TARGET AND KAIZEN COSTING IMPLEMENTATION IN CONSTRUCTION

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ABSTRACT

The challenge of implementing a combined target and kaizen costing approach has been recognized as a promising strategy for construction companies seeking to increase their profit margins, efficacy of production process and relationship with suppliers. Construction companies use to perform their services in a competitive market and can apply this combination to reduce construction costs, while at the same time assuring their profitable business margins. This research sought to implement a combined target and kaizen costing approach along the planning and construction phases of brand retail units (BRU). A context specific case study with four BRU has been devised. The main idea was firstly to design and to specify the units to reduce historical product development costs by means of product's definition interventions. On the target costing application the "customers care service center" of the company has been consulted about possible product conception interventions that were not perceived as value by customers. Later, the kaizen costing approach sought continuous improvements on production processes mostly based on suggestions originated by the main sub-contractors. The case study results show cost reductions around 13% compared with previous cost data of the company for these facilities.

KEY WORDS

Target costing, Kaizen costing, Cost reduction, Brand Retail Units.

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INTRODUCTION

In today's economy, companies that operate on competitive markets increasingly need to guarantee their survival through profits. However, with increased competition and the subsequent demand by clients, companies are bound to sell their products based on the price established by the consumer market.

The civil construction industry is no exception to these conditions and the competitive environment – with clients on the one side and construction firms on the other trying to maximize their own results, which is detrimental to the establishment of a synergistic environment (Granja, Picchi and Robert 2005). Contractual claims to recover losses are sources of difficulty and concern in the civil construction sector, and there are indications that oftentimes these practices are not the fruit of mere accidents (Rooke, Seymour and Fellows 2004). These circumstances have driven the study of the relationship between contractors and subcontractors (Nicholas and Edward 2003).

Generating Value

One probable resolution of this impasse is to produce at the minimum cost permissible and further guarantee value for the final client. In accordance with Cooper and Slagmulder (1997), the concept of value is the relationship between function and cost, where the function is associated to the specific need of the user for the product or service in question, its relationship with the cost indicates the parameter of the value added to a specific product or service, as detailed in the equation below.

• Value = Function / Cost	• (1)

The generation of value is an activity undertaken by the entire team through an analysis of the functions required for the product, service, supply or system, the purpose of which is to increase its value through the identification and elimination of extraneous costs, guarantee the required performance at the same time at the lowest cost possible throughout the life cycle (Fong and Shen 2000).

Target Costing

Target costing has been adopted by manufacturers as a means of improving the production process, working in project stages, where the main objectives of which are detailed below (Monden 1995):

- To define the sale price, not by the production cost but rather based upon the price that the customers attribute to the product;
- To analyze costs during the production process, specifically during implementation;
- To reduce production costs without losses in quality by eliminating activities that do not add value for clients;
- To motivate all those involved in the process and on behalf of increased profitability.

In addition to these objectives, and contrary to manufacturing where the use of target costing is an example of a practice adopted to reduce production costs, guaranteeing the functionality of the product, and these practices merely generate profits for manufacturing companies, in civil construction, these tools can also be used to generate value for the final client (Ballard and Reiser 2004).

A tool that helps reach the target cost is Value Engineering (VE). The VE consists of assuring the performance of the function of a product or service at the lowest cost possible. Generally, the VE is applied during the project definition phase, where just 20% of the costs have been incurred, and 80% thereof have already been determined (Cooper and Slagmulder 1999).

Ansari (1997) defines the VE as a systematic method of evaluating the functions of a product to determine if they can be produced at a lower cost, without under-cutting the materials used during the conception, seeking to reach the target cost.

Kaizen Costing

In manufacturing, kaizen costing is defined as the continuous improvement system, based on the PDCA cycle[4].

Kaizen costing is also applied to improve the relationship between the contractor and the subcontractor. Normally, this process is controlled by the contracting company, which establishes a systematic reduction of costs for its outsourced items (Cooper and Slagmulder 1999).

A tool that contributed toward the reduction of costs during the production phase is the Value Analysis (VA), which aids in the constant improvement of the production process and when used in tandem with VE. VA constitutes a focused approach toward the systematic reduction of costs, jointly guaranteeing quality and performance of function for the item or process analyzed (Toyota Motor Corporation 2002).

