The shopping centers architecture features in the largest southern city of Russia

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Abstract. The article researches the role of shopping and multifunctional shopping centers, which are considered to be the largest places of attraction for the population and influential employers in the city, the most profitable type of commercial real estate. The information technology development, global logistics and the widespread introduction of the consumer society ideology as well as the population high motorization contribute to the increasing social importance of shopping centers in the modern world. Currently, shopping centers are becoming the most important architectural and social sites of the largest city. The article reveals the issue status today. The attractiveness and the need to introduce multifunctional shopping centers as places of attraction of the population in cities. Examples of world and domestic practice are given. The multifunctional shopping centers of the largest city in Russia, Rostov-on-Don, are analyzed in detail. Three concepts of a multifunctional shopping center are identified.

Introduction
A shopping center is defined as an aggregate of trade enterprises and enterprises providing services located in a certain territory, planned, built and managed as a whole and providing parking for the vehicles within its territory [1]. The later definitions of a shopping center emphasize that a shopping center is a group of trade and related enterprises specially selected and placed according to a single concept to achieve a synergistic effect, located on one site in one or several buildings, united by a single architectural solution and common management, proportionate serviced retail zone with parking and landscaped surrounding area [2].

In this regard, the architecture features of shopping centers in the largest city are formed at the pre-design stage based on the requirements for the economic, architectural and design components of the overall design of the shopping center.

State of the matter
The share of regional cities in Russia accounts for about 60% (22.4 million square meters) of retail space [3]. Using the example of Rostov-on-Don, the largest and oldest city in the South-Russian region with a population of about 1.1 million, occupying the 10th place in Russia in terms of the number of inhabitants, we consider the features of the shopping centers architecture. Rostov-on-Don is the largest trade, economic, cultural and scientific center of the South of Russia, one of the most important transport hubs of the country, where the messages in the North-South and East-West directions converge.
Construction of shopping centers in the world and in Russia is at the peak of activity. According to the latest study by CBRE, a leading international real estate consulting company, the total area of the shopping centers being built in the largest cities of the world in 2017 is 33.5 million square meters [4]. In 2016 million-plus cities, including Rostov-on-Don, accounted for the largest amount of new retail space commissioned: 276 thousand m², or 32% of the total input volume. In 2017 further input is expected to decrease in million-plus million - up to 169 thousand m², because in Russia the developer activity peaked in 2014 and 2015 [5].

The retail real estate market specialists note that the indicator of market saturation can be considered the volume of retail space per 1000 inhabitants. For million-plus cities, this figure ranges from 300 to 450 m² per 1,000 people, an average European level of 400–600 m² per 1,000 inhabitants [6], in Rostov-on-Don it is 342 square meters per 1,000 inhabitants [5], which indicates the development potential of shopping centers in this largest city.

Achieving a high level of market saturation will lead to a significant increase in the shopping facilities competition. The quality of the shopping center’s architecture and the developer’s ability to provide attractiveness for tenants and customer flows will become increasingly important.

Rostov-on-Don, according to the general plan of 1971, has a linear public urban center. Public buildings, squares and public gardens are located along the Bolshaya Sadovaya street. In fact, the street itself was a large shopping and entertainment center of city importance, including shops, department stores, boutiques, theaters, cinemas, green areas, squares and monuments. The main form of the weekly leisure of a citizen of the Soviet period was a visit to the cinema and recreation parks.

A radical change in the situation occurs with the market economy arrival in the 1990s, the spread of new cultural values and lifestyle elements (competition, consumerism, shopping, the cult of personal vehicles, the priority of individual housing, high demands on family leisure, a wide choice of services, etc.). The main form of the weekly leisure of a city dweller becomes visiting shops and entertainment establishments.

The new shopping centers have appeared in Rostov-on-Don since the beginning of the 2000s, there has been a wide construction of shopping centers on free territories (in the peripheral areas of the city: “Mega Rostov-on-Don”, “MEGAMAG”, “Zolotoy Babylon”, “Thaler”, “Voskhod”), on the territories of former industrial enterprises (renovation of industrial zones of the middle zone of the city: ”Gorizont”, “VertolSiti”, “RIO”, “Continental”, “Babylon”, “CloverHouse”). In the central part of the city, there is a modernization or reconstruction of existing shopping centers (“TsUM Rostov”, “Astor Gallery”, “Falcon”, “Don Plaza”). As a result of these processes, the crowdedness of the traditional public center of the city loses its attractiveness and the trading function gradually “leaves” the urban community center to the newly created large shopping centers that take over the functions of the public urban space and become centers of attraction for people and social intercourse. The linear citywide center becomes spatial, dispersed, complemented by super-regional, regional, district and district multifunctional shopping centers. Shopping centers become large, they are satisfied with catering, and later - entertainment facilities: cinemas, ice skating, bowling, etc.

