

# Façade Committee, Challenges, and Achievements; Assessment of Mashhad Façade Committee Performance\*

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Received 18 March 2022; Revised 01 December 2022; Accepted 08 December 2022; Available Online 19 August 2023

## ABSTRACT

The inherent duty of urban design is to manage the improvement of urban design qualities in both content and procedural dimensions. Without simultaneous attention to these two, even the purest urban design theories may remain ineffective in reality. Improving the quality of the landscape, in addition to the need to formulate comprehensive, clear, and more or less flexible regulations, requires the definition of a precise and efficient executive structure so that it can be a suitable leverage for the implementation of these rules. Façade committees are one of the methods regarded for the control and implementation of these approvals, which play a significant role in achieving the goal of landscape improvement. Mashhad City has been one of the main pioneers in this field in the country by compiling approvals and forming committees to control and guide urban landscaping. The present research aims to evaluate the performance of the Mashhad façade Committee by examining its damages, challenges, and achievements as well as providing effective suggestions to improve this performance. Applying a mixed method and alignment methodology, this study has evaluated the performance of the façade Committee in two quantitative and qualitative phases. The research findings state that the most important challenges of façade committees are qualitative decisions, applying personal interest, weakness of legal position, and lack of criteria for action and executive guarantee. Its most important achievements are drawing the attention of the specialized community to the significance of the public landscape, citizens' rights and interests, and strengthening the architects' position in the development process. Some suggestions have been proposed for improving the performance of the façade committee in the procedural section that includes improving the organizational administrative level of the façade committee, forming a project steering committee, preparing periodical performance reports. Some other suggestions were proposed in the case of the content section, including planning for participation and opinion polls, and acculturation for Iranian architecture promotion.

**Keywords:** Urban façade, Façade Committee, Urban Landscape, Mashhad.

\* The present article has been extracted from a research project entitled "Investigating the Performance of the Façade Committee in Realizing the Desired Urban Landscape" commissioned by the Research Center for Islamic City Council of Mashhad, which was carried out by the first author in 2020.

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## 1. INTRODUCTION

Façade, in its lexical meaning, is the outer appearance of anything visible and positioned in front of the eyes (Dehkhoda dictionary). The façade is the interface between interior and exterior spaces (Takashi 2004). According to Clarence Stein (1955), urban design is the art of relating structures to one another and their natural setting. Cullen believes that what is effective in creating a building is the art of architecture. A new quality is formed by the juxtaposition of several buildings, and the success of this juxtaposition depends on the art of communication, and the art is in communicating between visual elements in a new whole (Cullen 2008). In addition to their role, individual buildings should serve the needs and characteristics of the space as a whole in many situations. If each building were to attract attention alone, the result would be annoying chaos. Although very few can sing solos, most should sing together like a harmonious chorale (Francis 2011). The façade form and style, the urban façade elements such as doors and windows and openings, volume compositions, color, signs and symbols, used materials, canopies, and other elements should be evaluated in terms of harmony and balance, proportions, symbolism aspects, Beauty and dignity, maintenance and restoration, order and readability, simplicity and complexity, continuity, diversity, and composition (Soheila 2018). The criteria considered for this evaluation mostly have visual and aesthetic aspects that should create qualities such as diversity, identity, readability, and meaning in the spaces and improve the citizens' knowledge.

The important issue in designing the urban façade and walls, in addition to the external components of the façade, is to create harmony and connection with the adjacent façades to create an integrated whole in a way that does not limit and distort architectural creativity. According to "Tibbalds", the issue of harmony and achieving an integrated whole as the main goal of development control has always been of interest to control authorities, but the key question is how much harmony is needed to achieve this goal:

- The variety of elements must be maintained to create the wall harmony.
- The personality and character of the elements should be respected to create the harmony of urban façades.
- The unique role and status of the elements must be maintained to create harmony in urban walls.
- The elements should be linked mutually to each other in an integrated way and aim to develop a whole with a common meaning to create harmony in the urban façades.

To achieve this goal, creating an integrated whole requires the efforts and cooperation of the experts, organizations, and professions involved in the subject, as well as the cooperation of professionals, developers, and citizens with each other. The methods of controlling and guiding the urban façade

and wall are planned in different ways based on the management system and the executive organizations of the controlling organizations. It should be noticed that judging aesthetic matters such as urban walls is relatively subjective due to its qualitative and interpretative aspects, and the control authorities should avoid imposing their interests on the permit applicants. Control authorities should not focus on façade design details unless the environmental settings are in such sensitive conditions that justify precise control; for instance, development in the historical areas of the city or areas with a special value or contextual character. In general, local control committees and authorities should not accept plans incompatible with the local character of the area. The success of solutions requires aligning perspectives. Cooperation is required not only between the subject-related professions but also between the specialized sector and the local community. Architects cannot do anything alone.

