



Decision Support Model for Conservation, Reuse and Valorization of the Historic Cultural Heritage

Lucia Della Spina^(✉) and Francesco Calabrò

Mediterranea University of Reggio Calabria, Reggio Calabria, Italy
lucia.dellaspina@unirc.it

Abstract. In the last twenty years the policies of conservation of cultural heritage have become central policies among the European community. This is due to the importance attributed to the use of heritage as cultural capital and as a potential factor for tourism; another reason is represented by the objective of supporting the importance of cultural values for the identity of the territories, for its intrinsic value and as an investment for the cultural, social and economic development.

Starting from the application of the Discounted Cash-Flow Analysis, the study support the public decision to locate the best appropriate use (Highest and Best Use) relating to the conservation and reuse of a historic building located in Southern (Italy).

Different scenarios are considered and evaluated from the point of view of the public and private convenience considering the Internal Rate of Return and the Net Present Value indicators. The final results are also verified by means of specific sensitivity analyses that allow the validity of the proposed model to be tested.

Keywords: Decision support model · Valorization · Scenarios analysis
Discounted Cash-Flow Analysis · Feasibility analysis · Pay Back Period
Sensitivity analysis

1 Introduction

In the last twenty years the policies of conservation of cultural heritage have become central policies among the European community. This is due to the importance attributed to the use of heritage as cultural capital and as a potential factor for tourism; another reason is represented by the objective of supporting the importance of cultural values for the identity of the territories, for its intrinsic value and as an investment for the cultural, social and economic development [1].

From a strictly economic point of view, the project of conservation and valorization of a historic building represents a moment of creation of values and surplus values [2, 3].

According to the principle of sustainable protection of public real estate transferred to private individuals, the verification of re-use choices has the objective of ensuring the preservation of cultural values in the actions for the valorization of existing building

resources. In particular, the new functions must be able not only to protect the identity of the asset, but also to guarantee a significant growth of economic and social values [4].

The expectations of the community are determining in the definition of reuse strategies, which can contribute to improving the quality of life, increasing functional equipment, infrastructures and services, with positive repercussions on the socio-economic context. On the contrary, the choices of reuse are often implemented in the absence of large-scale strategies that able to achieve the integration between the physical, economic and social values expressed by the artefacts to be recovered and by the contexts in which they are inserted.

The intervention on architectural and cultural resources also calls into question specific assessment and economic questions from the assessment of the value of the public real-estate assets and resources under analysis, to the evaluation of financial, economic and management convenience, in relation to the various subjects involved. The study focused on the specific aspect, linked to the central question of the choice of the use and the functions to be inserted, to be confirmed and/or optimized [5].

The market analysis, the forecasting of the cultural consumptions, the analysis of the costs and the evaluation of returns and benefits are just a few, significant points to be explored and, case-by-case basis, to be examined in greater depth, to lead the choices and the investments of public administrations that are increasingly constrained by financial hardship and scarcity of public resources [6–9].

The step of the preventive analysis and of the financial sustainability is aimed at investigating the profitability of the reuse alternatives in the hypothesis of concession to a private entity, which could be entrusted with the designing, restructuring and management of the public asset for a given period.

Starting from the application of the Discounted Cash-Flow Analysis (DCFA), the study support the public decision to locate the best appropriate use (Highest and Best Use) [10] relating to the conservation and reuse of a historic building located in Southern Italy [11–13].

According to the point of view of the public and private convenience, different scenarios are considered and evaluated considering the Internal Rate of Return and the Net Present Value indicators. The final results are also verified by means of specific sensitivity analyses that allow the validity of the proposed model to be tested.

2 The Case Study

The case study is represented by one of the most prestigious public real-estate assets located in the village of Gerace (Southern Italy): “Palazzo Sant’Anna” (see Fig. 1).

The building, whose origins seem to date back to the fourteenth century, has a privileged position as it is located above the ‘Bombarde’ belvedere overlooking the valley. It was born as a monastic complex whose original structure is still readable despite the changes stratified over time. The Church of “Sant’Anna” and the rooms of the vicarage, owned by the Curia, are an integral part of the building.

