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# The Role of Urban Morphological Indicators to Improve Commercial Streets of Alkut City Center

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ARTICLE INFO	ABSTRACT
<i>Article history:</i> Received 1 August 2020 Accepted 25 August 2020	In urban design and planning, there is often a great role for urban morphological indicators of cohesion and organization of the urban form to raise the efficiency of the performance of dealing with the built environment. Here, the research problem can be summarized in the fact that the growth of Al Kut city center and its accompanying commercial streets (as a case study) had a negative impact on the shape of the city,
Keywords: Urban Morphological Indicators; urban design- based community; gentrification, commercial street; Alkut city center.	especially with poor compliance with laws and regulations governing to this growth. For this reason, the research assumed that adopting the Urban Morphological Indicators represents a solution to this negative phenomenon. The quantitative and qualitative analysis was adopted in conducting the field survey of the case study. To verify the research problem, a questionnaire was designed directed to the experts to answer the effective and verified morphological indicators to control growth in commercial streets. The SWOT method was adopted in measuring and analyzing results related to indicators (Spatial Configuration, Regularity, Urban articulating, Visual identity) according to four classifications (strengths, opportunities, weaknesses and threats). With the aim of morphological control of urban growth in the commercial streets of the city center. The research hypothesis was verified through an expert questionnaire designed to answer the effective and verified nature of morphological indicators for controlling growth in commercial streets. The most important conclusions and recommendations lie in enhancing strengths and opportunities, investing in them, activating, developing and strengthening weaknesses and threats and transforming their impact into a positive impact as much as possible.

#### 1. Introduction

Urban development includes many procedures and processes that occur in the areas near the city centers [1], the most important of these is the urban activity of the new construction and the increase in urban activities for public and private spaces[2]. Commercial streets are an important part of the urban intervention challenge. In addition to the services provided to the city, it represents a real threat to the population in terms of urban scale and containment and isolation for the urban activities of the area.

This kind sharing imposes a of civilizational and cultural commitment to both parties in a manner that guarantees the efficient use of the city's resources and Committed to the strategies previously prepared by the city's developers [3]. Most local city center have developed a morphological strategy to control the changes and transformations in city center growth. These plans provide an opportunity for decision-makers to make the right and appropriate decisions to reorganize the shape of the city in line with the growth and changes of cities centers [4].

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The level of partnership among participants is subject to a system determined by laws and regulations previously prepared by central and local governments.[5] However, opening the field for morphological decisions has negative aspects, especially in the absence of a clear vision for decision makers in controlling these new areas.

The central question is how urban morphological indicators influence the control of the growth of commercial streets, ensuring harmony with the built environment of the city center. and this is what the research tries to control. Should an urban intervention focus on the product of the urban environment or the process that produces the physical environment? Should it be considered objective or rational? Is it a private or public activity? With the presence of these determinants and indicators, especially by those who have the power to decide to build projects in the new areas.

# 2. Methodology

Urban development includes several actions and processes that take place in city centers, especially in their old or traditional centers, and this process requires dealing with the built environment with caution. the problem is illustrated by the Lack of control over investment opportunities, And the absence of control over the urban form, This may affect the good urban context of Alkut City Center.

The quantitative analysis of the study area (AlHoura Commercial Street) was performed according to urban morphological indicators. The reality of the situation was assessed and the research problem was diagnosed, which lies in the lack of control of urban morphological indicators in controlling the growth of commercial streets of Alkut City Center.

- Hypothesis: The quality of urban parts (Buildings, squares, streets) does not necessarily lead to the quality of the whole (urban Morphology of AlKut city center).
- The aim of the research :Using Urban Morphological Indicators to control the growth of AlKut city center, especially in the commercial streets, in line with the

nature of the place, the needs of the population, and the prevailing laws and legislations.