In recent years, façade committees have been established in important cities of the country as a means of controlling and guiding urban façades and, indeed, are considered one of the control procedures in urban facades, which accurately definition of their roles, status, and responsibilities lay an important role in the implementation of approvals and is goals. Like any other control structure, control authorities and façade committees cannot be expected to increase the high-quality architectural works in the city. Rather, the main goal of these authorities and committees is to control façades that lack minimum qualities. In addition to comprehensive, clear, and more or less flexible rules and regulations, the method of creating harmony in the façade requires a precise and efficient structural definition to be an appropriate leverage for the implementation of rules and regulations. Mashhad Municipality also enacted some approvals based on the recommendations of the Supreme Council for Planning and Architecture in 1990 and 2008 in several stages to create a harmonious and integrated urban wall. Further, considering the instructions stated in 2005 and 2012, the City Council has assigned the duty of controlling and monitoring those instructions and regulations to the façade committee.

The most important contents of the aforementioned resolutions can be categorized as follows:

- Content issues: matters related to the definition of the façade, high-quality materials, color palette, additions, ridge, harmony of different levels, skyline, form of openings, prohibition of non-Islamic façades, maintenance of softwall, etc.
- Procedural issues: rules related to the condition of issuing the completion certificate in case of façade-building on the lateral surfaces, control, and monitor method, safety measures, maintenance, and restoration.

Although urban renewal is a gradual and time-consuming process, and the replacement of new

façades on the old walls and its effectiveness on the urban landscape quality requires a long period, the façade committees have influenced the process of designing and constructing the urban buildings in these few years. Evaluating this performance to identify the strengths and weaknesses of this committee can help improve this committee's performance to diminish negative effects and increase its effectiveness. Considering that it has been almost a decade since the beginning of the façade control process in Mashhad Municipality, it is required to measure the impact of these decisions in the form of approvals and committee activities in the field of organizing the urban image and landscape. This evaluation can be divided into two sections content (the content of approvals) and procedural (how to carry out controls and decision-making in the form of a committee) dimensions, and this research would focus on the procedural dimension due to its specified purpose. Research question: What are the most important structural and functional challenges as well as achievements of the Mashhad façade committee?

## 2. RESEARCH METHOD

The philosophical foundations of this research are formulated based on the pragmatism paradigm. Therefore, the present research aims to make the findings applicable by adopting a mixed method that combines more than one method to address research questions (Creswell 2017). Mixed methods research (MMR) is useful for addressing complex and multidisciplinary urban problems (Bhuyan and Zhang 2019). Based on this approach (mixed method), a triangulation research plan has been selected for accomplishing this study. According to this plan, quantitative and qualitative methods with similar weights are used simultaneously. The collection and analysis of quantitative and qualitative data are done separately in this research. The combination of different results through comparison is taken into account in the process of interpretation. Quantitative data collection was done with a questionnaire tool with the help of experts, and qualitative data was collected through in-depth interviews.