In Rostov-on-Don, both European and American models of shopping centers are being successfully implemented. For example, the shopping center MEGA Rostov-on-Don is located according to the American model outside the city in the Aksai district on the M4 Don highway at the entrance to the city from the east. The shopping and entertainment center “MEGAMAG” is located at the entrance to the city from the south, in close proximity to the historical and business center - the most densely populated central area of the city.

Examples of the European accommodation model are the shopping and entertainment complexes Megacenter Horizon and RIO, as well as the VertolCity shopping center on M. Nagibin Avenue in the geographical center of the city, not far from its historical, business and cultural center. The first and third are built on the site of the industrial zone, the second - in a beam, in the inconvenient M. Nagibin Avenue, on which three shopping centers are located, and is one of the main highways of Rostov-on-Don, leading from the city center in the meridional direction to large residential neighborhoods where
more than a third of the city’s population lives. In the city center are also located shopping centers Gallery “ASTOR”, “TΣUM”, “Falcon”, “CloverHouse”, “Continental”, “PROSPECT”, “Babylon”.

Thus, in the largest city of the South of Russia, there is a diverse palette of shopping centers by types and models forming new places of attraction for citizens and populations, and a promising trend in the retail space growth.

The shopping center architecture formation is determined by marketing, architectural and design concepts. First of all, a general or marketing concept is formed, defining the specifics of the functioning and strategic development of a shopping center. It serves as the basis for the development of an architectural concept that gives spatial, structural, functional and artistic parameters to the economic concept of a shopping center, depending on the location in the city and the possibilities of the development site. After all, the concept of the shopping center interior design is created. The formation of concepts can be sequential or parallel, depending on the specific situation. Development of a shopping center concept is a collective product created by commercial real estate experts, business concept consultants and business technology concepts, entertainment segment operators, lawyers, economists, realtors, technologists, developers, architects, designers, etc.

**Shopping Center Marketing Concept**

The concept of “shopping center concept” was formed in 2005 [2]. The concept of a shopping center, as an economic concept, is the specialization and positioning of a shopping center on a specific market segment and on groups of target consumers. specialization anchors (magnets). In addition, the concept should develop a shopping center development strategy for a long period and define its particular image.

The main goal of the concept is to reach as large a target audience as possible and to attract the maximum number of visitors [5], to determine the development prospects of the shopping center.

Qualitative characteristics are largely determined by the format of the shopping center. One of the most distinct trends is that new shopping centers focus on various attractions, cinemas and restaurants as opposed to shopping. Modern concepts of shopping centers as multifunctional complexes are based on the family-mall format and lifestyle - an object for family recreation, health, development, sports, entertainment and shopping, which creates an atmosphere of pleasure and comfort for residents of the largest city. Already operating shopping centers enter the entertainment sector or food court prevents the lack of land resources. Most often in the central part of the city they prefer to give a part of the premises as offices (“CloverHouse”).

The promising format of shopping centers in the modern economy is unique projects that provide the consumer with the satisfaction of standard expected needs, which are included in the complex of trade and services, as well as the availability of an adaptive mechanism for influencing consumers through satisfying their information and emotional needs using innovative products from directions [2].

At the pre-design stage, developing a concept, it is necessary to take into account the preferences of customers when choosing a shopping center. These include: increasing customer requirements for the quality of objects; the increasing importance of comfort in the shopping center; the growing importance of personal vehicles - high requirements for parking; multifunctional or specialized types of shopping center; development of online commerce.

One of the leading quantitative indicators of the shopping center is its value, which is measured by the total area. Shopping centers are divided by size into four groups: small, up to 20 thousand square meters; average, from 20 to 50 thousand square meters; large, from 50 to 120 thousand square meters; huge, more than 120 thousand m² [7]. As a rule, this group corresponds to the types of shopping centers: district, district, regional and super-regional.

Ensuring the population location is the most important task of the marketing concept. According to experts, one of the determining factors when choosing the size of a shopping center is played by the resource of the land, or rather the area, configuration and relief of the site [5].
Placement of shopping centers is the most important aspect of developing the concept of designing a modern shopping center. The main factors influencing the choice of the location of a shopping center in the largest city are proximity to major transportation hubs, highways of federal, regional, citywide importance, places of work and places of residence. When developing the concept of a shopping center, it is important that
- the number of people living in the area of 15-minute transport accessibility;
- buyers from the city center, which is characterized by the highest population density and higher income level of residents;
- transit flows on federal highways;
- buyers living outside the city according to the directions of influence;
- having a rest in traditional recreation areas of citizens;
- buyers living in cities and other settlements of the largest city’s agglomeration.

The architectural concept of the shopping center
Creation of architectural and planning solutions taking into account the wishes of potential customers and business objectives. The basis of the architectural concept is the trade and technological concept, which performs the function of a design task. It includes such elements as: format and number of floors of trade enterprises, total and rental areas, their structure, recommendations on types and choice of operators, layout scheme and floor-by-floor vertical links, recommendations on room zoning by types of operators [8].

