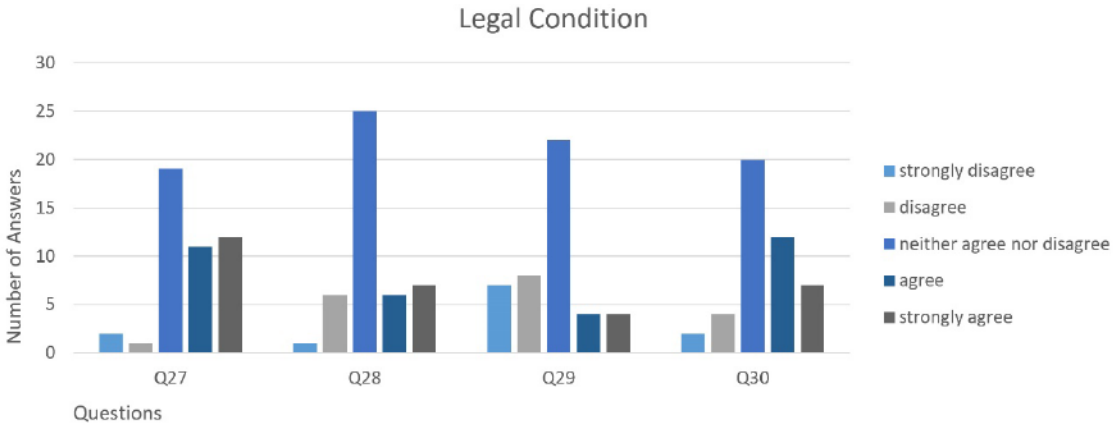


Figure 13.
Histogram of IDB's legal condition (created by authors)

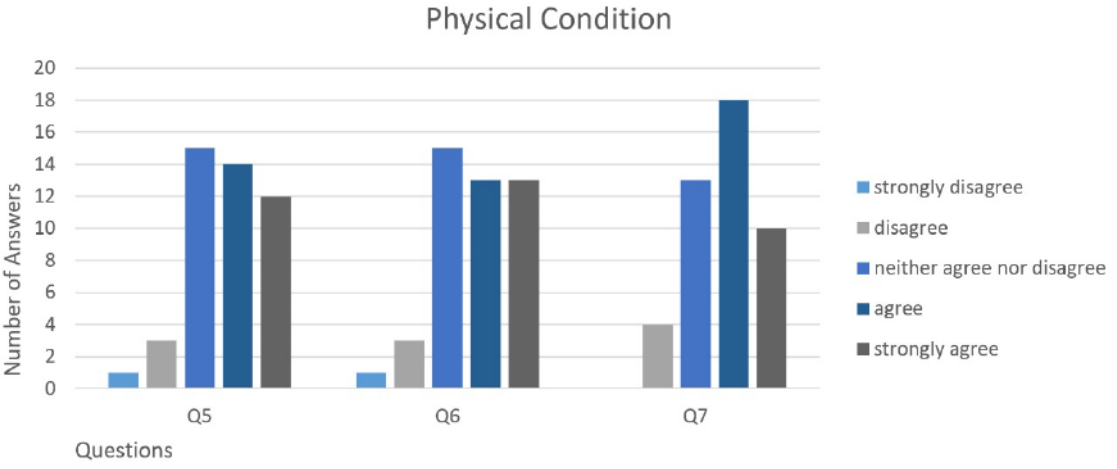


Figure 14.
Histogram of IDB's physical condition (created by authors)

the legal status. Within the scope of the items in the legal status category, only 27% of the experts fully agreed that the buildings complied with the applicable laws and regulations (Question 27), where as 16% believed that the complex had fire safety (Question 28), 9% believed that the complex provided access for the disabled (Question 29), and 16% believed that the interiors were suitable for user health and safety (Question 30).

Regarding the physical status of IDB, more than half of the experts (58%) were convinced that the structural design of the buildings was suitable to accommodate future uses and loads (Question 5). Again, 58% of the experts believed that the buildings were physically durable and that they had good workmanship (Question 6). 9% of the survey participants failed to agree that the bazaar featured an easy maintenance opportunity (Question 7).