The building, made of load-bearing masonry, rests directly on the outcropping rock. The internal distribution of the rooms reflects the last use of the building, which until a



Fig. 1. Case study: “Palazzo Sant’Anna”

few years ago housed the activities of a hotel. On the first level there are the kitchens with the annexed service rooms, different rooms and the reception: these rooms are covered with barrel vaults except for one with a large cross vault. This room is paved with parquet strips while the rest of the rooms are characterized by terracotta tiles and anti-slip material that is suitable for service areas. On the second level there are additional dining rooms, eleven rooms provided with bathroom; part of these ones

overlook the glass-enclosed walkway that giving on the cloister through a filter corridor. Over the course of time the original courtyard has been joined by two other buildings, thereby increasing the surface of the building to about 1180 square meters (see Fig. 2). The rooms of this level are paved entirely with the same type of parquet present at the lower level. The windows are made of wood, according to the original's. All the rooms are covered with layers of plaster which do not leave a glimpse of the wall texture. In addition to the two stairwells, an elevator connects the two floors internally. The pitched roof of the building is characterized by wooden trusses that make up the main warping, the purlins that make up the secondary frame, the planks and the mantle in shingles in terracotta. The large terrace, near the Bombarde, is connected to the main body by a ramp.



Fig. 2. Layout of the “Palazzo S. Anna” - current functional model. Legend: c. cloister; 1. breakfast room; 2. reception; 3. kitchen breakfasts; 4. atrium; 5. kitchen stores; 6. kitchen; 7. bathroom; 8. bathrooms first level, 9. elevator, 10. premises of ecclesiastical property; 11. gallery, ramp and terrace; 12. kitchen pizzeria; 13. pizzeria room; 14. Pizzeria’s bathrooms; 15. dining room; 16. rooms; 17. breakfast room and bar; 18. wide corridor often used for dining room; 19. small dining hall; 20. common bathrooms; 21. deposits; 22. zone filter to the stairs and lift room.

The general state of conservation is not in negative condition, since there are no structural movements or lesions of any kind. However, in order to make the building usable again, some interventions aimed at restoring degradation caused by the use of the structure and the natural deterioration of the elements are still necessary. One of the first problems concerns rising damp, typical of the first levels of historic buildings, due to the deterioration of the plasters and the finishing layers. Similarly, for the roof, a small part of the roof shingles in terracotta was blown away by the wind, also due to the location of the building, which is directly exposed to the winds blowing from the sea. The external flooring is entirely to be replaced, unlike the internal one in parquet strips

which requires only the replacement of some deteriorated elements and subsequent surface lamatura. Finally, for the external windows, interventions are necessary to make them efficient again.

3 Methodology

Due to the non-use and advancing of the physical degradation of the structures, today the building object of study only represents a cost for the Municipal Administration. In the hypothesis of its valorization it can instead represent an opportunity for economic development of considerable importance if and only if a careful evaluation of feasibility is made on the choice of the functional alternative that pursues the economic highest and best use for the asset, in the context of possible uses permitted by legal norms.

To reach the goal, we resorted to the Highest and Best Use Analysis (HBU), a preliminary assessment technique that allows to identify the economic highest and best use among the possible uses, technically, physically and legally possible for a asset, considering its peculiarities, the needs of the context and of the owners of the building. The process of this analysis is therefore based on the conformity of some decision-making rules of the various hypothesis of building's uses, according to which such destinations must be feasibility, financially sustainable and must represent the most convenient from an economic point of view [14].

In order to support the design of re-use alternatives, were taken into consideration the main categories of stakeholders with different levels of interest/power, for each of them an analysis was developed, in order to requirements to the final users; technical-functional aspects: business criteria; sector-specific rules in the designing of spaces [15, 16].

The HBU allows to evaluate the most profitable destination for a real estate, that is the functional alternative able to produce higher income; this is possible starting from the assumption that potential managers are willing to pay a rent that reflects their expectations about the most profitable use of the resource, between those legally permitted and physically possible. The decisions in the field of investments, by a private operator, depend in fact on the profitability expectations of the subject who would carry out the investment; these decisions can be verified by economic-financial forecasting tools that lead to formulate an economic judgment on the feasibility of the valorization project [17–19].

Starting from the current physical state of the asset, to assess the various functional scenarios, the criterion of economic-financial convenience was used through the Discounted Cash-Flow Analysis (DCFA). This in order to investigate the profitability of the alternatives in the hypothesis of concession to a private investor entity, which would be entrusted the planning, restructuring and management of Palazzo Sant'Anna for twelve years, while the Administration would collect for the duration of the concession a annual fee, with the exception of the first year and a fee reduced by half to the second year.