CASE STUDY

Throughout the complete application of the tools developed within the manufacturing sphere in the civil construction sector, the characteristics of both segments should be observed and taken into consideration, in order to avoid mistaken interpretations (Koskela 2000; Kern and Formoso 2004). This paper studied the application of target and kaizen costing within the sphere of civil construction, more precisely, in Brand Retail Units (BRU), owing to some characteristics like low variability of the materials employed, the serial production of units, the short period of time for the execution of work and the standardization of the executive project. These characteristics are similar to on demand production and low modification levels in the function of the final product, as is the case with manufacturing (Winch 2003).

It is important to note that this application, despite having significant results, is still exploratory in nature, and it needs to be repeated on other units to prove the real earnings obtained with the tools.

The establishment of a conceptual structure with respect to the implementation of target and kaizen costing in Brand Retail Units (BRU) can be found in Granja, Picchi and Robert (2005). This work is a very first tentative implementation of that structure.

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[4] The PDCA cycle is defined as a continuous process improvement cycle, more details of which are provided in Ohno (1988).

Basic Information

The case study was developed on an international retail chain, represented in Brazil by a master franchise of 120 units in operation. Units are characterized by having similar projects and fast construction times, which can be constructed in 35 or 60 days. The development was conducted by the company's engineer in charge, who is also one of the authors of this paper, in conjunction with other managers of the company along with the subcontractors responsible for the construction.

Figure 1: UN3 after construction: sales area (top left and bottom right pictures), parking lot (top right picture) and backroom area (bottom left picture).

Four units were the subject of the case study. The first two units (UN1/UN2) only entered the study in the project phase, while the other two (UN3/UN4) were included in both the project as well as the construction phase.

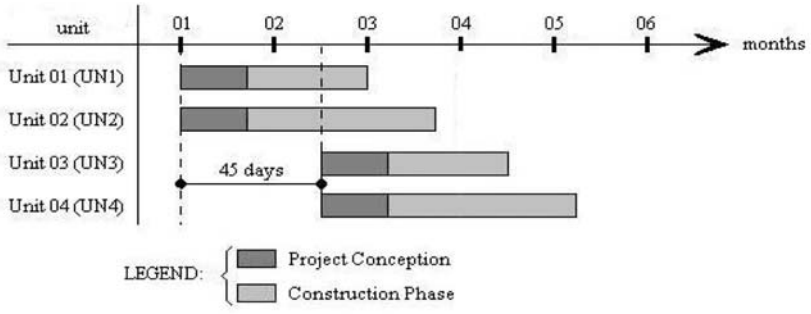

Figure 2: Schedule for the implementation of the units, highlighting the project and construction phases

It is important to note that the case study sought to guarantee that the needs of the clients were identified and met, with the intent of delivering a product to the final user that would not lose its habitual added value, even in this case where the client does not purchase the building, simply using it for another purpose, which in this case is the consumption of entertainment products and services.

Implementation methodology

The implementation methodology employed, established in figure 2, ends up becoming a routine, creating a state of continuous improvement of the process executed by professionals involved in the business. After the analysis phase (figure 2), new suggestions may arise, and subsequently, new improvements may be made, without ever losing sight of what was perceived of as value by the clients during the preparation phase. From the moment that the implementation is concluded, the cycle returns to the planning phase, creating a routine based upon the PDCA cycle (Thomas, Dean and Fowler 2003).