As regards the technological status, 78% of the experts considered the orientation of the buildings correct and that solar access was adequate (Question 16). 58% of the experts believed that there were neither glare nor shading issues on the surfaces (Question 17). 71% of the experts considered natural lighting and ventilation adequate (Question 19). 73% of the participants agreed that it was possible to get feedback on performance and use (Question 21). Furthermore, 60% of the experts neither agreed nor disagreed with the adequacy of insulation and acoustics (Question 18). Besides, 56% of the experts neither agreed nor disagreed that the energy class of the complex was adequate (Question 20), where as 29% considered it inadequate.

Finally, a review of the category describing the political status indicated that 53% of the experts neither agreed nor disagreed that the ecological footprint of the bazaar complex was low (Question 31). The rate of those, who responded affirmatively, was 33% in

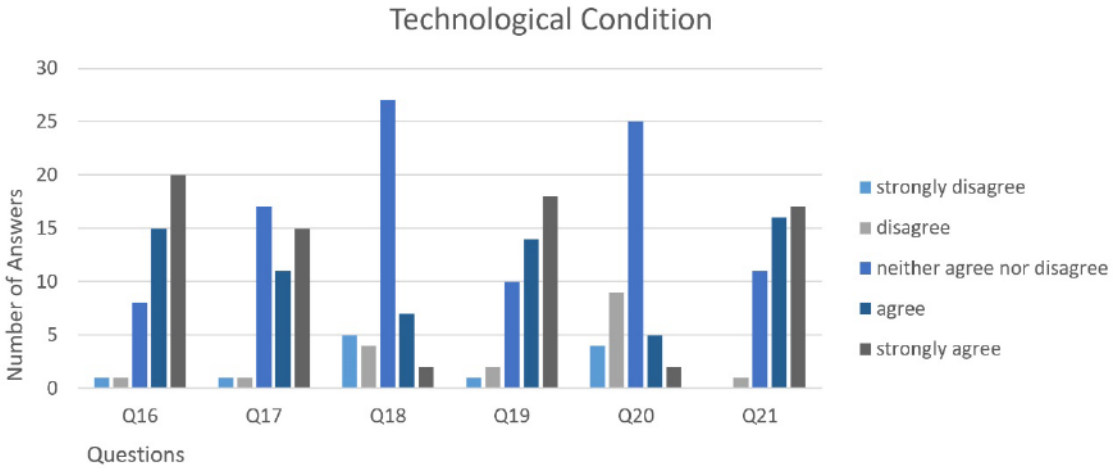


Figure 15.
Histogram of IDB's technological condition (created by authors)

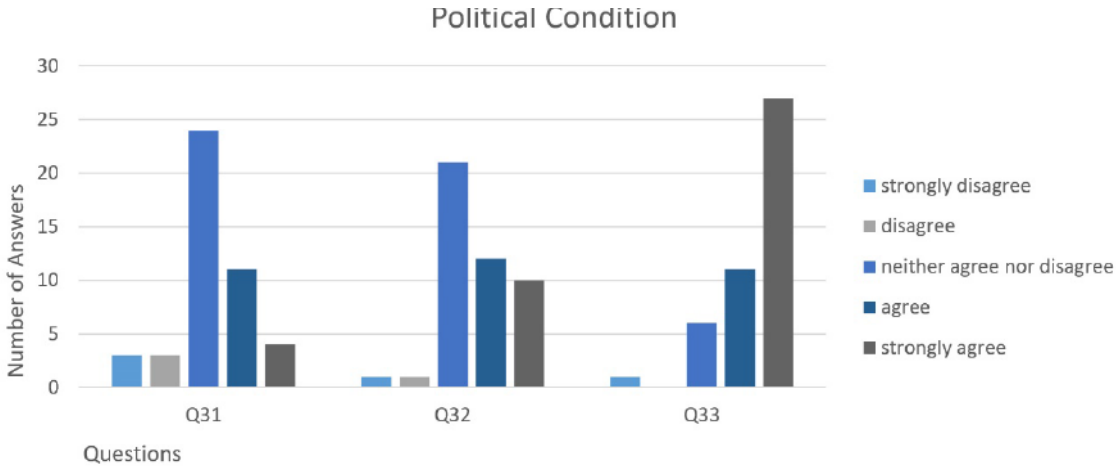


Figure 16.
Histogram of IDB's political condition (created by authors)