The research uses the quantitative survey carried out by the students of the Department of Architecture at Wasit University in 2019 for the city center, as well as the quantitative survey carried out by the researcher for the new development areas outside the traditional center of the city. Also, take advantage of the information provided by the municipality, the governorate administration and the investment department related to the research topic. The research will adopt a method of SWOT analysis to help understand strategic decisions, because the research is based on two groups, first groups user action, and the other controlling this act. This is mainly intended to show the strengths and weaknesses of each of the external and internal factors, with the help of the results of the analysis in choosing appropriate alternatives for research.

# 3. Urban development activities

City centers have undergone many different changes, including the growth of commercial streets, which is putting additional pressure on city centers. Therefore, the legal framework must be strengthened with the necessary indicators for the areas of intervention, in order to contribute to the promotion of positive morphological changes in those areas, to achieve integration and continuity with the city center.[6] Changing for the better and maintaining the sustainability of cities is at the heart of urban designers' work[7].

The obsolescence urban environment and the crowding of most of the city centers cause some investors to find new alternative areas near the city center to provide better services to users. Therefore, these areas offer positive solutions provided by those interested in urban design in the form of three main components: -

- visual qualities of the urban environment, urban space[8].
- transforming spatial arrangements relations between spaces and society[9].

• Creating a desirable physical world in line with the actual needs of users [10].

It is necessary that the new pattern express the new state of change and transformation of levels of the nature of land use, in contrast to the unjustified expansion at the expense of the city center.[11] In spite of the investment opportunities presented by the governments are closely linked to the economic engine in urban areas and cities, However, providing the most significant ability to interact between different actors and organizations in creating useful solutions to activate parts of the city is most important. [12] This interaction depends on the quality of the partnership between the two parties and determines the priorities for participation in forming the new areas of the city.

Therefore, this partnership must be viewed with a deep understanding in order to understand the nature of its impact on the overall changes and transformations of the new regions. Urban renewal is linked here with driving the wheel of transformation and change and being a set of social, economic and urban measures in general, with positive urban transformation or creating the optimal planning structure for the city and securing the best urban environment conditions for the residents of the region.

# 3.1 Quality of urban space integration

The success of the central area depends on linking it with the rest of the city, as the urban fabric of the central region contains old buildings and important activities whose role is to give aesthetic values and integration of the development process. This success depends on three aspects: -

- Viability: Absorb new changes in city centers.
- Vitality: is the provision of community needs, the viability of the city, and the balance between the structure of the existing city and the activities of the residents.[13]

• Liveability: It includes indicators of quality of life and its role in increasing community participation in urban development processes[14].

Enriching the physical side of the building with unique shapes and details is not sufficient to integrate it into the urban context in an effective and positive way. To understand the city, we must consider the interconnectedness of the elements (buildings, edjes, paths, streets, and open spaces) and other elements that actually connect parts of the city together that are most important to understanding the city morphology. [15] When continuous transformations take into account the different functional rings of city formation. It consists of two methods: (Traditional urban space: Surrounding urban buildings with an open space), (Modern urban space: is the formation of a building within the open spaces).

The real problem of urban practice in this aspect is the loss of urban spaces as a clear phenomenon in the totality of morphological transformations in the urban environment. Here, investment opportunities for new projects are among the desirable advantages in city centers. Urban renewal activities in traditional areas ensure great benefit from the sustainability of the urban form within the advantages of the site and the surrounding urban environment and the preservation of the natural and built environments.

## 3.2 New commercial streets expansion

The commercial districts is real estate designated for use by for-profit companies, such as shopping malls, office complexes, restaurants, and service stations. This type of property is located somewhere between industrial and residential properties or an extension of the city center. It may be rented out by a realtor, or purchased directly by the developer for future projects, and every expatriate must grant permission to construct new buildings.

The commercial Streets of the city mainly consist of commercial functions. Commercial

activity within cities includes the buying and selling of goods and financial institutions, the retail trade and services of companies, the sale and purchase of wholesale, and a variety of uses broadly classified as commercial.