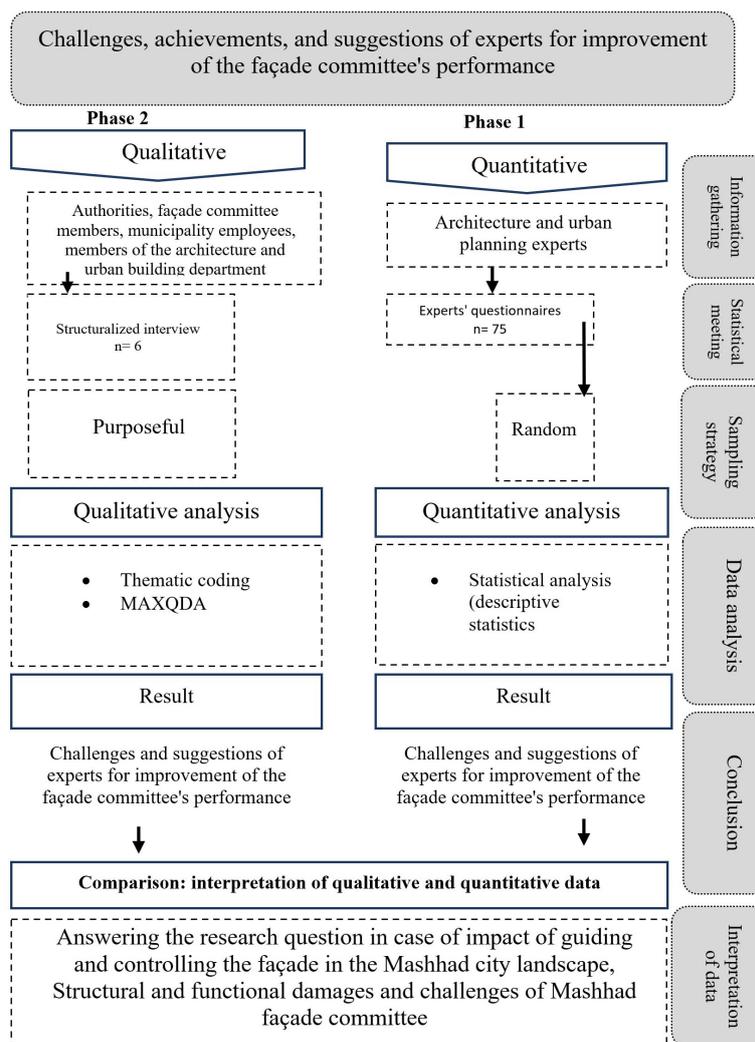


Fig. 1. Research Methodology

The statistical population and sample size of the present research are determined in two qualitative and quantitative sections as follows:

- Quantitative section: the statistical population of experts responding to the online questionnaire
- Qualitative section: The population participating in the qualitative section of this research includes experts, officials, and members of the façade committee. Snowball sampling was applied to determine the number of participants in this section. In this sampling method applied to find key experts, assuming that some primary informants were found, we made an effort to get access to further experts through every expert by posing questions such as: Who else knows a lot about this? Who should we talk to about this?, etc.

Since the present research used both quantitative and qualitative approaches and questionnaire and interview tools, both quantitative and qualitative methods were applied in data analysis. Statistical analysis was used to analyze the questionnaires, and thematic coding analysis was applied in the MAXQDA software to analyze the interviews.

### 3. RESEARCH PROCEDURE

The term “façade” generally refers to the external surface of the wall. Sometimes, however, the term is reserved to name only the frontal part of a building (Adam 2010). The term "façade" is generally the exterior part of the wall. However, this term sometimes is used only to refer to the outer part of the building. This word comes from the post-classical Latin word *faccia* (meaning human face). Initially, a façade was simply a by-product of a material type used in wall construction, as external and internal surfaces were no different. Gradually, with the increased significance of aesthetics, the external layer of human shelters acquired refinements that were pleasing to the eye (Anna 2019). The urban façade is the dominant appearance of the city texture and the narrator of the first messages in the citizens' eyes (Fateme and Molla Salehi 2019). Façade is the output of internal features of the building and its residents, on the one hand, and it is associated with the city and its people, on the other hand (Hadi 2019). Urban façade and landscape is considered the first level of human contact with the phenomenon of the city and affects the visual perception of the environment. Further, although each façade is differentiated from another façade in terms of its features and character, it is necessary to consider the facades forming an urban wall as an integrated whole, and every element of the façade should have an effective relationship with this whole.

Peter Buchanan's research on contemporary façades of London (Bhuyan and Zhang 2019; Buchanan 1988) has taken the abovementioned ideas a step further. As an architect who oversees the face of contemporary

England, he is strongly influenced by Christopher Alexander's ideas and presents powerful ideas about the significance of the social and psychological relationship between the building façade and the public realm. Buchanan considers the crucial problem of architecture to be neither the choice of style nor honest and straightforward strategies. He rejects the moral fallacy of modernism; a fallacy that is the basis of many architects' opposition with the design control and considers it to be the cause of promoting dishonesty in plans. He considers the repetitive and boring facades as the main problem of contemporary architecture that are mostly prefabricated to speed up the work. Moreover, he refers to them as "monetary façades". Buchanan focuses on the following issues:

1. restoring the importance of the street and the role of façades in it;
2. paying attention again to the context, history, and decorations; and 3. the importance of the status that façades provide physically and mentally for people. Regarding the façade, he expresses the following eight prescriptive ideas:
1. The façades should create a sense of place. They should fulfill their dual role (wrapping the whole building and splicing the external space) well.
2. The façades act as a mediator between the interior and exterior space, as well as individual and public space, and provide the possibility of a gradual and hierarchical transition between them.
3. The façades should have windows that encourage people to pause in front of the façade and represent the inner living state of the building.
4. The character and integration of the façades should be compatible with the existing custom (being in harmony with the neighboring buildings and entering into a dialogue with them).
5. The façade composition should have an appropriate rhythm and order and create visual comfort as well as enthusiasm in the audience to pause and watch them.
6. The façades should represent a sense of the mass of the building and its construction materials; a sense that should be intertwined with the expression or manifestation of the building form.
7. The materials used in the façade's construction should be original, durable, tangible, and decorative. In addition, they should be compatible with nature and climate changes.
8. The façade decorations should attract the audience's attention, and instigate their visual sense and curiosity (Buchanan 1988).

### 4. SPATIAL EXPECTATIONS FROM URBAN FAÇADE (ENVIRONMENTAL PERCEPTION DIMENSION)

Indeed, the buildings' façades appear as a screen of architectural compositions that entail a kind of meaning and therefore can stimulate the human imagination and communicate with him (Mohammad

et al. 2013). Some elements in the wall are not visible like its components (edge and background). These elements are received from the perceptual dimension and influence the visitor (Kevin 1994).

Furthermore, façades have multiple roles every one of which requires special attention: protective role, presentative role, and communicative role. Façades also have constituent elements as follows (Table 1).

**Table 1. Façade Elements**

Element of Relationship in Façade or Urban Texture	
Ground Line	The edge where the building meets the ground is called the ground line. This line can be created by the visual impact of the plinth or even cover the entire ground floor. The ground line is representative of the manner of connection with the ground (Pakzad 2003).
Skyline	The skyline is the boundary line between the earth and the sky; the skyline en-tails the boundary of the mass and buildings joining the sky (Pakzad 2003).
Dominant Lines in the Façade	Sometimes, the manner of combination of different surfaces and volumes elements in one texture creates lines in the visitor's eye. These lines are the induction lines of the texture towards the visitor. These lines may be vertical or horizontal (Pakzad 2003).
Component of Elements in Urban Façade	
Width of Pieces	Each wall is made of a combination of several separate façades or the façade of different independent parts. The distance between the two edges of one façade and the adjacent façades determines the width of the piece (Pakzad 2003).
Height, Volume, and Mass	Height restrictions are one of the height control methods. Controlling the volume and mass of the building by determining the maximum horizontal dimensions or infrastructure area also affects the height of buildings (Malek 2013).
Protrusion from the Wall	The protrusion is a protruding structure at a height above the building surface where all its surfaces are closed. Protrusions are volumetric elements of the wall that create rhythm or make the wall distinctive depending on its type and connection (Malek 2013).
Aperture and Openings	Apertures are the communicative spaces between the inside and outside of the wall, such as windows, openings, etc., which are transparent and allow light to pass through. Large apertures which ignore proportioning of the façade make the wall look visually impaired (Malek 2013).
Color and Texture of Materials	Color and materials are considered dominant visual elements in the context, which inspire the phenomenon of localism. These elements play an important role in creating balance, harmony, and synchronization between the context components (Kamran 2014).
Urban Façade Decorations	It is the manner of arrangement of urban architecture elements in a building. The decorations are also effective in architectural style and are indicative of social tendencies (Kamran 2014).
Installations, Signs, and Panels	Environmental installations include all components and elements that appear in the environment intending to facilitate the use of the landscape for the human being, such as urban furniture, panels, signs, etc. (Kamran 2014).