Through the development of the DCFA it was therefore possible to determine the cash flows generated by the investment, taking into account a series of profitability indicators such as the Net Present Value (NPV) calculated as the sum of the discounted

annual cash flows with an appropriate rate discounting, and the Internal Rate of Return (IRR). The IRR is that interest rate (or discount) determined by the return on the invested capital. In other words, the IRR is the rate that cancels the VAN, or that rate which makes the positive and negative cash flows of an intervention equivalent and therefore represents the profitability of the investment.

In the calculation of the NPV, the reference time frame considered is nine years, as required by the law on leases for hotel activities pursuant to law no. 392/1978. In addition, a sensitivity analysis was carried out considering two discount rates at 5% and 8%.

Moreover, the Break-even Analysis allowed, instead to know the break-even point between costs and revenues and therefore to quantify the period of time necessary for the recovery of the initial disbursement sustained [20–22].

Finally, it was assumed that the Administration will divest the use of the property for consideration to a hypothetical private manager, that will manage the activities planned for the structure and will bear not only of the operating costs resulting from the implementation of the activities, but also of the costs related to the restructuring, ordinary maintenance, annual provisions for the extraordinary maintenance as well as the purchase of equipment and furnishings useful for carrying out the activities.

4 Functional Scenarios

Below are the scenarios identified according to the stakeholders involved in the design of the intended use.

4.1 Scenario 1: The Current Functional Model

This scenario involves the renewal of the current accommodation structure, which currently features 11 rooms, 25 beds, a restaurant with 110 seats, a pizzeria, and a meeting room maintaining the pre-existing internal functional distribution (see Fig. 2).

For this scenario, it is highlight the considerable management difficulty found also by the previous management experience due to the dispersive functional dislocation of the kitchens (on the first level) and the restaurant halls on the second level (see Fig. 2).

In order to make the building available again, a total investment of € 1.045.000,00 was estimated, of which € 645.000,00 for the recovery/restructuring cost and € 400.000,00 for the completion of equipment and furnishings (see Table 1).

Table 1. Scenario 1 - total investment

Total intervention costs	€ 540.000,00
Technical costs + unexpected costs	€ 105.000,00
Total recovery/restructuring cost	€ 645.000,00
Total equipment and furnishings	€ 380.000,00
Technical costs	€ 20.000,00
Total equipment and furnishings	€ 400.000,00
Total investment	€ 1.045.000,00

According to the HBU procedure, the scenario have been evaluated in order to verify:

- Technical Feasibility: the planned interventions are all compatible and consistent with the historical structure, indeed, they are aimed at improving the conditions of usability.
- Juridical Feasibility: the planned interventions and the envisaged functions of the building is legally compliant. Since no variations have been proposed from the point of view of volume and structural, the building responds to the regulations on seismic safety in force. Furthermore, despite being a historic building, is not subject to monumental bonds pursuant to Legislative Decree 22 January 2004, n. 42, but as a historical building built for more than seventy years, it is subjected to the provisions of safeguard dictated by the Code until the verification of cultural interest has been carried out (articles 10–12, D.Lgs. 42/2004). Moreover, according to the D.M. of 21/09/1984 published on the G.U. n. 265 of 26/09/1984, building’s area is subject to a restriction related to the natural beauties of the Province of Reggio Calabria.
- Economic-Financial Feasibility. After the estimation of the recovery cost, have been evaluated the management cost, taking into account the cost of personnel, utilities, the cost of raw materials relating to the restaurant, costs for ordinary and extraordinary maintenance of the building, furniture and equipment and other fixed costs. The revenues from the aforementioned activities are then calculated, taking into account the current annual occupancy rate of the hotel facilities (6%, source ISTAT) [7, 8].

Table 2. Scenario 1 - indicators of profitability

Discount rate	8%	Discount rate	5%
VAN	- € 941.710,38	VAN	- € 961.274,30
IRR	–	IRR	–
Investment return time	–	Investment return time	–

Analyzing the indicators of profitability, NPV and IRR, calculated with an 8% discount rate, both the indicators have a negative value. Even using an optimistic discount rate equal to 5%, the situation does not change though it is considered for the manager the possibility of having a capital contribution of 50% of the investment.