Commercial activities can usually occupy a relatively small area of land, but they are important to the economy of a community. It facilitates the circulation of funds, provides employment opportunities, and serves many members of society, such as cultural events and public gatherings. The value of cities lies in the persistence of patterns of spatial organization over time and in maintaining this continuity during development processes. Contemporary traditional cities are at great risk of losing these characteristics.

## 4. The case study

The special nature of traditional city centers three basic characteristics imposes that distinguish urban formation, which are city plans, land uses, and building forms. Economic and social initiatives often enhance the morphological value of the city, and these initiatives and improvements are effective tools stopping some of the problems that in accompanied the decline of these centers due to lack of time and lack of keeping pace with technology and institutions.

The unrestricted growth in many urban areas and the growth of commercial areas in particular had social, environmental and morphological consequences. New construction in these areas may not always have a positive impact on the city and the urban environment. Therefore, the investment opportunities in commercial streets in the threatened areas must be carefully considered to the extent that they benefit the region. Especially in aspects related urban design concepts, including to containment, gradient and scale, which can define the visual characteristics of an area. Accordingly, AlHoura Commercial Street of AlKut city center as proposed as an area to study

urban morphological indicators and to benefit from the case study to enhance the positive concepts of the study area to enhance the built environment.

## 4.1Traditional Alkut city center

Al-Kut is a city located in eastern Iraq, southeast of Baghdad, on the left bank of the Tigris River, 160 kilometers away. The old town of Alkut is is within a sharp (U) curve of the river, opposite the Shatt al-Gharraf bifurcation point of the Tigris River see Figure (1). This bend is almost an island but has a narrow shore connection. Alkut was for centuries a regional center for the carpet trade.

The choice of Al Kut city center came for a number of reasons: There are many areas with good investment opportunities associated with the city center. The current view of development is based on the formal components of the Kut city center without regard to urban vocabulary and signage, streets and squares, urban spaces, city stereotypes, urban fabric, and urban architecture. The visual arrangement of Al Kut city center can be controlled and improved by controlling the growth of the city rings.

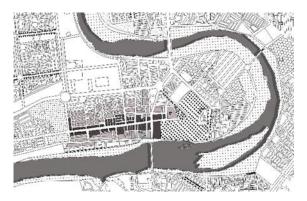


Fig. 1. Siteplan of Alkut City Center Source:Wasit Local Government / Development of the Master Plan for Wasit Governorate 2014

The commercial streets in the traditional middle of Kut can be seen as a social and economic revitalization project that goes beyond the environmental dimensions to provide the area with a green space, while creating job opportunities through the investment of the cultural capital existing in the area. Figure (2) Encouraging residents to open the horizons of small businesses, and take advantage of small loan facilities, with attention to infrastructure and improvement of homes and public spaces, so that the area is more attractive.



Fig. 2. Perspective of Alkut city center. alhoora commercial street 2. a commercial street of traditional city center. 6:30 pm source: photographed by the researcher

Population increases and economic growth in the city of AlKut have resulted in urban pressure on the city center. This increase has led to a failure to absorb the increasing numbers of people on the one hand, and a failure to absorb the changes in people's lifestyle and their various needs on the other hand. Many markets, supermarkets and malls have emerged in areas close to the local market in the city center as alternative and effective places for a large number of users who fit their new lifestyle. [16] The family can go, shop and enter restaurants in one place, without having to enter crowded areas or without paying attention to their own means of transportation, which represent a major obstacle in the traditional environment of the city.

Although there are multiple garages near the market, they are prepared and designed for a specific type of user that does not take into account the new needs of the Iraqi family within the traditional environment. Alhoora commercial street was chosen for reasons:-

• Close to important areas of the city, such as the governorate building, the main local market, the provincial council, the municipality, and cultural areas and close to residential areas.

- They are new attractions for events in the traditional downtown markets.
- It has a good future and has a functional and urban diversity.
- It is an ideal model for the growth and development of commercial streets linked to the city center.

