

Financial and Economic Assessment of Creating the ETKA Hypermarket (In Mashhad Metropolis)

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ABSTRACT

Financial analysis can help investors for studying the return of projects. They can decide and agree or disagree about a project by using financial assessment. In this study, we want to assess the financial indexes about creating the ETKA Hypermarket in Mashhad metropolis. For this purpose, the importance and need of research, definitions and concepts associated with stores is investigated. The next part of the research, analysis about the current state of the ETKA store of Mashhad through revenue and expenses, then evaluated predicted based on financial indicators. In the final section, the results and related suggestions are surveyed. Based on the results, Payback period of the project is equal to 2.22 years on this index, and internal rate of return equal to 122.70 percent.

KEYWORDS: Financial indexes, ETKA Store of Mashhad, Net Present Value, Internal Rate of Return, Sensitivity Analysis.

1. INTRODUCTION

Today, citizens in the cities and countries buy goods and services based on different factors in comparison with past. People had to look at factors such as price and quality and they usually spend much time when purchasing or shopping for various goods. Today, another important factor to consider is that citizens can even be argued that it is more important than the previous factors. Time is one of the factors that today forced citizen choice new way of shopping. Among the solutions offered, great store is better than another. These stores can build positive economic and social outcomes for investors and citizen.

This study wants to survey financial assessment of a store (hypermarket) in Mashhad Metropolis. For this purpose, the present study looked at the importance and requirement of research, definitions and concepts related stores checked. The next section reviews the current state of Mashhad store based on current situation of income and expense takes place. In the final part of the project evaluation criteria to evaluate the results got, and recommendations on the research is presented. It is needed to note that all calculations through Computer Model for Feasibility Analysis and Reporting (COMFAR) software did.

2. LITERATURE REVIEW

2.1 Great (Big) Stores

Such store creates from multi-store under common ownership and centralized forms. The duties and operates of a department store (shopping, advertising, rent and so on) have done by a central command unit or a central management and control. Big chain stores about a network of large and small retailers, which are defined as the ownership of the same item exclusive offer (Asgharzadeh, 1995).

2.2 History of creating stores

For first time, setting up stores offered by a French trader Bvskiyv Aristide in 1852 with a small shop called "Ben Murcia" to sell goods. In the modern Western, notion of a chain store goes back to the mid-nineteenth century. In 1879, the store offers a variety of items (first generation supermarkets today), opened in New York. Shop chain of retail stores of provisions and charge simultaneously spread to other domains as well, and distribution of tobacco, drug stores and restaurants also quickly formed (Ahmadi, 1996). Other factors were also successful chain stores include:

- Can turn buyers purchase goods in the shop and see the selection
- Selecting the right places and busy
- No distinction between buyers and lower classes of society that welcomes people

From twenty mid-century, modern supermarket for first time was created by chain stores. The stores are in the suburbs had been built in a wider variety of places than they were in consumer goods. Large supermarkets and a variety of goods and services could rise purchasing and caused gradually giant store or hypermarket came (Akhavy, 2001).

2.3 Objectives and causes the formation

The distribution system is the interface between production and consumption and one of the major changes in either production or consumption will lead to main changes in the distribution sector. In the eighteenth and nineteenth centuries in Europe was the origin of the changes in production methods, transport and the like. Distribution system changed, too. Modern distribution systems used rather than last forms. The modern distribution institutions caused some innovations. One of these institutions is chain stores after emergence, uniform way, but the evolution is over, so that the chain stores the current combination of a variety of new methods of distribution. The primary objectives of these stores (if there are favorable conditions for the industrial revolution), mainly because of high profit margins of economy that people was established chain store. But gradually, the chain stores show that they can have some social advantages, too (REFAH stores Management Research and Education, 2010). This issue has caused politicians and decision makers encourage and promote hypermarkets and chain stores in comparison with past.

2.4 Stores in Iran

The chain stores were created with direct or indirect support of the government and they promoted slowly. Better position to win. The move from bottom to top and from small to large and profitable aspect of self that is, the cycle continues with new competitors. Resulting in chain store organizations and especially environmental requirements of government policy and Katie motion is from top to bottom. Survival, growth of this market is heavily dependent. Sensitivity to the environment could shape these organizations provide. Motor cycle a chain of stores that mainly affects the development and rapid growth have state sensibility, the development cut (REFAH stores Management Research and Education in 2010). Managing director must be informed and know what products through ducts and how these ducts there are current.