Therefore, the scenario is not financially sustainable and this hypothesis is not economically advantageous (see Table 2, Appendix 1).

4.2 Scenario 2: Upgrade of the Accommodation Facility and Wellness Centre

This second scenario involves the upgrade the accommodation facility and the creation of a wellness centre. The number of beds will increase from 25 to 38, thanks to the construction of wooden mezzanines in some of the rooms. Outdoor gazebos with a

capacity of 200 seats will be built on the panoramic terrace on the ground floor, in order to host banquets and events. The usability of the restaurant area will be improved with reference to the Scenario 1; to the first level the kitchen's area will be extended in order to be able to include the equipment for the pizzeria. During the summer, as far as the restaurant total surface, there will be outdoor gazebos, light and removable, with a capacity of 200 seats. This will allow to host banquets and events for the period from June to September. By using part of the premises of the former pizzeria, the toilets will be created to support the external structures. The original restaurant area will be used exclusively as meeting room. Ultimately, in this second scenario the upgrade of the accommodation facility and the presence of the Wellness Centre will allow an increase of the potential demand (see Figs. 3 and 4).



Fig. 3. Layout scenario 2. Legend: c. cloister; 1. restaurant 30 places; 2. reception; 3. services; 4. atrium; 5. kitchen stores; 6. kitchen; 7. bathroom; 8. kitchen extension; 9. elevator; 10. premises of ecclesiastical property; 11. gallery, ramp and terrace and gazebo; 12. additional first level services and wellness center locker rooms; 13. wellness center; 14. wellness center locker rooms; 15. meeting room; 16. rooms; 16b. loft rooms; 17. breakfast room and bar; 18. wide corridor; 19. filter room; 20. common bathrooms; 21. deposits; 22. filter zone to the stairs and lift.

It was estimated a total investment of € 1.285.000,00, of which € 860.000,00 for the recovery/restructuring cost and € 405.000,00 for the equipment and furnishings (see Table 3).

Following the HBU methodology, the verification concerning the evaluation of the technical feasibility of the intervention was carried out. The realization of the lofts inside the original rooms is not technically feasible (and legally) as it would involve load problems on the structures and substantial changes to the historical building.

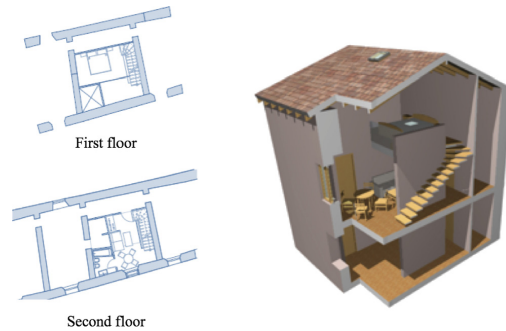


Fig. 4. Upgrade the accommodation facility

Table 3. Scenario 2 - total investment

Total intervention costs	€ 715.000,00
Technical costs + unexpected costs	€ 145.000,00
Total recovery/restructuring cost	€ 860.000,00
Total equipment and furnishings	€ 405.000,00
Technical costs	€ 20.000,00
Total purchases	€ 425.000,00
Total investment	€ 1.285.000,00

4.3 Scenario 3, Restaurant Activity Upgrade

In this scenario the original destination structure with 25 beds is kept unchanged, while they are widened and strengthened the catering activities, similar to the provisions in the Scenario 2 (see Fig. 5).

Coherent with the planned activities, an investment amount of € 1.200.000,00 is hypothesised, of which € 690.000,00 for recovery/restructuring operations (see Table 4).

According to the HBU procedure, the scenario have been evaluated in order to verify:

- Technical feasibility: the planned interventions, as in the case above, are all feasible and compatible with the building. Even the proposed external structure will not be an element of negative impact on the building, as it is light and removable.
- Legal feasibility: for this phase the considerations made for the first scenario are valid. For the external structure destined to the restaurant will be required the necessary authorizations so that it can be assembled in the months of high and medium season.
- Economic and financial feasibility. Investment and management costs have been estimated refer on accommodation, catering, wellness centers and conferences, taking into account a slight improvement in the hotel occupancy rate. According to the strategies aimed at developing the tourism sector that has planned and which is implementing the municipal administration, revenues have been estimated. The