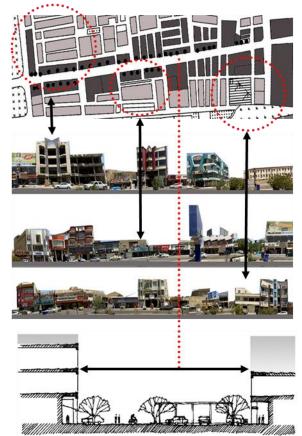
Although the development of alternative areas that take into account the developments and provide a modern urban environment, as well as functional diversity and the mixed use of activities, the development process in these areas has paid great attention to meeting the environmental and architectural conditions, as well as the laws and legislation imposed by the Investment and City Administration Authority without looking at The problems associated with the original approvals process on individual buildings.

The type and nature of urban development is associated with a large number of problems, including the backlog of decisions regarding the balance between city growth and the provision of necessary services. Decisions do not cancel each other, even if they are simple decisions, they will in one way or another affect the shape of the city, and this is what is represented by the city center of Kut, including (building spacing, place and type of urban activities, the nature of lines of movement).

#### 4.2.Data collection

Information about the area was collected based on a survey of the case study, included height of the buildings, number of floors, nature of use, width of streets, proportionality, proportions between the buildings and the street, and other details. a survey was also participated at the local population and users of the area (between the ages of 14 and 75 years) for various topics related to the subject of the study. the survey was carried out by direct interviewing using questionnaire forms in which the interviewers recorded the respondents' answers.

The commercial street consists of multiple blocks as well as multiple functions and represents a new outlet within the city center but is also a weakness. In addition to functional solutions and new urban buildings that represent a real need for the city's needs, what they offer in dealing with morphological indicators does not bode well, according to the survey. The reason is that the Morphological Indicators is not handled on an urban scale. We see this clearly in Figure (3).



**Fig. 3.** Alhoora commercial street from top to bottom: plan of Alhoora commercial street / skyline of the street/ cross section of the street.source: photographed by the researcher

The survey evaluates Alhoora commercial streets residential area by main indices that correspond to morphological assessment aspects (Spatial Configuration, Urban relationships, Urban articulating, Visual identity). The tools and matrices were used in the SWOT analysis that contribute to reaching the nature of the relationship between environmental factors and the variables affecting, which contribute to carrying out analyzes of external environment factors. This is to gain access to opportunities or threats in the external environment, and the strengths and weaknesses of the internal environment. Here, this method was used to organize and collect information in order to reach the main objective of the research.

## 5. Assessment items

The evaluation indicators were arranged based on an analysis of strengths and weaknesses, areas of opportunity and risk areas according to the SWOT analysis, and the indicators were divided into two main parts: the first part: it relates to the dominated degrees (strengths and weaknesses), and the other part to the degrees that are not controlled (opportunities and threats).

The management of the city center requires its control by the local administration, which affects in one way or another the nature of the built environment in accordance with the requirements of safety, control and monitoring in public places. This is an important step in identifying indicators, as they are the primary determinant of any strategy that intervention parties can follow, as this analysis includes organized and arranged research of data, study of dealing trends and review of internal and external information.

What we see when the main Alhoora Street and Al-Haidariya main Street were transformed from residential areas to commercial areas and buildings and changed the density of the area's users, exposing the residential environment to the danger of strangers and violating their privacy. Accordingly, the urban appearance in the centers of the city of Kut took two opposite sides from its relationship with the development activities to: -

- 1. Formal and legal development characterized by the provision of economic and cultural services and opportunities.
- 2. An informal or systematic spread in the periphery, characterized by instability and chaos due to the dynamism of the population mostly. This urban appearance reflects cultural, social and economic differences and expresses the form and function of contemporary historic city centers.

There are three main processes that can change the physical existence of cities, the first of which is the process of transformation, as well as the process of adaptation and reconstruction work. They are all based on the fact that natural causes or targeted or indiscriminate intervention can play a large role in determining the magnitude of risks arising in the city center.