## 5. FAÇADE CONTROL PROCEDURES

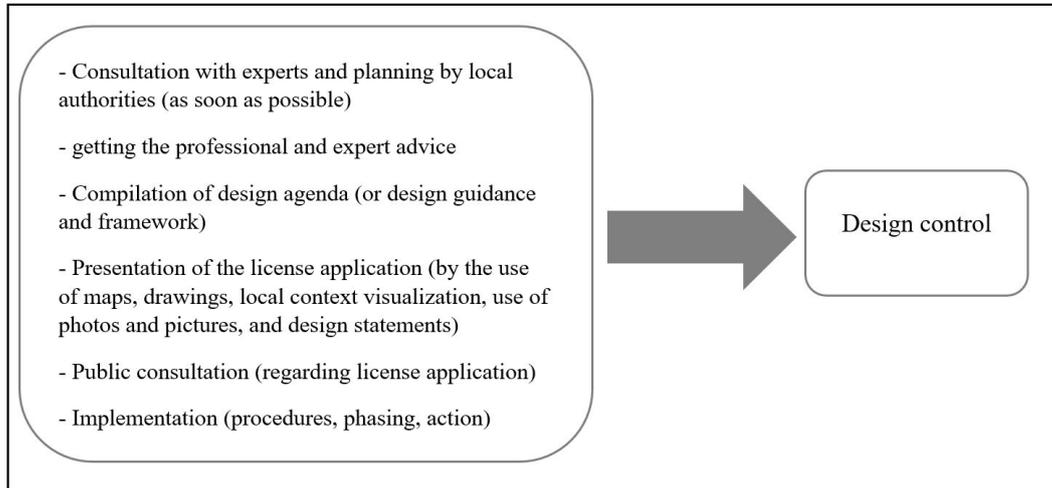
Carefully analyzing the definitions of the design process, Jones (1980) defines it as a set of actions and measures taken sequentially or in parallel to conclude the final design from an agenda with an initial goal. His opinion about the process has been defined as a path or strategy that is planned and adopted for the design completion. He distinguishes between design procedures and the design process (i.e., thinking). Jones assumes design procedures as a routine. From the perspective of planning, the development control system regulates a range of formal and informal procedures as a stage of the design process.

Among the formal procedures, it can be referred to as "submitting the license application to local authorities", "presenting" (presentation), and "public consultation". Further, among informal procedures, it can be referred to the advice, guidance, consultation with experts, and discussions with supervisors and development controllers. These formal and informal procedures are important components of an efficient process and should be carefully taken into account in both design policies and supplementary design guidance.

All design concepts imply three essential steps in the design action: "analysis, synthesis (combination), and evaluation". These three steps can be repeated several

times. The important point is that various forms of the design process can be identified (Markus 1969; RIBA 1965; Shirvani 2019; Khak Zand et al. 2013; Darke 1978), but it is observable that despite the obvious differences in the form of feedback loops, all of them include these three main steps. Most designers emphasize the significance of goal setting, analyzing,

generating alternatives, selecting the optimal alternative, and evaluating the results. Lang (1949), puts a special emphasis on the necessity of interaction between the design and development (construction) processes, process design nature, and discussions on procedural activities.



**Fig. 2. Design Control Procedure**  
(Punter and Carmona 2011)

Applying the mixed methods research (MMR), a triangulation research plan has been used to evaluate the façade committee's performance in two quantitative and qualitative phases. In this section, according to Figure 1 (first phase: quantitative procedure), the experts' opinions were collected using the questionnaire.

## 6. RECEPTION OF OPINIONS AND ANALYSIS OF VIEWPOINTS OF GROUPS INVOLVED IN RESEARCH

In the quantitative section, the opinions of experts supervising the content and procedural aspects of the façade committee were collected using the questionnaire; and in the end, they were asked about the challenges of the façade committee and suggestions for improving the committee's performance. In this

section, the statistical population includes 75 people, of which 26% have a doctorate, 68% have a master's degree, and 6% have a bachelor's degree. By receiving the population's opinions and coding them in Maxqda software, all the challenges raised in the form of categories and concepts were categorized based on their harmony. The most important challenges of the façade committee and façade control process include qualitative decisions and the application of personal interest, weakness of the legal status, lack of criteria for action, lack of executive guarantee, effectiveness of authority and capital flows, weakness of the organizational structure, weakness of public awareness as well as façade committee's members and experts. Among these, the challenge of lack of executive guarantee and not using experienced members have been identified as the most important challenges.