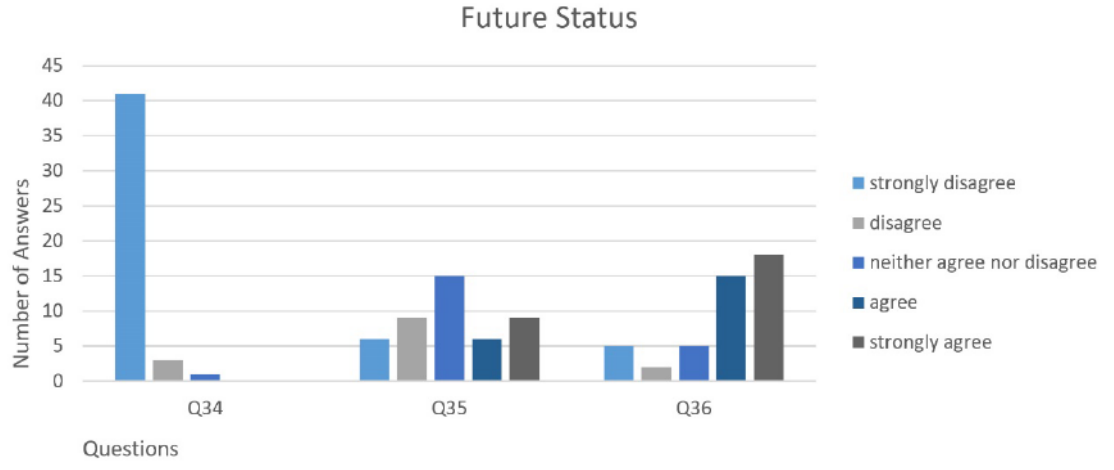


Figure 17.
Future status of IDB (created by authors)

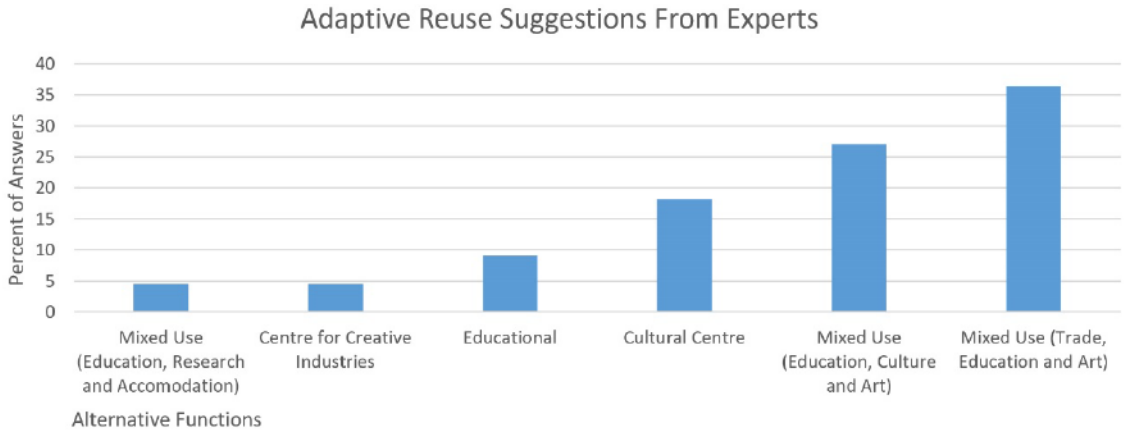


Figure 18.
Adaptive reuse suggestions from experts (created by authors)

the same item. 49% of the experts agreed that the bazaar received public support (Question 32), where as 84% agreed that the complex complied with the urban master plan (Question 33).

The last three items in the survey were about the future existence of the IDB. 73% of the participant experts in the survey agreed that the IDB should be preserved by re-functioning (Question 36), where as 33% stated that the complex could be preserved "as is" with their current functions (Question 35). The point that almost all the experts agreed (98%) was that the bazaar should never be demolished (Question 34). 36% of the experts, who approved re-functioning, recommended hybrid use, where the current function of the complex would be partially preserved and supported by artistic and educational activities, where as 27% suggested hybrid use consisting of culture, art, and education without preserving the current function, and 18% opted for cultural-only use (Figure 18).