The planning authorities in the country are working on introducing considerations of environmental protection, pollution control, rational consumption of natural resources and sustainable development in development projects plans, and also protecting water from pollution, protecting the air against pollution and reducing noise, protecting biological diversity, managing hazardous materials and waste.[18] Therefore, any project in Iraq, including the study area linked to this law and this Council and the project owner is committed to provide an environmental impact assessment of the project and its objectives:-

- Modifying and improving project designs.
- Confirm the optimal use of resources.
- Improve the social impact of projects.
- Inform decision-makers and assess the situation, Preventing any malfunction of the environment.
- Identification, measurement and minimization of impacts of the project.

In addition to enabling the local community to participate in the development and assistance in planning and building institutional capacities for this type of intervention .A well-designed project can reduce risks and impact on the environment and people, as well as increase the chances of acceptance of the project from the public. With public participation opportunities provided by the most directly influencing people interested in the project.

There is an important mechanism in selecting projects with impact in the new areas close to the city centers, but there is a lack of control in choosing the correct indicators that affect the morphological evaluation of the regions. Therefore, the study area will be chosen and these indicators applied to determine its importance using the efforts of experts.

## 5.1Assessment model

Experts were relied on in the field of urban design and architecture with the classification and accreditation of these indicators in determining the Urban Morphological Indicators system and its subsequent use to determine the priority of maintaining new urban areas in the center of AlKut city center.

## 5.1.1 Spatial configuration

The urban Spatial Configuration refers to the surrounding of blocks outer space and you define it in that Configuration, which consists of buildings as the main component parts of the blocks. Urban space provides continuity between the public sphere, the quasi-public sphere, and the private sphere. In order to activate the performance of space relay, the urban barriers and gaps between those space areas must be reduced, which are primarily caused by the poor organization of urban masses that contribute to impeding the continuity of space.

# 5.1.2 Urban relationships

New development projects in city centers have focused heavily on the new developing style of society, while neglecting the social relations associated with the place. The implementation of these policies resulted in a significant loss in the quality of traditional activities in public spaces and the degradation of urban centers by removing large parts of the city fabric. [17]

Therefore, cities have become more variable in light of the tyranny of the individual struggle to improve the living reality, and jobs have become more integrated as a result of business specialization, which is reflected in the content of the city.

# 5.1.3 Urban articulating

The urban environment is all and parts of a dynamic unit of movement, and those parts that make up the whole are functionally and spatially

interrelated, so if the parts are not related to each other to achieve a specific goal, they remain separate and fragmented despite their presence within a content that can be computed as a whole. [18] So we need to find a threshold between successive distances and achieve a direct correlation between adjacent parts, so that each part is distinguished by its independence, and also to define the boundaries of the boundaries with the other adjacent part [19]. Creating a transitional area or joint through the use of an element or space or others with neutral spatial characteristics, and it acts as a transitional element between the opposing parts in a way that ensures the independence and separation of the opposing parts as well as their interconnection.

The extent of this complexity falls under the concept of the urban environment, which consists of a set of functionally and spatially interconnected parts, and each part has a specific boundary of a private or public space.

# 5.1.4. Visual identity

The visual aspect is concerned with achieving the identity and specificity of cities, understanding the variables and developments that affect the urban context, and taking into account the nature of their inhabitants [20]. The motor axes have a role in activating the performance of the visual axes. Movement or mobility is an important element in the visual perception of the elements and components of the three-dimensional built environment[21].

In urban visual identity, there are three effects which are place sense, visual identity, and visual modification. The sense of place is based on lines that connect the elements of space to one another, including pedestrian paths in streets, open linear spaces, and other elements that effectively connect parts of the city together.as for the visual identity, it depends on the patterns of outer space [22].

While visual morphology is related to focusing on urban volumes or the so-called negative space of architectural plans within the relationships of elevation and hierarchy of interconnected spaces to illustrate the structure and system of urban spaces as essential parts of the urban form.

