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REAL ESTATE PROJECTS EVALUATION

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Summary: When searching for the best real estate acquisition alternative there are several criteria usually considered, that turn to be of special interest for the offering agents. These criteria can be detected in terms of the different socio-economic classes. Considering the purchase of a new house in some of the condominium type projects on the periphery of Santiago, two main aspects have to be decided: the commune or local sector, and within it, the project that best fits the family's needs.

These AHP applications take into account the main selection parameters for an "ideal" representative family of each of the socio-economic classes considered, based on on-site specialized vendors information, in order to determine investment priorities for the real estate agency. Additionally, existing projects (housings offer) are prioritized in terms of the decision parameters, for each of the socio-economic classes, generating a housing offer ranking, which points out the main competitor's projects for each geographical sector.

Once the projects are ranked, a study of their potentialities can be made order to visualize how they are matching with the demand priorities and what should a new real estate project offer, in the same sector and for the same objective group, to better cope with the demand and to reorient the selling trends. When offering the same is impossible (special landscape, beauty or pure air conditions of the site, for instance), an analysis can be made to define which affordable facilities and in what amount must be included in the project to make up for the valued and absent criteria.

1.- Introduction

Buying a new house is an important decision in a family's life. There are many factors involved, starting with the personal choices of each family member. Some prefer an independent house, other may choose a department, some consider that the garden or green areas are the most important, while others prefer considering first the accessibility and the neighbourhood, and for some, the facilities nearby will definitely make the turning point.

As it seems impossible to model a house selection process in terms of individual choices, which depend on the age, economic situation, family history, number of school aged children, etc., it does seem reasonable to classify the housing demand according to some other general criteria.

In this paper, we will show how the real estate demand, for new houses located on some of the condominium type projects in the periphery of Santiago, can be modelled in terms of three socio-economic levels, which share more or less the same criteria list, but differ in the importance given to each one of them.

Our client, a real estate agency, wants to know what are the buyers looking for, and what tradeoffs are they willing to do, as a very big housing offer is taking place and some projects are much more successful than others. Once these elements are identified, it should be easier to focus the resource investment in those aspects and to offer a more interesting project than the competitors. The evaluation process will show how a specific project ranks when compared with other similar projects and the selling trend should show if the projects react to the changes made or not.

1.1 Different goals and border conditions

As for a single family the decision seems to be: “which of the possible alternatives should be our selected new house”, for a real estate agency the goal might be: “consider these models to help our clients select where they want to live”, and finally, our client’s goal, from a general point of view is: “How do the similar real estate offer projects rank in order for us to build a successful project”

The border conditions include:

- Only houses are considered, no buildings
- All of them are located in the surroundings of Santiago
- They are all new houses, gathered in condominium type projects
- A different model is considered for each of the socio-economic levels
- The houses as such, make no difference between one project and another. This statement considers that people choose first in terms of the location, their contact supporting nets (family and friends) and the project in itself. After all those factors are decided, they start looking for certain kind of house. For the real estate agency, a successful kind of house can be built wherever (acting as a commodity).

Working on the models, we were able to see that not only the buyers can be reduced to three socio-economic levels (in terms of criteria and importance of these criteria), but also the projects are divided in these three categories, and there is, more or less, a one-to-one correspondence.

1.2 Different actors and their representatives

The weights of each model criteria represent the intensity of a potential house buyer. To avoid the “personal preferences” that wouldn’t lead us to a general model, another approach was built. Selected long time experience vendors, for each socio-economic level, were invited, to resume their expertise regarding the corresponding group of house buyers. It may sound contradictory that the sellers, which represent the real estate “offer”, are the best suited to give the “demands” point of view. But their success in their job is clearly because of this fact: “the better I understand my clients preferences and needs, the better I can offer them the appropriate project/house that will match with what they are looking for, or stress the facts that the buyers declare as important”. So good real estate sellers need to know what the buyers want, hide, seek for, etc. In addition they are very well prepared to

deal with objections based on facts that the projects can modify, as “there is no elementary school in the neighbourhood”. The seller knows that he can offer: “You’re right, but Construction Phase II considers a 4 block full-technology school”, because the school is a real part of the future project. So these selected sellers are good representatives of the group of buyers, and therefore of the objective group.