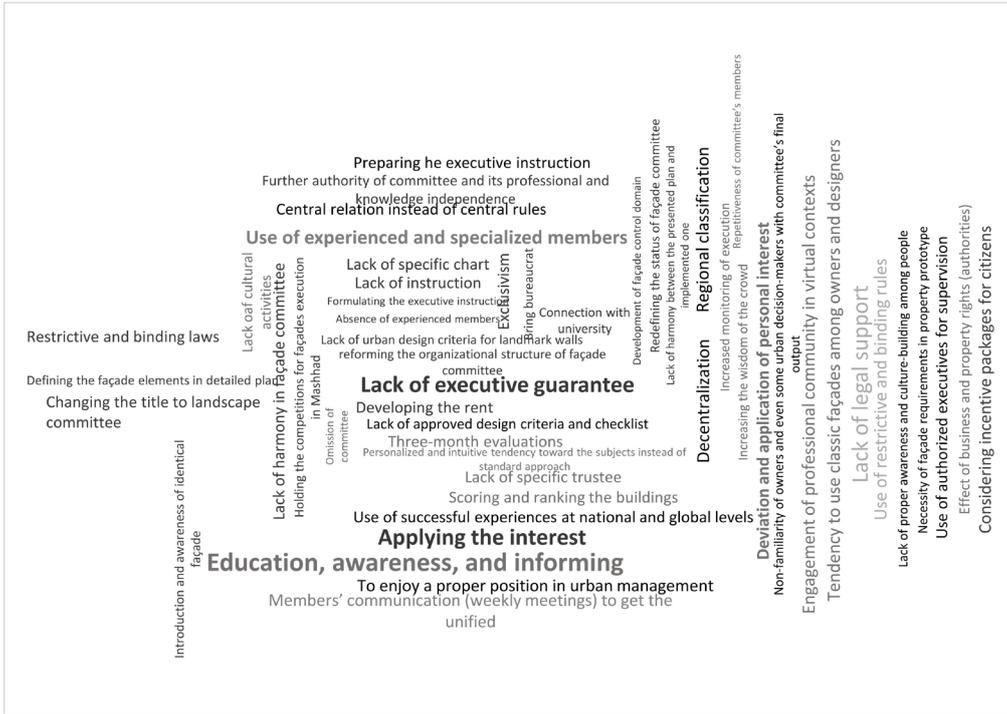


Fig. 3. Façade Committee Challenges are Categorized based on Significance and Mentioned Concepts

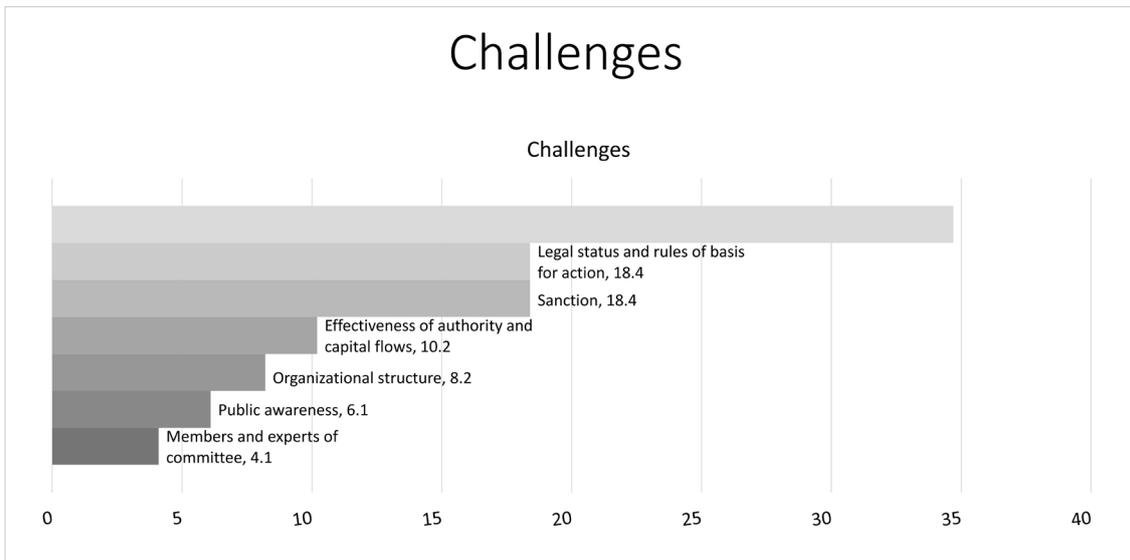


Fig. 4. Façade Committee Challenges are Categorized based on Categories

Challenges	Qualitative decisions and application of personal interests	Exclusivism the personalized and intuitive tendency toward the subjects instead of the standard approach Deviation and application of personal interest
	Committee members and experts	Absence of experienced members on the committee The repetitiveness of the committee's members
	Public awareness	Lack of related cultural activities Non-familiarity of owners and even some urban decision-makers with the committee's final output Lack of proper awareness and culture-building among people
	Organizational structure	Lack of specific chart Lack of specific trustee
	Legal status and criteria for action	Restrictive and binding laws Lack of specific trustee Lack of legal support
	Effectiveness of authority and capital flows	Effect of business and property rights (authorities) Tendency to use classic façades among owners and designers
	Execution	Lack of harmony between the presented plan and implemented one Lack of executive guarantee