#### 5.2.Assessment items weighting

All these indices were taken from survey (2018-2019) in which the residents evaluated the desirability of urban form in points (5 points: excellent, 4 points: very good, 3 points: good, 2

points: bad, 1 point: bad), see table (1). Used the expert judgement method to determination of the residents' opinion compatibility and determine the significance of the criteria. On determining the numerical values of the indices their insignificance (importance) is determined.

		1	2	3	4	5
1	Spatial	0.18	0.13	0.23	0.4	0.06
	Configuration					
2	Urban relationships	0.06	0.16	0.58	0.05	0.15
3	Urban articulating	0.2	0.05	0.11	0.56	0.23
4	Visual identity	0.02	0.66	0.15	0.05	0.12

**Table 1** Example of weighting evaluation items

The significances of the indices of sustainability of urban form are evaluated in numerical scale. The research determined the values of each of the aforementioned strategic factors in analyzing strengths, weaknesses, opportunities and dangers by combining them with two matrices to evaluate the Urban Morphological Indicators system, and to assess the sustainability of new urban areas, which the research will address through the following point:

- The evaluation matrix of the Urban Morphological Indicators system

SWOT analysis helps determine Urban Morphological Indicators factors. The steps of the evaluation matrix for the Urban Morphological Indicators system can be explained through the following steps:

- 1. Identify a list of five of the most important opportunities as well as the same number of threats with the greatest impact in the region.
- 2. The relative weight of each factor is multiplied by the order of that factor, i.e. (second column x third column) in order to obtain the weighting weight of each factor.
- 3. The weights are collected in the previous step to obtain the total weight of the area.

Comparing the sum of the results of the weighted weights field with the weighted average score of the total score, which represents (3), which was obtained by the sum of the order of strategic factors divided by their

number  $1 + 2 + 3 + 4 + 5 = 15 \div 5 = 3$  and in the case of increasing the sum of the weights The region has a weighted average over the weighted average, then the Urban Morphological Indicators represent opportunities for the region, but in the event that the weighted total average exceeds the weighted total weight in the region, the Urban Morphological Indicators represent a threat to the region.

### 6. Results and Analysis

#### 6.1.Opportunities

The results (Opportunities) can be presented in (Relative, Arrangement, weightings) as follows, see Figure (4)

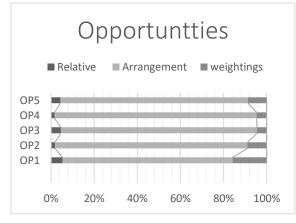


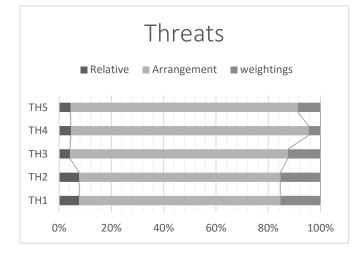
Fig. 4. Opportunities items results

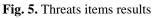
(OP1) Investing in urban real estate (0.2, 3, 0.6), (OP2) Implementation of high-quality projects (0.1, 5, 0.5), (OP3) Anticipate the needs of residents and users (0.05, 1, 0.05), (OP4) Privacy, identity and individual display (0.05, 3,

# 0.15), (OP5) Rehabilitation and reuse of some important buildings (0.1, 2, 0.2).

#### 6.2 Threats

The results (Threats) can be presented in (Relative, Arrangement, weightings) as follows, see Figure (5):





(TH1) Lack of control over technologies and materials (0.2, 2 0.4), (TH2) Laws, plans and partnership flounder (0.2, 2 0.4), (TH3) Lack of awareness of the need to intervene (0.15, 3 0.45), (TH4) Lack of a framework for arbitration and participation (0.05, 1 0.05), (TH5) Not to use the expertise of designers (0.1, 2 02).