On the other hand, the terminal criteria require scales and proper definitions. Here we considered the expertise of long time on the field urbanists, full time architects and urban designers, with several years working for public offices and dealing with daily design criteria and urban development. Different actors were considered for each of the models, even though there are large overlapping areas, due to the fact that the limits on each of the socio-economic levels, sometimes are rather fuzzy.

2.- The general model

Despite the fact of the different socio-economic levels, the 3 models were built over the same general basis:

The Sector
The Project

These two main criteria try to exemplify what the geographical topology shows:

The Sector

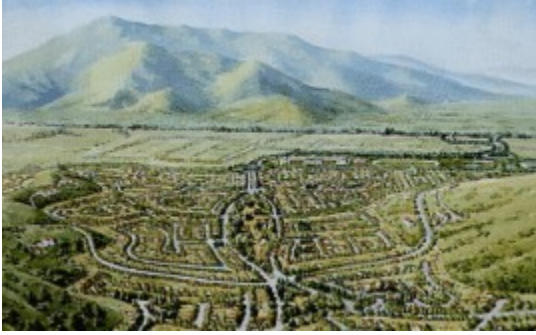
- a) Some sectors are large areas, completely consolidated, this means: with a complex structure that takes into account every aspect of social, cultural, administrative, commercial, and educational life. It also considers existing transportation means, health care and on place security instances. In these sectors, many small projects may be built, obtaining additional profit from the sectors’ installed facilities.
- b) For new projects, on the other side, most of them quite far away from these “centric” sectors, everything has to be build. The sector in this case is the project by itself, as there is nothing else in the surroundings, except for a few cases, where another sector-project exists in the neighbourhood. Their attractive is related with environmental conditions (low pollution, noise and congestion levels) and greater ground surfaces for the same price.

The Project

- a) When projects are imbedded in a Sector (as case a) above), they usually represent a small part of the sector. They don’t need to build and offer special facilities as the sector is well provided. In this case, if the “individual buyer” has chosen this Sector, all the projects within it that belong to the affordable cost range, compete for being selected.
- b) As in case b) above, for new projects located on the periphery areas, the project and the sector is indistinguishable, so some of their benefits are measured in the sector’s portion and the rest is considered in the project’s portion of the model. In this case, a same sector-project may even have several smaller projects imbedded, oriented towards different socio-economic levels, or in different stages of construction.

Some images may help to make clear the different cases.

Sector-Project Example (City of the Valleys) Very big mega-project with one or more projects in different stages of development, not related with previously consolidated areas



Examples of a Project: Condominium type identifiable group of houses and facilities, imbedded in a previously consolidated area.



2.1- Main Sector and Project Criteria

Once these two important concepts have been clarified, we can list the main criteria inside each one of them:

- a) Sector: The first level criteria are:
 - a. Environment
 - b. Facilities/Consolidation degree
 - c. Accessibility
 - d. Personal Safety and Goods Security

- b) Project:
 - a. Assistance and management
 - b. Security level offered by the project
 - c. Green&Recreational areas /Sports Equipment
 - d. Identity

When talking about a project imbedded in a big existing Sector, here are many aspects of the sector than can't be changed, others, may be modified by the project. For instance, the number of schools in the sector is a hard data. If it's not enough for a future demand (more scholars), the project must take this factor into account and try to modify it, if possible. The same can't be applied, for instance, to people's security in the sector. If these set of criteria evaluates bad, the project might improve internal security, but what happens beyond the project's limits remains unchanged.

When talking about a Sector-Project, it's the project itself who must respond to the number of needed schools or to the sector's security level. If the response of the project does not fit with the demand needs, eventual buyers will look for other alternatives.

In a certain sense, small projects "offer what the sector already has", and big projects (representing sectors by themselves) "offer what the project will have". Of course that one of the basic statements is that promises related with future facilities or services will come true. This is particularly important when big infrastructure works are promised by particular companies or by governmental agencies, as a new highway, a future subway lane or a big mall and service area. These promises are an important fact in buying in advanced and obtaining lower prices, for when the works are completed, prices of real estate in the area are expected to rise. What makes people believe or not in such promises is related with the real estate agency's identity, record and pattern of behaviour.