4. DISCUSSION OF RESULTS

The historical context of Istanbul Drapers' Bazaar located on the historical peninsula of Istanbul, between two important complexes of Fatih and Süleymaniye, at the foothills of Süleymaniye and next to the Golden Horn, is defined as a very strong urban area. Furthermore, given its central location within the city and its direct contact with Atatürk Boulevard, an important transportation axis, the complex is situated in a city part with a very high rent value. Further, the building complex draws attention with its modern architecture in the aforementioned historical context. The modern form of the complex dwells before us as a universal and original architectural product that exists per se thanks to the use of artworks and materials, where the courtyards in the bazaar, the old fountain, minor building elements, including bay windows and terraces on the facades and the cages refer to an architecture that learns from history and shaped by the history.

The privileged status of IDB in Istanbul and its value as a cultural heritage is evident by the urban development and architecture competitions opened for the realization of the bazaar complex, the architect Tekeli's emphasis on the painstaking efforts and sensitivity for the historical context during the projecting phase, and the scores based on the responses of the experts to the items in the economic (location value) and social categories of the survey. Nevertheless, Tekeli's concerns about the lack of parking lots and the deterioration in the fabric of the adjacent neighbourhoods, the difficulties that Çifter mentioned about pedestrian access, and the experts' affirmative opinions as regards an improvement in the area of the building complex, are suggestive of deterioration around the IDB and need for improvement.

The fact that IDB was designed in the light of the concepts of flexibility, modularity, and flow as regards the spatial and formal organization of the buildings and that the complex had a high conversion potential, was supported by the results obtained from the AdaptSTAR functional category and the information provided by Tekeli about the project. The expert responses to the items in the same category about service channels and ease of dismantling and the views of Tekeli and Çifter as regards the current status of installations and air conditioning units suggest that improvement is necessary in the scope of the service spaces.

Legal issues constitute one of the top problems of IDB, arising from the date of its construction. As

confirmed both by the insights of Tekeli and Çifter, and experts' responses to the items in the AdaptSTAR's legal category, the complex is incompatible with the applicable laws and regulations, has deficiencies regarding fire safety, and further improvement is required for indoor comfort and access of the disabled.

The problems underscored in the legal category also affect the physical status of the IDB. The majority of experts believed that the structure and choice of materials in the buildings were suitable for future use in terms of design and workmanship and affirmed that the complex was easy to maintain. Based on the above results, the fact that the details associated with the uses were addressed during the design phase, can be said to have prolonged the physical life of the building. Nevertheless, as Tekeli suggested, there is a need for physical improvements, starting from the structure, to ensure both compliances with applicable laws, and removing issues associated with ageing. A financial resource allocation plan, which was strongly emphasized by Çifter, is necessary for ongoing maintenance and repair activities apart from the basic interventions.

The buildings received high scores on design-related issues, including orientation, natural light, and ventilation, but were considered inadequate in terms of insulation, acoustics, and energy class based on the scores from the AdaptSTAR technology category. The materials and technologies used in the period, when the IDB was built, are considered the main cause of the weakness of the building in the technology category. Effective use of contemporary materials and technologies may help solve those problems.

The weakness of the IDB regarding the energy class is also manifest in the experts' opinions about the ecological footprint. Half of the experts affirmed that the bazaar received public support, where as most agreed about its compliance with the urban master plan. The interviews with Tekeli and the history of the building complex, which was realized as a result of an architectural competition, were suggestive of the fact that due sensitivity was demonstrated in important design decisions, including historical silhouette and land use, during the design phase of the buildings so as to ensure compliance with the urban master plan. Improvements as regards legal and physical categories will likely address the ecological issues in the political category as well. In addition, continuous use of buildings proves to be a far more accurate approach in terms of ecological footprint compared to possible demolition. The public support, on the other hand, would be reinforced by the introduction of appropriate functions in conversion for reuse.