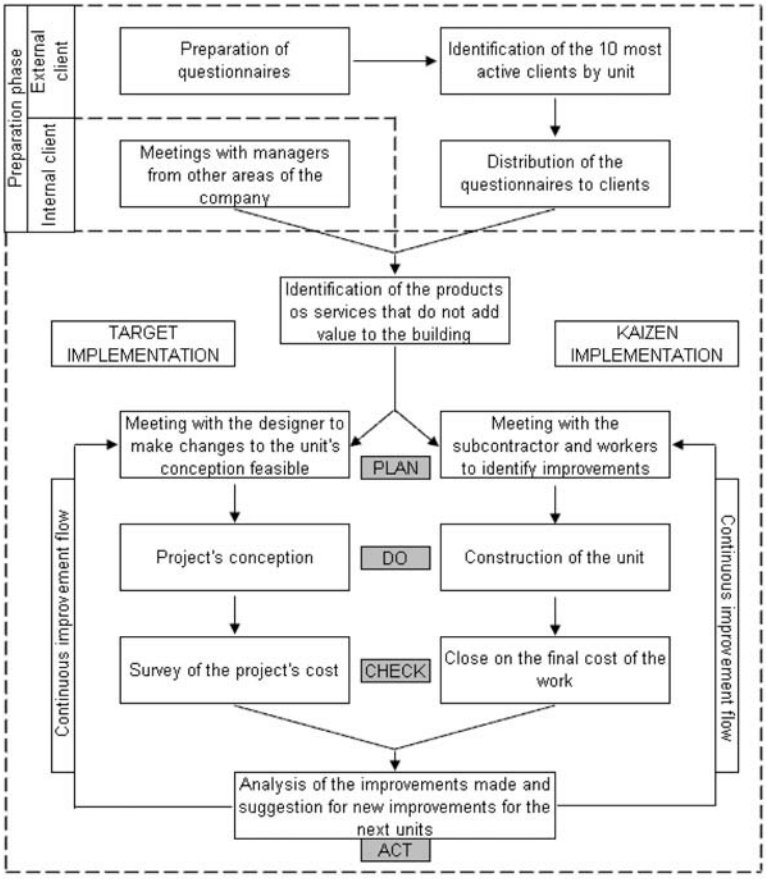

Figure 3: Schematic design of the routine for implementing target and kaizen costing in BRUs.

Identification of value from the client's point of view

To measure the degree of the client's satisfaction and to identify the activities and the materials that add value to the final product, a focused client research project was chosen. The customer care service center of the retail chain was used to aid the identification of the perceived value from the client's point of view, where for each unit operating in the network ten clients were consulted through a multiple choice answer questionnaire. The clients were chosen based upon the highest monthly consumption rates and the highest activity with the units. The questionnaire sought information from the client concerning the degree of importance that they give to a certain set of construction items, listed here: type of side walls for the building, type of roof on the building, specification of the paint color for the sales room, brand of finishing in the bathrooms, type and brand of the internal lining, type and brand of internal flooring, type of lights and specification of the electrical components, bathroom sink and metal toilet brand, method for cooling the environment, existence of cooling in the bathrooms, brand of metallic pieces and hinges for the doors to the street, type of internal frames, existence of landscaping in external areas, type of paving in the parking lot and the color of the sales furniture.

The degrees of possible importance to be chosen were identified based on the following scale: "very high" and "high": defined as essential items to the activity for which the building was designed; "low" and "very low": defined as dispensable. Each client associated one degree of importance for each item listed.

Identification of value from the company's point of view

The areas that depend on the unit's environment to perform their work related to the main activity of the business were consulted, identifying possible interventions on the project that would also reduce the implementation cost, with the guarantee that they would continue to regularly perform their work. Within the internal environment, the items analyzed are the following: incidental lighting on visual communication of the walls, brand of furniture for the employee backroom area, existence of lining in the support areas, number of bathrooms for clients, depth of the awning on the outer façade.

The degrees of importance defined in conjunction with the managers in the marketing, operations and products area are the same as those adopted for research with the clients for the units.

Subcontractor relationship policy

Traditionally in the civil construction sector the relationship between the contractor and the subcontractor is different from the one see in the manufacturing sector. According to Ballard and Reiser (2004), in manufacturing contracting parties have been able to develop constant improvement tools along with their suppliers for some time, and typically not only with the first tier but also second and even third tier suppliers.

In this case, as it concerns the initial application and new concepts that at first appear to be a tool to reduce the profit margin of the supplier, two companies were chosen, which according to the experience of the contractor are most strongly indicated to participate in the process, one being a construction company (for the implementation of kaizen costing) and an

architectural firm (for the implementation of target costing). A single supplier system was chosen (SSS)[5] both for the projects as well as for the construction.