2.2- Global and Terminal Criteria

Lowest socio-economic level analysis

In terms of the terminal criteria, for the lowest socio-economic level, the most important facts are policemen presence or security facilities in the sector, internal sector's road system, and the confidence of living near good neighbours. Security items are valued in all socio-economic levels, making a difference just in terms of the precise security mechanism desired. The accessibility criteria take into account that some of these families don't own a car, and depend on public transportation. For higher socio-economic levels, accessibility considers that some members of these families and domestic work helpers rely heavily on public transportation.

When analysing global criteria, they reflect more or less what was shown by the terminal criteria: Active security items, accessibility factors and sector's environment. The environment plays an important role, not only for avoiding slums, landfills, noisy, smelly or unhealthy areas, but mainly for going back home, knowing to find a pleasant and nice place

to live. Working areas not always offer visually agreeable locations and there is no possibility of changing that fact at all.

For this level, the project's importance is low when compared with the sector's importance. The Sector is chosen in the first place, strongly depending on the family's contact supporting nets.

Medium socio-economic level analysis

For this level, the main terminal criteria are project's school availability and project's internal security (different items for places number 2 and 3).

When talking about global concepts, the first of them is project's security items again, project's equipment and project's identity. In this case, a nice looking project reflects a certain status, a need for specific internal organization and an interest in internal urban design, items that separates and identifies this group from the others. The project's importance grows with respect to the previous case, and reflects a bigger intensity when compared with the sector's importance.

Highest socio-economic level analysis

In this case, the global criteria preferences are: project's installed facilities, project's security level and project's identity, as the most important.

Finally, for this group, the terminal criteria preferences are very much alike that of the previous case: project's school availability, internal patrol security system and controlled access with guard sheds. For this group, the security level provided by the project is essential. This also reflects another fact: As the socio-economic level increases, the importance of the project increases as well. In fact, for the highest level considered, if the project is "good enough" as to provide all what is needed, the sector factor is not very relevant

This fact reflects that the relative importance of sector versus project is of capital importance when making a sensitivity analysis. The values obtained where given by the specialist and where confirmed latter on by the surveys made.

These criteria analysis shows that despite the fact that having school alternatives near home is the most important "stand alone" terminal criterion, the security level is the most important global concept: some buyers look for it in the sector others expect to find it within the project. So projects have to consider what the surrounding sector is offering in terms of safety elements. All the other facilities involved, the administrative factors, beauty of the landscape, urban design, etc. won't make a buyer change his mind if the security elements are below his expectations.

Once the models were completely built and weighted, our client took his time to analyze them, checking if the weights did reflect what the selling trends and surveys suggested, until final acceptance.

3.- Alternatives Evaluation and Conclusions

Once the models and weights had stabilized, different thresholds were built. For each socio-economic level, three “benefits” threshold are considered. The first of them separates the projects that are far from what the demand is looking for. This fact should be reflected somehow in their sales volume and sales rates, unless something external appears, as a very low price, for example. This threshold separates the regular projects from the “bad” ones.

The second threshold, or medium range one, separates the regular projects from the “good” ones.

The higher threshold separates the “good” projects from those that are “really good projects”, in terms of the terminal criteria defined by the “buyers”, that means, by how the projects are matching with the demand.

For the two highest socio-economic levels, 17 projects were analyzed in each model. They are in general different, but some big projects appear in both, as they consider several stages, oriented towards different publics. As the main interest of our client was directed towards a big mega-project (sector-project) with no housing offer below the US\$50,000, the third model was not fed with alternative’s data. As a fact that arose during this evaluating time, many projects, not yet completely developed, were not fully evaluated, as not all future information was available. This meant, and showed, that comparing some rather “hollow” models may lead to wrong interpretation. Additionally, when analysing certain results versus known data, our client realized that some terminal criteria scales were too coarse, as to detect subtle differences and those scales were re-defined, re-weighted and alternatives re-evaluated. The results of this second iteration (as expected) were much more precise.

Several important facts were finally determined:

- A same project could be evaluated in terms of present and futures stages of development. This evaluation analysis was carried on for our client’s mega-project, obtaining interesting results for the issue of how to establish the best time investment - development ratio.
- The models evaluation oriented towards the main interest areas, and allowed a notion of “rates of investment” needed to fully compete with other projects that evaluated shortly better.
- Sensitivity analysis was performed, with great expectancy and meaningful interpretation.
- It is now easy to see, which projects compose our client’s real competition set, in each socio-economic level, and determine the key difference factors in each case.