The development of the architectural concept involves specifying the following key characteristics of the shopping center: the general layout of the site, the floor, the type and number of vertical and horizontal communications, the total area, the number of cars / parking spaces, attendance, constructive frame, evacuation and security, type of communication and recreational structure.

The architectural concept includes the development of the following aspects of the design solution:
- site planning (placement of a shopping center, landscaping and recreation areas, parking distribution, individual, service and public transport routes, pedestrians);
- the combined layout of the site and the shopping center;
- planning of the floors, including working, auxiliary, technical and technological premises, vertical communications;
- sections of the building, revealing the architectural-spatial and constructive structure;
- 3D models of the future shopping center building, inscribed in the real urban environment.

The peculiarity of the architectural and planning construction of a shopping center is as follows: the solution of the communication structure as a system of horizontal (corridors, galleries, passageways, malls, passages) and vertical communications (stairs, elevators, escalators, travellators, ramps) must comply with not only functional, but also a large extent, artistic and aesthetic requirements. Internal communications of shopping centers should not only ensure the safe and comfortable movement of large flows of people, but also form positive emotions, aesthetic sense of pleasure, artistic images.

The main tasks of architectural design are to create spatial conditions for the movement of visitors and to ensure the most comfortable conditions of stay (eas of parking, access roads, the presence of recreation areas, toilets), as well as the needs of tenants.

Specific architectural concepts can combine different principles, namely:
- creation of a unique architectural and spatial solution;
- creation of an original entertainment component;
- use of the potential of the landscape and natural areas;
- the use of extraordinary formats that create a special atmosphere for customers [6].

In the conditions of total uniformity, the presence of unique distinctive features in the concept of a shopping center is always an attraction of additional traffic and a guarantee of financial success of the project.

The design concept of the shopping center. In shopping centers, the architectural and artistic solution to the interior is of greater importance compared with the appearance. Often, shopping
centers, like any commercial building, have simple rectangular volumes, highlighted with color, advertising, corporate identity, lighting and architectural details. In contrast, the artistic solution of the internal space should be expressive, unique, attractive and contrasting to the exterior. The originality, diversity and architectural "highlights" of the interior should captivate the consumer and give positive emotions, make adults and children want to visit the shopping center again.

Creating an effective sales area involves solving the following design tasks: providing the visitor with visual contacts with the largest number of trading enterprises at a time, in order to attract visitors to each store; ensuring continuity of communication and recreational space in order to ensure the longest and most comfortable stay of visitors in the center; creating a kind of spatial interior solution to attract a circle of loyal customers that retain consumer interest in this shopping center [9]. The design concept includes the solution of such aspects of design as: navigation in the shopping center space; corporate identity development; the design of shop windows, which serves as the most powerful means of advertising goods in the very place where this product is sold, as well as developing the concept of advertising, through which shopping centers increase attendance.

Navigation of visitors in the shopping center is provided not only by means of graphic design, but also by the general idea of communication and recreational space, which should reflect the logic of cognition of the interior space and orientation in it for all categories of clients.

Creating a corporate style shopping center must meet the following requirements:

- graphic attributes of the brand of the shopping center, the visual platform of the brand determines the style of communication with the consumer. The original idea should convey brand values and be able to develop successfully and effectively on all carriers, in space, on the monitor screen;
- design solutions should be practical and easy to implement, take into account the economics of the project;
- when developing corporate identity, it is necessary to take into account the specifics of regional Russian technologies and materials.

In relation to the design of showcases at the concept level, common approaches, techniques and tools are laid, which allow to further implement all the designers’ ideas when designing a showcase for a particular tenant.

The concept of advertising in shopping centers should use outdoor advertising, radio and shopping guides to convey information about tenant discounts to consumers [10].

Thus, innovative design ideas and careful attention to the wishes of customers and tenants to create a comfortable object-spatial environment will make the shopping center successful and competitive.

**Summary**

The architecture features of shopping centers are formed at the initial design stage based on the shopping center concept. The concept of the shopping center consists of marketing, architectural and design concepts. In the largest city, the shopping center becomes a multifunctional, includes an active entertainment function. In the structure of the largest city in the south of Russia, there is the presence of all types and models of placement of shopping centers: from super-regional to district. Perspective concepts of the shopping center provide at the same time diverse family rest and a wide range of services and goods. The modern shopping and entertainment center “reproduces” the traditional center of the largest city in the areas of new populations, forms a new spatial structure of the public center of the largest city. The architectural and spatial solution of the shopping center models the spatial conditions and functional diversity of the center of the largest city. The use of construction techniques and spatial elements of the traditional urban center - streets-passage, squares, atriums, bridges, terraces, recreation areas, children's and recreational areas, green areas, small architectural forms contribute to the strengthening of public functions in shopping centers. Identifying the features of the architecture of the shopping center, taking into account current trends and requirements, will ensure high traffic and competitiveness in the retail property market.

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