Fig. 5. Concepts and Categories related to Challenges of the Façade Committee

### 7. SUGGESTIONS FOR IMPROVEMENT OF THE FAÇADE COMMITTEE'S PERFORMANCE

The experts' suggestions for the improvement of the façade committee's performance have been classified in the Maxqda software in the categories as follows: "reviewing and promoting the committee's organizational administrative level, preparation,

promotion, and improvement of rules and documents used as the basis for action, promotion of desirable patterns, reinforcing the supervision on certified façades, and reviewing the necessity of committee". Among the mentioned categories, "reviewing and promoting the committee's organizational administrative level" has been recognized as the most important category.

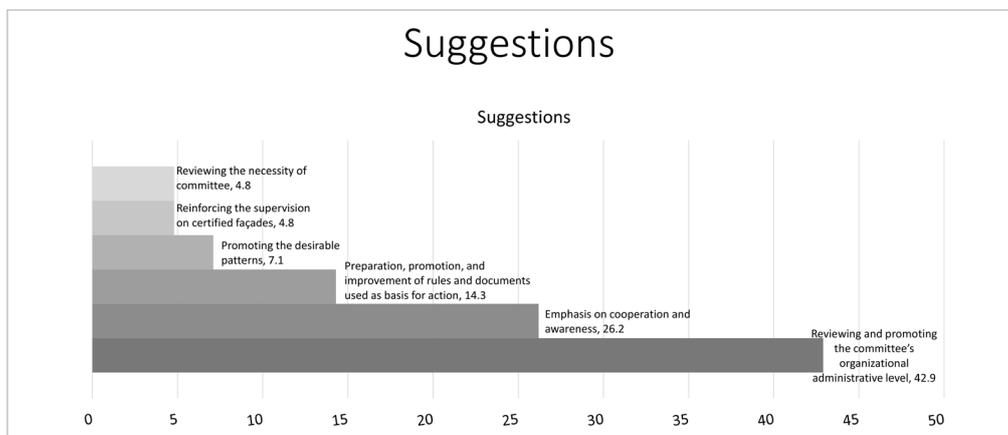


Fig. 6. Experts' Suggestions for Improving the Façade Committee's Performance based on Categories



Fig. 7. Suggestions of Experts Concerning Improving the Performance of the Nama Committee based on Categories

Suggestions	Reviewing and pro-moting the committee's organizational administrative level	Use of successful experiences at national and global lev-els Further authority of the committee and its professional and knowledge independence Changing the title to landscape committee The necessity of façade requirements in property prototype Redefining the organizational status of the committee
	Emphasis on coopera-tion and awareness	Considering incentive packages for citizens Engagement of professional community in virtual con-texts Members' communication to get the unified
	Preparation, promo-tion, and improve-ment of rules and documents used as the basis for action	Preparing the executive instructions Defining the façade elements in a detailed plan Formulating the executive instructions
	Reinforcing the su-pervision of certified façades	Use of authorized executives for supervision Increased monitoring of execution and definition of legal process
	Promotion of desira-ble patterns	Holding the competitions for the façades execution in the city Introduction and awareness of identical façade Rating the buildings
	Reviewing the neces-sity of committee	Decentralization from committee Omission of committee

Fig. 8. Concepts and Categories related to the Experts' Suggestions Regarding the Improvement of the Façade Committee's Performance

## 8. ANALYSIS

In the qualitative part, to deepen the research content and clarify the evaluation, the viewpoints of façade committee members were received through in-depth interviews in two content and procedural sections,

so that their opinions regarding the achievements, challenges, and possible solutions were received and analyzed. The interviews were done with some officials and key members of the façade committee, which are summarized as follows in Figure 2:

**Table 2. Summary of in-depth Interviews**

Significant Achievements of the Façade Committee	Priority of Mashhad façade committee in the country
	Existence of control and guidance structure of the urban landscape
	Encouraging developers to employ expert architects, and capable design-ers with communicative and responsiveness capabilities in the façade committee
	Culture-building to pay special attention to important (large and on the side of the main streets) buildings
	Emphasizing the importance of public space and citizens' public rights for developers
Significant Challenges of the Façade Committee and Façade Control Process	Elevating the architects' position and playing a crucial role in the urban development
	Existence of a legal vacuum regarding supervision and control
	Absence of executive and supervisory arm
	Absence of a real and concerned supporter and trustee for the facade committee such as the city council or the municipality
	Use of less-experienced architects for façade design in consulting and development companies
	Presenting the formal maps which do not correspond to the executive ones
	Ignoring the identical features in designs
Development of classic façades (ignorance of local and traditional archi-tecture)	
Suggestions for Improving the Façade Committee's Performance	Priority of economic trends and architects' compliance with the owner's willing
	Reviewing the status and process of approval by the façade committee
	Enhancing the executive guarantee of the façade committee's decisions
	Examining other countries' experiences to improve and increase the committee's efficiency
	Gathering the experiences of the façade committee to identify strengths and weaknesses
	Holding synergic meetings by committee members
	Culture-building for the promotion of the Iranian architecture model
	Creating a mechanism to criticize the façade committee (to increase its efficiency)

## 9. DISCUSSION AND CONCLUSION

To conclude, the aforementioned investigations reveal that the qualitative decisions, application of personal interests of committee members, weakness of legal status, lack of criteria for action, and lack of executive guarantee are the most important challenges of façade committees, all of which more or less are indicative of problems existing in the administrative-legal and organizational structure of the committees. However,

the achievements such as drawing the attention of the specialized community and people to the significance of the public landscape, and the rights of citizens, as well as promoting the position of architects in development have made the façade committee as the only leverage of quality control in development and the most important inextricable achievements that makes its performance defensible. Further, some suggestions effective for improving the performance as well as increasing the efficiency

and effectiveness of the façade committee and other mechanisms for urban landscape control and guidance are presented as follows:

### 3. Suggestions

Procedural Dimension	
1. Improving the Administrative-Organizational Level and Status	<p>Redefining the committee's status in the process of (construction, licensing, and completion certificate)</p> <p>Completing the structure of control and guidance committees (including the establishment of the control and guidance committee for detailed and local thematic plans, as well as the landscape committee of the province's engineering system, and town buildings maintenance committee)</p> <p>Decentralization and development of the committee in municipal areas based on a defined specific framework and central sector unity</p> <p>Defining the clear and effective process for monitoring the implementation of certified façade</p>
2. Promotion and Improvement of the Façade Committee's Performance	<p>Documenting the process and workflow and successful representations of evaluation and guidance</p> <p>Review and continuous pathology of the façade committee's performance</p> <p>Holding synergistic meetings with experts</p>
3. Enhancing the Public Awareness	<p>Holding competitions among best façades and rating the buildings</p> <p>Defining incentive packages for top citizens and developers</p>
Content Dimension	
1. Preparation and Completion of Legal Documents and Regulations in a Specified Format (Regulations of Prepared Detailed Plans and Localized Instructions and Urban Design Documents)	<p>Completing the guidance documents with a thematic perspective, such as general guidance for specific subjects (identical architecture, Islamic Iranian architecture, contextualism, technological and modern facade, sustainable architecture, etc.)</p>
2. Planning for Participation and Opinion Poll at two Levels:	<p>1. Experts: to modify and review the process of committee assessment, reviewing the criteria</p> <p>2. People: to be aware of the public's desire and to promote public interest</p>
3. Planning and Culture-Building for the Promotion of Proper Patterns for Façade Architecture	

## ACKNOWLEDGMENTS

This article wasn't supported by any financial or spiritual sponsors.

## CONFLICT OF INTEREST

The authors have no conflicts of interest to declare.

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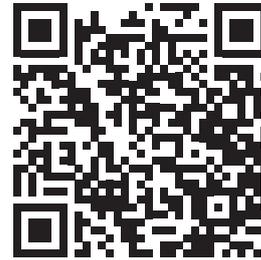
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#### HOW TO CITE THIS ARTICLE

Ostadi, Maryam, Fatemeh MohammadNiaye Qaraei, and Maryam Motamedi Nezhad. 2023. Façade Committee, Challenges, and Achievements; Assessment of Mashhad Façade Committee Performance. *Armanshahr Architecture & Urban Development Journal* 16(43): 105-117.

DOI: 10.22034/AAUD.2023.334579.2646

URL: [https://www.armanshahrjournal.com/article\\_176100.html](https://www.armanshahrjournal.com/article_176100.html)



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