Fig. 5. Layout scenario 3. Legend: c. cloister; 1. restaurant 30 places; 2. reception; 3. services; 4. atrium; 5. kitchen stores; 6. kitchen; 7. bathroom; 8. kitchen extension; 9. elevator; 10. premises of ecclesiastical property; 11. gallery, terrace and gazebo; 12. additional first level services and wellness center locker rooms; 13. wellness center; 14. wellness center locker rooms; 15. meeting room; 16. rooms; 17. breakfast room and bar; 18. wide corridor; 19. filter room; 20. common bathrooms; 21. deposits; 22. filter zone to the stairs and lift

Table 4. Scenario 3 - total investment

Total intervention costs	€ 575.000,00
Technical costs + unexpected costs	€ 115.000,00
Total recovery/restructuring cost	€ 690.000,00
Total equipment and furnishings	€ 485.000,00
Technical costs	€ 25.000,00
Total purchases	€ 510.000,00
Total investment	€ 1.200.000,00

focal point is however the increase in the possibility of hosting banquets and the numbers of seats for the restaurant. This increase is due to the realisation of the external structure that will work for five months a year and to the improved and expansion of the kitchens, together with the income from the wellness center, which even if minimal, complete the offer of the structure.

Among the solutions proposed, this scenario complies with all the steps envisaged by the HBU, resulting in the most economically advantageous one.

In fact, analyzing the results obtained in both the two hypotheses, both with the discounting rate of 8% and 5%, it is clear that the financial sustainability is verified, with a good level of profitability, as also confirmed by the value of the TIR.

In the assessment it was assumed that the manager can access a capital contribution of 40% of the investment. The Pay Back Period of the investment was quantified in eight years in the first case and in seven ones for the second (see Table 5, Appendix 2).

Table 5. Scenario 3 - indicators of profitability

Discount rate	5%	Discount rate	8%
VAN	€ 447.664,90	VAN	€ 273.096,04
IRR	14%	IRR	14%
Investment return time	7 anni	Investment return time	8 anni

5 Conclusion

Starting from the application of the Discounted Cash-Flow Analysis, the study was an appropriate support instrument in order to the public decision to locate the best appropriate use (Highest and Best Use) relating to the conservation and reuse of a historic asset located in Southern Italy.

Different scenarios are considered and evaluated from the point of view of the public and private convenience considering the Internal Rate of Return and the Net Present Value indicators. The final results are also verified by means of specific sensitivity analyses that allow the validity of the proposed model to be tested.

Assuming that the only weapon to counteract the degrade of an public real-estate assets is the compatible reuse, the results of this application to the case study, have been supporting decisions for:

- the municipal administration, which by granting management of the property could obtain two benefits: the revenue from the rent and the remission of costs to be borne for the inactivity of the asset;
- the private subject future manager of the Palazzo Sant’Anna, as through the feasibility study it was possible to identify the best and most advantageous solution from an economic point of view among different use alternatives, which are the result of a shared path with the main categories of stakeholders with different levels of interest/power;
- all this premised, it should be added that the management experiences already carried out in the past for Palazzo S. Anna show that there are evident managerial difficulties for activities tourist accommodation, in achieving an economic-financial result adequate to the expectations of the private manager.

For these reasons, the Municipal Administration has been sensitized to consider other uses, consistent with the characteristics of Palazzo S. Anna, such as those linked to Higher education and Research activities, which will be the subject of subsequent insights.