The results show that this region has opportunities in the system of Urban Morphological Indicators because the sum of the weights is 3.5 greater than 3 and it must be worked on developing them. The research would like to refer to the following points related to the implementation of the Urban Morphological Indicators system evaluation matrix:

1. Forms of external strategic factors are distributed to each member of the strategic department or board of directors in the region to determine the importance of each strategic factor separately towards the region and the effects of each strategic factor on the strategic decision. 2. Collect models, calculate averages for them, and then design the matrix to measure opportunities and threats.

The research believes that this method will help identify strategic factors of importance without them, which are less important to the region, taking into account the order of weighting strategic of factors, and the identification of Urban Morphological Indicators that represent opportunities or threats towards business organizations.

- Matrix for evaluating the sustainability of new urban areas:

The same steps that have been referred to in the Urban Morphological Indicators Assessment Matrix can be done by examining and tracking the elements of the internal environment represented by the strengths and weaknesses in creating the Urban Sustainability Assessment Matrix.

Where we find that the internal environment factors of the region represent strength, with a weighted total weight of 3.05 greater than 3, which the administration of the region must work to develop for the better, due to its large decline, and therefore does not turn into weaknesses that lead to losses and a decrease in the growth rates in the region . The research provides a matrix for assessing the sustainability of new urban areas through the (strength and weakness).

#### 6.3.Strength

The results (Strength) can be presented in (Relative, Arrangement, weightings) as follows, see Figure (6):

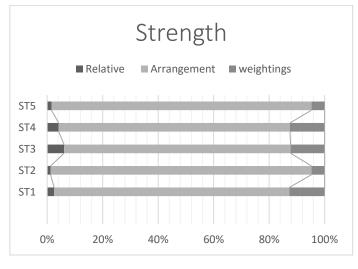


Fig. 6. Strength items results

(ST1) Strengthening the economy and social aspect (0.15, 5, 0.75), (ST1) Promote the value of positive development and sustainability (0.05, 4, 0.2), (ST1) Realizing the model of building modern markets (0.15, 2, 0.3), (ST1) Activating the sustainable investment strategy (0.15, 3, 0.45), (ST1) Balanced urban recovery (0.05, 3, 0.15).

#### 6.4. Weakness

The results (weakness) can be presented in (Relative, Arrangement, weightings) as follows, see Figure (7):



Fig. 7. Weakness Items results

(WE) Going beyond sustainable sectoral policies (0.05, 3, 0.15), (WE) Lack of permanent monitoring and evaluation of the process (0.05, 2, 0.1), (WE) The threat of the residential area

By strangers (0.15, 2, 0.3), (WE) Real estate developers are not concerned with sustainability (0.1, 4, 0.4), (WE) Weak partnership between

the government and the private sector (0.05, 4, 0.2).

In light of the foregoing, the research believes that the matrix for assessing the sustainability of new and external urban areas can be used to analyze the elements of the internal and external environment for the following reasons:

- 1. The system of Urban Morphological Indicators surrounding business organizations has become more severe.
- 2. Identify internal strategic factors that have the greatest impact and importance by weighting each strategic factor, in a very short time and in parallel with the strategic decision maker, which will enable the course to be corrected at the best time.
- 3. Determine the region's position on Urban Morphological Indicators and identify the most important opportunities and threats that will affect the strategic decision.
- 4. Determine the region's position on the internal environment to identify the most important weaknesses and strengths that will affect the strategic decision.
- 5. Comparing the weighting weight of each strategic factor from one year to the next to determine the extent of its importance and its impact on the region, as well as the weighting weight of the region from year to year and provide the necessary reports.
- 6. To strengthen and strengthen the region's strengths and opportunities to try to reduce vulnerabilities and threats on the one hand, and increase market share and support the competitive position on the other hand.
- 7. Follow-up weaknesses and threats with high weights and work to find the best ways and means to address them first.