One of the companies chosen was the Brazilian construction company "RC Empreendimentos". After an explanation of the concepts, the management of the company agreed to insert a clause into the supply contracts guaranteeing a division of the profits obtained from the improvements. During the work phase, the employees that worked on the construction met on a daily basis prior to the start of the work day and were encouraged to make suggestions to improve the production process, related to cost, as well as deadlines and function. A suggestion box was installed in a common area for employees. For each idea implemented, the employee who thought of it was complimented in the meeting on the following day, and his/her idea was explained by him/her to the rest of the staff.

For each idea accepted, the representatives of the contracting company and subcontractor jointly assessed the savings generated, and in accordance with what was determined in the supply agreement, divided the profit generated by the improvement in half.

The other company chosen was the architectural firm "Zsiga Mangabeira Arquitetura", which due to the supply guarantee provided by the contractor, moved part of its design team to the contractor's central office, which increased communication speed and promoted the exchange of experience between the designers and the contractor's team.

Method for analyzing the results

Working based upon the principle that interventions on projects did not diminish value from the client's point of view, the variable used to verify efficiency was cost, more specifically, the cost per squared meter (sqm) of construction.

Two types of units were studied as explained previously, the first being a 35 day construction time and the other, 60 days. That difference should be considered in an analysis of the results, since the first concerns a remodeling of an existing building, where some costs like that for a foundation and a roof, do not apply.

It is worth noting that on the target costing application for BRUs, we should consider a difference to manufacturing, where target cost is defined as a sale price that the market accepts to pay for the product. In the case of the BRUs, the target cost is not the price that the client pays for the building, since they are not really buying it, it's the cost permissible for the building that will influence the return on the capital invested by the company.

Results

Client research

As this is a focused research, 100% of the questionnaires were completed. In the event that a client sought did not respond, the next client on the list of consumption and activity was questioned, until ten questionnaires were obtained for each unit.

[5] A SSS (single supplier system) is an example of a relationship with suppliers in a lean business system, and a better understanding can be obtained from Thakur (2002).

Table 1: Result of the questionnaire distributed to clients of the network

ANALYZED ITEM / IMPORTANCE DEGREE	VERY HIGH	HIGH	LOW	VERY LOW	NOT ASSIGN
Type of side walls for the building	1,6%	3,3%	42,0%	44,6%	8,5%
Type of roof on the building	3,8%	6,1%	40,6%	44,8%	4,8%
Specification of the paint color for the sales room	9,3%	9,8%	40,6%	34,6%	5,7%
Brand of finishing in the bathrooms	8,3%	6,9%	39,7%	40,1%	5,1%
Type and brand of the internal lining	14,5%	17,7%	31,8%	30,8%	5,3%
Type and brand of internal flooring	9,8%	9,3%	33,2%	43,0%	4,8%
Type of lights and specification of the electrical system	14,4%	20,7%	34,3%	24,4%	6,3%
Bathroom sink and metal toilet brand	9,1%	10,7%	36,3%	38,1%	5,8%
Method for cooling the environment	34,0%	35,9%	17,1%	9,7%	3,3%
Existence of cooling in the bathrooms	22,3%	30,8%	22,2%	20,9%	3,8%
Brand of metallic pieces for the doors to the street	10,0%	11,3%	37,3%	36,3%	5,1%
Type of internal frames	11,8%	11,8%	37,0%	34,5%	4,9%
Existence of landscaping in external areas	1,9%	6,5%	35,8%	53,7%	2,2%
Type of paving in the parking lot	4,8%	10,5%	33,8%	46,1%	4,8%
Color of the Sales furniture	17,9%	33,3%	24,8%	16,0%	8,1%

In all, 1.200 questionnaires were distributed. The analysis of the result was divided into the four degrees of importance cited plus a field where the client had the option to not assign a value to the question, because an item did not belong to their consumption unit, or they were simply unaware of the answer (Table 1). The degree with most indications on all of the questionnaires was considered to be what the client considers as value.