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Appendix 1

	Year 0	Year 1	Year 2	Year 3 Year Regime	Year 4-9
APPENDIX 1. SCENARIO1 Financial Sostenibility					
Investment costs (building renovation + equipment and furnishings)	€ 1.045.000,00	€ 0,00	€ 0,00	€ 0,00	€ 0,00
Capital contribution (50%)	-€ 522.500,00	€ 0,00	€ 0,00	€ 0,00	€ 0,00
Management cost	€ 535.766,00	€ 418.816,00	€ 483.866,00	€ 535.766,00	€ 535.766,00
	€ 0,00	€ 34.149,60	€ 37.944,00	€ 42.160,00	€ 42.160,00
	€ 0,00	€ 570,00	€ 900,00	€ 1.140,00	€ 1.140,00
Raw materials / Breakfasts	€ 22.080,00	€ 13.880,00	€ 18.040,00	€ 22.080,00	€ 22.080,00
Restaurant meals	€ 396.000,00	€ 148.500,00	€ 198.000,00	€ 396.000,00	€ 396.000,00
Banquet meals	€ 30.000,00	€ 20.000,00	€ 24.000,00	€ 30.000,00	€ 30.000,00
Pizzeria meals	€ 5.000,00	€ 5.000,00	€ 5.000,00	€ 5.000,00	€ 5.000,00
Ordinary maintenance costs	€ 5.000,00	€ 5.000,00	€ 5.000,00	€ 5.000,00	€ 5.000,00
Provisions for extr. maintenance of equipment and furnishings	€ 0,00	€ 8.000,00	€ 8.000,00	€ 8.000,00	€ 8.000,00
Provisions for extr. property maintenance	€ 0,00	€ 0,00	€ 0,00	€ 60.000,00	€ 60.000,00
Rent	€ 5.000,00	€ 10.000,00	€ 5.000,00	€ 5.000,00	€ 5.000,00
Advertising costs	€ 3.000,00	€ 3.000,00	€ 3.000,00	€ 3.000,00	€ 3.000,00
Insurance costs	€ 2.000,00	€ 2.000,00	€ 2.000,00	€ 2.000,00	€ 2.000,00
Intangible long-term costs	€ 522.500,00	€ 668.915,60	€ 790.750,00	€ 1.115.146,00	€ 1.115.146,00
Total costs	€ 720,00	€ 360,00	€ 720,00	€ 720,00	€ 720,00
Revenues from B&B_ low season	€ 1.125,00	€ 562,50	€ 787,50	€ 1.125,00	€ 1.125,00
Revenues from B&B_ middle season	€ 0,00	€ 5.100,00	€ 7.650,00	€ 10.200,00	€ 10.200,00
Revenues from B&B_ high season	€ 7.200,00	€ 3.600,00	€ 7.200,00	€ 7.200,00	€ 7.200,00
Revenues from half board B&B_ low season	€ 10.800,00	€ 5.400,00	€ 7.560,00	€ 10.800,00	€ 10.800,00
Revenues from half board B&B_ middle season	€ 12.000,00	€ 6.000,00	€ 9.000,00	€ 12.000,00	€ 12.000,00
Revenues from half board B&B_ high season	€ 1.080,00	€ 540,00	€ 1.080,00	€ 1.080,00	€ 1.080,00
Revenues from full board B&B_ low season	€ 1.575,00	€ 787,50	€ 1.102,50	€ 1.575,00	€ 1.575,00
Revenues from full board B&B_ middle season	€ 6.900,00	€ 3.450,00	€ 5.175,00	€ 6.900,00	€ 6.900,00
Revenues from full board B&B_ high season	€ 45.000,00	€ 29.600,00	€ 37.000,00	€ 45.000,00	€ 45.000,00
Revenues from Restaurant_low season	€ 112.500,00	€ 5.015,00	€ 90.000,00	€ 112.500,00	€ 112.500,00
Revenues from Pizzeria	€ 880.000,00	€ 330.000,00	€ 440.000,00	€ 880.000,00	€ 880.000,00
Revenues from Banquets	€ 21.000,00	€ 7.000,00	€ 14.000,00	€ 21.000,00	€ 21.000,00
Revenues from Banquets and Conferences	€ 0,00	€ 0,00	€ 0,00	€ 0,00	€ 0,00
Residual Value of the investment	€ 0,00	€ 397.415,00	€ 621.275,00	€ 1.110.100,00	€ 1.110.100,00
Total Revenues	-€ 522.500,00	-€ 271.500,60	-€ 169.475,00	-€ 5.046,00	-€ 5.046,00
Balance					