By applying the results of the Urban Morphological Indicators evaluation matrix and the results of the new urban areas sustainability matrix, we find that the sum of the opportunity box = 1.65 and the sum of the threats box = 1.50 and subtract threats from opportunities = 0.15, as well as the sum of strengths = 1.95 and the sum of weaknesses = 1.10 and subtract the weak points from Strengths = 0.85 In light of the

existing results, there is no objection to implementing the strategic decision.

Many buildings have a building permit and are within the controls, but did not provide creative solutions in terms of morphological sustainability, according to what was stated in the research, and the result is not every commitment to the rules is correct and performs the required.

### 8. Development assessment items

In light of the previous presentation, the research believes that qualitative results can be transformed by analyzing **SWOT** into quantitative results that help strategic decisionmakers in making the appropriate decision as quickly as possible, as well as using weightings and their totals to help in making the necessary comparisons to track the path of strategic factors and know the developments and deviations that pass It out. Each strategic factor separately, and measuring the region's ability to deal with strategic factors in the business environment in the region in comparison with other business organizations to achieve continuous development and achieve comprehensive control over all elements of the internal and external environment.

It requires strengthening the legal framework, and determining the effectiveness of individuals and institutions within the prepared strategies and future plans of the city.

Through the nature of financing and the material resources available, with its focus on reinvestment and directing consumption in a way that enhances the quality of life in urban areas. In addition to adhering to building codes and urban management regulations, it gives privacy in shaping city centers.

There are two cases that have been identified through research: The first case, which is the positive case in which the priority is the interaction of the elements of transformations in contemporary cities with the components of the current original city (the main city references) and its traditional functions in a way that leads to a balanced development between them. The second case, which is the negative situation that occurs in the absence or weakness of pre-planning and with the effects interaction of (urban transformation), which leads to overlapping planning and actions resulting from partial interventions by multiple parties with the absence of joint coordination, and on a larger scale with a weak role of supervision that governs city.

However, the possibility of developing the traditional urban horizon due to government legislation and construction conditions, including determining the basic densities and building heights within city centers that determine the morphology of the urban horizon. The built environment has basic principles that must be respected in building permits according to their terms, which are:-

- 1. **Sense of place**: Respect and Approbation of built environment.
- 2. **Enclosure**: enhance this feeling with urban design.
- 3. **Scale**: The relationship between human dimensions and buildings scale.
- 4. **Hierarchy**: The relationship between building sizes and the city context.
- 5. **Attention to Billboards**: by Activating educational signals and lighting.
- 6. **Visual Identity**: creating an impression through the visual elements of a place.
- 7. **Reviving Traditional Materials**: To confirm the spirit of the place
- 8. Society and their Participation: in their environment and surroundings.
- 9. **Crafts Traditional**: It expresses people's feelings and visions of the built environment.
- 10. **Compatibility and Harmony**: To create communication between People's actions and built environment

The importance of developing Urban Morphological Indicators lies in their ability to support the quality of life, raise the morale of the community in city centers and direct its future by involving people and key bodies in developing and building the city, and matching city strategies. It plans its economic and social reality, diagnoses the strengths and weaknesses of the built environment, awareness of the use of human and material resources, and most importantly, provides periodic monitoring and evaluation of progress and performance by the local government.

## 9. Conclusions

The city of Kut suffers from a weak panoramic view, the absence of organizational unity, and the real concept of diversification within the general context.

The results revealed three main categories of results: The first category: enhancing the human loss to the traditional urban place, increasing the isolation of adjacent functional areas from each other, and the absence of clear policies to promote positive values in the area.

The lack of partnership between government and local institutions, international organizations, and private sector institutions means the lack of control over the urban form of the city.

## Recommendations

Providing partnerships and empowering the community and the elite. With an emphasis on encouraging participatory approaches and highlighting the creative effort of the development process.

Optimal exploitation of natural resources and activating the energies of the place through the use of modern technologies in construction and improvement of social and environmental conditions.

Architectural practices and design awareness through three main axes (rationalizing or standardizing design processes, increasing the individual sense of the architect, his responsibility towards society, and the spread of the traditions of academic institutions).

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