The primary inference based on the study results is that IDB as one of the most significant examples of the modern architectural movement in Istanbul, is an important cultural heritage that must be protected. The consensus of the experts in casting aside the idea of demolition of the bazaar was supported by the fact that the buildings scored high in different categories as to design, workmanship, and material choices in the period they were built. Furthermore, the bazaar was considered in the four-star (good) building category in terms of its adaptive reuse potential by securing 79.15 points from the AdaptSTAR model. With this result in mind, the data obtained as a result of the study also suggested that IDB needed certain interventions in order to maintain its physical existence and survive in the future. It is necessary to make the right decisions through public participation regarding the functions of the buildings before implementing any actual physical intervention aimed at extending service life of the buildings in the IDB complex. Thus, it would be possible to meet to the requirements arising from a potential change in function, while solving the current problems associated with the physical status of the complex.

The vast majority of experts argued that the IDB should be refunctioned, where as others believed that it should be protected with its current function. As Tekeli also mentioned, despite the fact that IDB has been a bazaar complex serving the fabric trade, the very purpose of its construction, it has also been used to accommodate different functions from the beginning. The building complex arose as one of the important hubs of the Turkish music world in addition to the auxiliary functions, including restaurants, kiosks, workshops, and banks to provide necessary services for the bazaar. Today, as Çifter mentioned, the ever-changing technological and economic conditions sustain an impact on trade patterns and face-to-face trade is replaced by online trade. This suggests the need for a different order in bazaar spaces compared to the original setting. The developments in the music market, on the other hand, triggered the diminished influence of the recording industry in the bazaar, which was once called "the recording companies' bazaar" for a certain period of time. Although the drapers and recording companies still dominate the bazaar, today other lines of business are prevalent in the bazaar, including machinery and medical supplies shops, printing houses, and graphic design offices [29]. It is inevitable that the spaces will change

hands along with the ever-changing circumstances. The decision as regards the prospective function of the buildings is of the first priority in order to protect such a valuable cultural heritage, improve the adjacent neighbourhoods, and ultimately contribute to the development of Istanbul.

Large centres centers with re-functioning in question, occasionally turn out to be idle areas that have lost their vividity and attractiveness due to the changes in production and service approach, shopping, and social life as a result of economic and technological developments in the contemporaneous era. Accordingly, cultural policies have been drafted and implemented with the aim of revitalizing urban centres. The main reason associated with the foregoing is the fact that novel models of business and service provision have shifted from material production and distribution to knowledge production, design, and service in the current post-industrial era. Culture embracing art and heritage rises to prominence as the element that would nourish this new model which relies on creativity [30, 31].

The fact that IDB has already been a building complex that qualifies as an open-air museum due to the artworks it hosts, suggests that the functions on the axis of culture and art could be incorporated into the complex. As Çifter mentioned, currently various institutions are in contact with the bazaar administration for cultural activities, albeit temporary events. The initiative by Istanbul Kadir Has University to move to the complex as mentioned by Tekeli and again, Tekeli's ideas about the conversion of the complex into a life center are also supported by the experts, who predominantly advocated refunctioning as per the culture-art-education axis.

The most important point of consideration here is that the complex should not be bargained away by gentrification practices, which would prioritize rent-oriented initiatives, under the pretext of revitalization and new use. IDB is located in a city part with a very high land value, thus the large surface area covered by IDB is invaluable in the eyes of investors. This increases the risk of the area being sacrificed to rent-oriented activities in place as per the prevailing economic policies in Turkey especially in Istanbul. Having been recently legitimized essentially by means of cultural and artistic activities, such initiatives induce complete or substantial deterioration or loss of the quality of cultural heritage products. Empowering the complex by functions that leverage culture, art, and education as a means of resistance to such initiatives is of vital importance both for the preservation of IDB and for setting an example for similar cultural heritage assets.

To achieve the above goal, it is necessary to materialize the reuse of IDB through transparent processes, by project competitions as was the case at inception, and in consideration of the expert opinions. Conversion into a modern life centre that encompasses culture-art-education activities, which both ensures a historical continuum of existing functions and does not exclude them as regards economic balances and takes public interest into consideration, would be possible through the economic support of local and national administrations and mobilization of technological opportunities. This is indicative of the fact that conversion is directly related to political processes.