Appendix 2

	Year 0	Year 1	Year 2	Year 3 Year Regime	Year 4-9
APPENDIX 2. SCENARIO 3 Financial Sostenibility					
Investment costs (building renovation ± equipment and furnishings)	€ 1.200.000,00	€ 0,00	€ 0,00	€ 0,00	€ 0,00
Capital contribution (40%)	-€ 480.000,00	€ 0,00	€ 0,00	€ 0,00	€ 0,00
Management cost	€ 515.966,00	€ 382.666,00	€ 455.366,00	€ 515.966,00	€ 515.966,00
Staff	€ 42.160,00	€ 34.149,60	€ 37.944,00	€ 42.160,00	€ 42.160,00
Bills/Services	€ 2.280,00	€ 0,00	€ 1.560,00	€ 2.280,00	€ 2.280,00
Raw materials / Breakfasts	€ 26.160,00	€ 15.920,00	€ 20.440,00	€ 26.160,00	€ 26.160,00
Restaurant meals	€ 9.000,00	€ 5.920,00	€ 7.400,00	€ 9.000,00	€ 9.000,00
Pizzeria meals	€ 567.000,00	€ 252.000,00	€ 378.000,00	€ 567.000,00	€ 567.000,00
Banquet meals	€ 5.000,00	€ 5.000,00	€ 5.000,00	€ 5.000,00	€ 5.000,00
Ordinary maintenance costs	€ 5.000,00	€ 5.000,00	€ 5.000,00	€ 5.000,00	€ 5.000,00
Provisions for extr. maintenance of equipment and furnishings	€ 8.000,00	€ 8.000,00	€ 8.000,00	€ 8.000,00	€ 8.000,00
Provisions for extr. property maintenance	€ 60.000,00	€ 0,00	€ 0,00	€ 60.000,00	€ 60.000,00
Rent	€ 5.000,00	€ 10.000,00	€ 5.000,00	€ 5.000,00	€ 5.000,00
Advertising costs	€ 3.000,00	€ 3.000,00	€ 3.000,00	€ 3.000,00	€ 3.000,00
Insurance costs	€ 2.000,00	€ 0,00	€ 2.000,00	€ 2.000,00	€ 2.000,00
Intangible long-term costs	€ 720.000,00	€ 724.795,60	€ 928.710,00	€ 1.250.566,00	€ 1.250.566,00
Total costs	€ 1.440,00	€ 720,00	€ 1.080,00	€ 1.440,00	€ 1.440,00
Revenues from B&B low season	€ 2.250,00	€ 1.125,00	€ 1.687,50	€ 2.250,00	€ 2.250,00
Revenues from B&B middle season	€ 20.400,00	€ 10.200,00	€ 12.750,00	€ 20.400,00	€ 20.400,00
Revenues from B&B high season	€ 14.400,00	€ 7.200,00	€ 10.800,00	€ 14.400,00	€ 14.400,00
Revenues from half board B&B low season	€ 21.600,00	€ 10.800,00	€ 16.200,00	€ 21.600,00	€ 21.600,00
Revenues from half board B&B middle season	€ 24.000,00	€ 12.000,00	€ 15.000,00	€ 24.000,00	€ 24.000,00
Revenues from half board B&B high season	€ 2.160,00	€ 1.080,00	€ 1.620,00	€ 2.160,00	€ 2.160,00
Revenues from full board B&B low season	€ 1.575,00	€ 3.150,00	€ 2.362,50	€ 3.150,00	€ 3.150,00
Revenues from full board B&B middle season	€ 13.800,00	€ 6.900,00	€ 8.625,00	€ 13.800,00	€ 13.800,00
Revenues from full board B&B high season	€ 9.000,00	€ 5.600,00	€ 7.000,00	€ 9.000,00	€ 9.000,00
Revenues from restaurant low season	€ 36.000,00	€ 24.000,00	€ 30.000,00	€ 36.000,00	€ 36.000,00
Revenues high season outdoor structure	€ 1.260.000,00	€ 560.000,00	€ 840.000,00	€ 1.260.000,00	€ 1.260.000,00
Revenues from Banquets	€ 21.000,00	€ 7.000,00	€ 14.000,00	€ 21.000,00	€ 21.000,00
Revenues from Conferences	€ 27.000,00	€ 4.200,00	€ 5.250,00	€ 27.000,00	€ 27.000,00
Revenues from Pizzeria / restaurant inside low season.	€ 27.000,00	€ 18.000,00	€ 22.500,00	€ 27.000,00	€ 27.000,00
Revenues from Pizzeria / outdoor structure high season	€ 7.500,00	€ 5.400,00	€ 6.300,00	€ 7.500,00	€ 7.500,00
Revenues from Wellness Centre	€ 0,00	€ 0,00	€ 0,00	€ 0,00	€ 0,00
Residual value of the investment	€ 0,00	€ 675.800,00	€ 995.175,00	€ 1.470.450,00	€ 1.470.450,00
Total Revenues	-€ 720.000,00	-€ 48.995,60	€ 66.465,00	€ 219.884,00	€ 219.884,00
Balance					

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