Table 1 presents in gray all of the items where the degree of importance was considered "low" or "very low", while the items that the clients considered important and if they were altered would cause the building to lose added value, were highlighted in black. For the effects of changing the project, only the items in gray were considered. The changes generated are listed below:

- Substitution of the concrete side wall of the building using ceramic tiles. Although this change caused a small delay in the schedule, it is not considered critical and the implementation cost is reduced;
- Substitution of a pre-fabricated roof by a "two sheded" type roof;
- Changing the brand of paint for the inside walls, the coverings in the bathrooms, internal liners, internal floors, lights, electrical wiring, bathroom sinks and metal toilets and hinges for the inside and outside doors. All of these actions took place based upon market research with at least three suppliers per item, guaranteeing the supply within specifications, requisitioned through a supply agreement.

- Elimination of the attachment system for the internal liners, attaching them through an electrical duct fixture system through a specific commercial system for this purpose;
- Replacement of metal frames with wooden frames;
- Remodeling of the external landscaping, planting grass, substituting higher cost plants that are difficult to maintain;
- Standardization of block paving in the parking lot, replacing concrete that requires a greater amount of paint to cover, in addition to having a higher cost per sqm.

Research on the other areas of the company

Two meetings were held with the managers of the marketing, operations and products department for the company studied. The criteria used in the analysis was similar to the research performed with the clients, however in this case, on the five questions discussed, there was a unanimous choice of the degree of importance for each one of (Table 2).

Table 2: Result of the meetings with the other areas of the company

ANALYZED ITEM / IMPORTANCE DEGREE	VERY HIGH	HIGH	LOW	VERY LOW	NOT ASSIGN
Incidental lighting on visual communication of the walls			X		
Brand of furniture for the employee backroom area				X	
Existence of lining in the support areas				X	
Number of bathrooms for clients			X		
Depth of the awning on the outer façade			X		

Below are the project interventions, based upon the meeting consensuses reached:

- Elimination of twenty lights, designed to illuminate a specific visual communication device on the walls of the units, given that it had very little effect on the marketing of the company;
- Changing the brand of furniture in the backroom, opening up a new bidding process, guaranteeing supplies in accordance with the specification required;
- Elimination of the liner in the support areas;
- Reduction of the depth of the external visual communication awning from 60 cm to 30 cm, consequently requiring a lighter metallic structure to hold it up, and less internal lights to light it, in addition to reducing the quantity of canvas necessary for its manufacture;
- Reduction of the number of bathrooms from two to one, which although it was authorized by the operations manager, it could not take place, because this

concerns an intervention on an item pre-determined by the global network responsible for guaranteeing the homogeneity of the units throughout all countries, you cannot get rid of one of the bathrooms, one has to be kept exclusively for women and the other for men and the physically disabled.

Suggestions from employees that were implemented

Employees made 31 suggestions for improvements during the construction of UN3 and UN4, 8 of which were implemented. They are listed as follows:
Masonry:

- Before: Masonry unloaded in any place. The mason went to search the bricks in accordance with the demand.
- After: Bricks unloaded in packs with 20 units and just one assistant supplied the masons.

Roof:

- Before: Roof installed with thermal protection (100 sqm executed per day), hindering many other works in the unit per four days.
- After: Roof installed without the thermal protection in just one day, the thermal protection was installed later by the employees who were hanging to the roof.

External area:

- Before: Two staging platforms installed in two different moments to execute the external painting and the awning installation.
- After: One employee was trained to execute both. Just one staging platform was necessary.

Internal lining:

- Before: Lining installed in plates, generating many clippings.
- After: A dry lining was used like a frame, and the clipping were unnecessary.

Hydraulic installation:

- Before: Pipes and connections supplied to the plumber who installed them.
- After: Hydraulic kits in accordance with the Project were developed.

Cooling system:

- Before: Ducts supplied without isolation, the employee isolated them after the installation, generating a lot of interferences.
- After: The ducts were isolated outside.

Glasses:

- Before: Glasses unloaded in any place. In the installation the glasses were carried

by the employees. Breaking constantly verified.

- After: Glasses installed directly from the truck, the frames were like tracks and the glasses were not stored.

Cabling installation:

- Before: The cabling was installed before the furniture, oftentimes some connectors were crush.
- After: The cabling was installed without the connectors, which were installed after the furniture.