Where allocation of financial resources has been a major problem for even the maintenance and repairs of the buildings, a comprehensive functional change should be built upon strategies beyond government support. Here, collaboration with relevant institutions and organizations for cultural heritage assets across the world becomes even more important. Some of the aforementioned strategies include stage-wise implementation of conversion practices and the development of event programs to ensure self-financing similar to successful adaptive reuse practices throughout the world.

The interventions subsequent to the decisions about functional change and strategy development fall under two headings, including basic interventions and physical acupuncture. Basic interventions are associated with solutions to the physical problems especially the structure followed by installations and facades. It is important not only to ensure that the building complex complies with applicable laws but also to make such basic interventions with a view to preserving its architectural quality. Holistic solutions are considered the ideal approach, despite the economic difficulties associated thereto. Ongoing point interventions for the current and future ageing-related deterioration in the building over time are called physical acupuncture. Both economic, and technical resources need to be allocated for the purposes of physical acupuncture.

The culture-arts-education-oriented reuse intended for IDB is also important in terms of the interaction of the complex with the adjacent neighbourhoods. Developing a program that would offer employment and training opportunities for the local community in the vicinity of the complex has the potential to pave the way for collective recovery, starting with the deterioration of the social fabric. In addition, the use of

labour force from adjacent neighbourhoods in the complex would secure a bilateral gain.

5. CONCLUSION

The present study assessed the adaptive reuse potential of Istanbul Drapers' Bazaar located in one of the significant historical sites of Istanbul and one of the important examples of modern architectural heritage, based on the AdaptSTAR decision method, with interviews held with the project architect and the administrative officer of the bazaar. Adaptive reuse, a conversion strategy that has been more prevalently investigated and implemented with the increased importance of environmental awareness and the rising concept of cultural heritage, is compatible with ecological, social, and economic sustainability in all aspects from energy efficiency to waste management, from resource utilization to cultural transfer. In adaptive reuse strategies, however, determining where and how the resources would be allocated in the buildings to be converted is decisive for the success of the projects. One of the foregoing assessment mechanisms, the reliability-tested AdaptSTAR, has been used as a decision-making tool.

The bazaar in question is an immovable cultural asset, which should be considered a local example representing design, originality, and an architectural movement and should definitely be transferred to future generations with the invaluable works of art it hosts. Notwithstanding the above, it is inevitable that the complex would receive certain interventions in the process of transfer to future generations due to the advances in contemporaneous construction technologies, changes in laws and regulations, and new spatial requirements as a result of changing habits along with current life dynamics and time-sensitive ageing. A two-stage assessment strategy was adopted for the purposes of the present study, followed by a comparison and interpretation of the study data in order to inform the right decisions about the location and size of the interventions in question.

A review of the study results indicated that the considerations during the interviews with the architect and administrative officer of the project and responses of the experts in the survey and the subsequent AdaptSTAR score were aligned. It was suggested that in order to protect the physical existence of the bazaar and to maintain it into the future physical and technological reinforcements should be made within the framework of the applicable laws and regulations in the buildings included in the bazaar complex, new or additional functions should be identified in order to revitalize the urban fabric by ensuring public participation, and the new function should ideally be selected from the axis of culture-art-education.

The fact that the AdaptSTAR model assessed the adaptive reuse phenomenon from all perspectives, but not only from an architectural point of view, urged a multilateral discussion of the potential conversion of IDB. As regards the reuse possibilities of IDB, the social, economic, and political issues both created obstacles, and included potential solutions.

In line with the data obtained from the study, recommendations for the process of conservation and transformation of IDB through adaptive reuse are listed below:

- establish teams of experts, local people and local administrators
- planning trainings and field trips on the importance of IDB as cultural heritage to raise public awareness and public support
- experimenting with different possibilities of use by opening the area for temporary cultural events
- exploring the possibilities of cooperation with educational institutions
- developing strategies through public meetings
- organizing project competitions in line with the strategies
- presenting the developed projects to national and international institutions and organizations to provide economic support
- involvement of local labour in the implementation of the adaptive reuse project

The suggestions outlined above form a basis for further elaboration and development for the building complex, the city where the building is located, or the cities of the world where similar examples are located. The first step towards a true change is to identify the possibilities and make an assessment. The present study also opens the door to future comprehensive studies that would scrutinize the aforementioned strategies and interventions in detail.

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