Participation of subcontractors

In general, the participation of subcontractor companies exceeded expectations. The architectural firm created a specialized team for the contractor's project, which thus guaranteed the supply through the contract. Additionally, the designers interacted with the work team and with the other areas of the company, working full time, which aided in the identification of improvements.

The relationship with the subcontractor construction company did not start quite as well. Initially the management of the construction company understood that the application of kaizen costing was simply a way for the contractor to ask for a discount on the value of its services. However with the guarantee in a contractual instrument that discount would take place on payment installments for the amounts mutually negotiated after the verification of an improvement documented through a contractual amendment, at which point the management of the construction firm changed its opinion and the subcontractor became an important ally in the search for the reduction of costs.

Another major challenge was to encourage the work team to participate in the process. Maintaining the team that built units UN1/UN2 on units UN3/UN4 was essential for the application of kaizen costing on the last two, since the employees were already habituated to the processes and materials, since they had worked on the previous units. Additionally, the concept of improvements began to spread throughout the employees through daily meetings that began on UN1/UN2. The improvements were only effective however on UN3/UN4.

Cost analysis after implementation

These are the results, in US dollars, obtained after the target and kaizen costing implementations. Figures were distributed according to construction's phases. Tables 3 and 4 show that the items highlighted in gray were altered in the project and had their costs reduced in comparison with the historic average for the network, except with regards to UN4, where due to the energy input being at a voltage of 380V, it was necessary to adapt the electrical circuit to another standard, increasing the need for materials, and consequently, increasing the cost of the electrical installations item, and at UN2, where it was necessary to enhance the visual communication, since the store is located in a mall. An extra light was installed in the parking lot.

For a comparison of the cost per meter squared in the unit, the items that were not modified are also added, in order to obtain an effective savings amount on the total amount spent. From Tables 3 and 4 the items such as furniture, for example, were not changed, and their costs differed very little in comparison with their historic average. Additionally, there was the

possibility of an even greater reduction of bathroom fixtures, if the bathroom reduction had been approved.

Table 3: Comparison between the costs of UN1/UN3 with the historic 35 day construction costs for units

ITEMS UN1/UN3	HISTORICAL COST	UN1 ONLY TARGET	UN3 ONLY TARGET	UN3 TARGET + KAIZEN
Initial preparation	$ 467,60	$ 0,00	$ 1.250,00	$ 1.250,00
Structure auxiliary	$ 732,70	$ 510,56	$ 657,88	$ 657,89
Masonry	$ 2.462,54	$ 931,56	$ 1.005,67	$ 925,62
Covering	$ 5.481,91	$ 3.727,67	$ 4.072,76	$ 3.472,76
Internal lining	$ 1.579,29	$ 1.241,51	$ 1.454,06	$ 1.222,56
Internal flooring	$ 4.885,71	$ 4.115,00	$ 4.846,87	$ 4.846,87
Hydraulics / Electrical	$ 29.660,24	$ 24.046,04	$ 28.644,39	$ 27.209,13
Cooling system	$ 14.240,16	$ 15.373,21	$ 17.806,77	$ 16.608,83
Glasses and frames	$ 11.060,46	$ 9.284,17	$ 10.157,76	$ 8.477,85
External area	$ 345,51	$ 0,00	$ 400,00	$ 400,00
Toilet accessories	$ 918,55	$ 491,00	$ 508,00	$ 508,00
Final services (cleanness, support)	$ 1.765,60	$ 1.962,49	$ 2.747,86	$ 2.747,86
Cabling	$ 8.500,00	$ 8.500,00	$ 9.192,26	$ 7.125,00
Visual communication	$ 22.880,63	$ 19.875,00	$ 24.275,00	$ 24.275,00
Furniture	$ 28.632,21	$ 27.500,00	$ 30.696,88	$ 30.696,88
Security system	$ 12.151,21	$ 11.575,00	$ 13.922,50	$ 13.922,50
TOTAL	**$ 145.764,31**	**$ 129.133,20**	**$ 151.638,65**	**$ 144.346,72**
Unit's area (sqm)	226,44	221,50	258,50	258,50
TOTAL (U$/sqm)	$ 643,72	$ 582,99	$ 586,61	$ 558,40
Cost reduction based on historical costs		9,43%	8,87%	13,25%

Table 4: Comparison between the costs of UN2/UN4 with the historic 60 day construction costs for units

ITEMS UN2/UN4	HISTORICAL COST	UN2 ONLY TARGET	UN4 ONLY TARGET	UN4 TARGET + KAIZEN
Initial preparation	$ 32.939,14	$ 33.413,60	$ 29.684,20	$ 29.684,20
Structure auxiliary	$ 18.557,26	$ 17.948,69	$ 16.844,10	$ 16.844,10
Masonry	$ 6.868,88	$ 4.610,28	$ 4.800,76	$ 4.329,60
Roof	$ 20.620,88	$ 17.212,69	$ 18.531,24	$ 15.031,17
Covering	$ 13.987,90	$ 10.235,93	$ 10.814,44	$ 9.251,18
Internal lining	$ 6.477,17	$ 3.239,15	$ 3.257,80	$ 2.626,56
Internal flooring	$ 8.438,00	$ 6.915,94	$ 7.069,90	$ 7.069,90
Hydraulics / Electrical	$ 40.469,60	$ 31.561,97	$ 40.798,94	$ 38.956,85
Cooling system	$ 24.487,83	$ 25.403,66	$ 25.929,73	$ 24.487,00
Glasses and frames	$ 21.946,68	$ 18.247,74	$ 17.754,10	$ 13.400,70
External area	$ 25.908,25	$ 22.991,44	$ 22.042,02	$ 22.042,02
Toilet accessories	$ 1.055,04	$ 616,87	$ 697,06	$ 697,06
Final services (cleanness, support)	$ 2.608,47	$ 2.974,44	$ 3.066,70	$ 3.066,70
Cabling	$ 8.500,00	$ 8.849,64	$ 8.638,84	$ 7.625,00
Visual communication	$ 29.865,67	$ 26.320,44	$ 25.272,52	$ 25.272,52
Furniture	$ 27.500,00	$ 28.631,18	$ 27.949,18	$ 27.949,19
Security system	$ 12.111,56	$ 12.025,92	$ 11.678,47	$ 11.678,47
TOTAL	**$ 302.342,30**	**$ 271.199,58**	**$ 274.830,00**	**$ 260.012,20**
Unit's area (sqm)	364,23	358,15	364,00	364,00
TOTAL (U$/sqm)	$ 830,09	$ 757,22	$ 755,03	$ 714,32
Cost reduction based on historical costs		8,78%	9,04%	13,95%

Table 4: Comparison between the costs of UN2/UN4 with the historic 60 day construction costs for units

Participation of people indirectly involved in the process

In order to insure the execution of the changes listed in the previous items, it was necessary to foster a good relationship with other areas of the company that participated in the construction process. Upper management: It was the first to be made aware of the project and allowed its execution with the interest in improving the construction process for its units, in addition to reducing implementation costs. Middle management: The managers involved in the process were consulted with respect to all of the changes suggested and they only took place after their authorization. International area: As this is a global retail network, some project modifications were seen as breaches of the system determined for the construction of units, and they had to be submitted for the approval of the international area responsible for the standardization of the network. These included the removal of one bathroom for clients, which was not authorized,

and the reduction of the awning from 60 cm to 30 cm, and it was authorized because it was proven to reduce costs without harming the company's image.

CONCLUSIONS

The application related in this paper, despite some significant results, is still exploratory in nature and can be considered an initial activity towards the application of target and kaizen costing on civil construction.

During this initial application, the combination between target and kaizen costing generated savings on the order of 13%, based upon historic costs for the units.

In order to achieve even better results, it will be necessary to apply these tools to more units, not simultaneously, maintaining the same work team and the same participating companies.

Everyone involved in the process must actively participate, by contributing suggestions and in some cases actually allowing interventions on the project, as is the case with upper management and international divisions, for example.

Future studies are suggested to extend the target and kaizen costing to other types of work and to expand the application in BRUs.

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