2.5 Status of Mashhad

In the recent century, people growth in Mashhad grew. In 1956, about 241,000 people lived in this city and it was fourth city in Iran. In the next census in 1966, the city of Tehran, Isfahan, Iran's third place in the cities. In the 1976 census, Mashhad, after Tehran, Iran's second most populous city, and the last census in 1385, this is the place. In Census of 2006, the population of the city of Mashhad in the year was about 2,410,800 people.

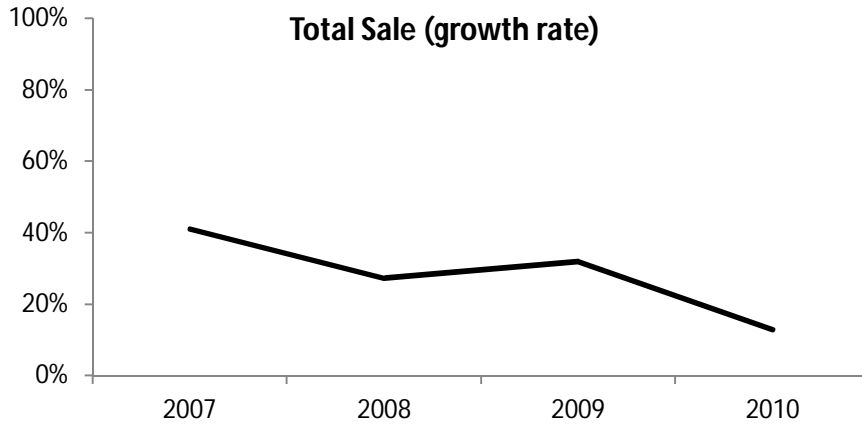
The historic city of Mashhad, the second most populous city in Iran and the country's largest urban center in the East of Iran, thanks to the holy shrine of Imam Reza, annually host roughly 15 million pilgrims and travelers. The arrival of the passengers has caused huge money into the city is in the service sector raised tremendously developments and the growing Muslim people and the enthusiasm of Muslims (and non-Muslim tourists) to visit and see the shrine of Imam Reza, in total keeping with the current trend shows that even at the end of this century (2021), pilgrims and travelers are thirty million. Also in Mashhad people studies show that over the last hundred years, the crowds of pilgrims and passengers annually, Mashhad population of about 2 to 7 times the people has risen. And, in 1307 the population was 45,000, the pilgrims and travelers Mashhad people to citizen was about 2.1 (55,000 people) reached. This index was 6.6 in 1986 and it show Mashhad hosts more than 10 million travelers in that time. It is important to mention that pilgrims and travelers are mainly in the different fields of social and economic of the accommodation will be checked in Mashhad.

The results show that households Job Category Pilgrim (caused by travel costs) 4 group encompasses economic, and cultural characteristics affect residential facilities - such as education supervisor – in the end defines three levels use the facilities available in the city.

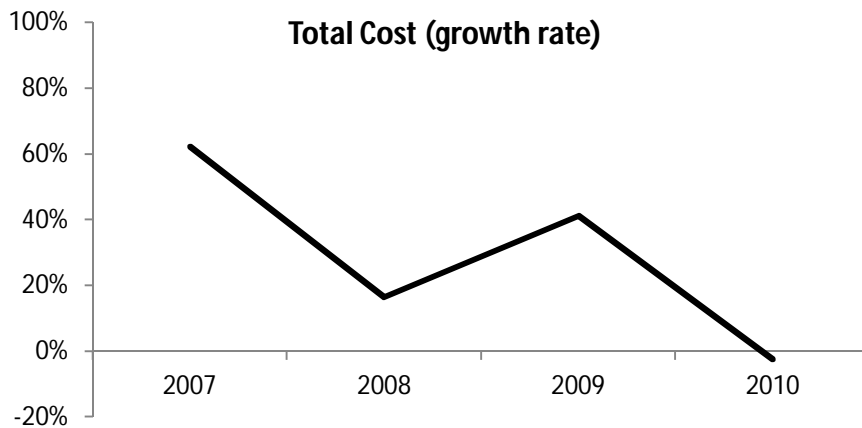
2.6 Current reliance Mashhad Store

The most difficult part of an economic analysis is to evaluate the relevant quantities future. Assessments are based on the previous results and the best and most common source of information about past results, the enterprise's information. Review records, to get estimates of beneficial and full value must be used repeatedly in the history of economic data and engineering judgment and analysis with reasonable run. In this chapter to review the

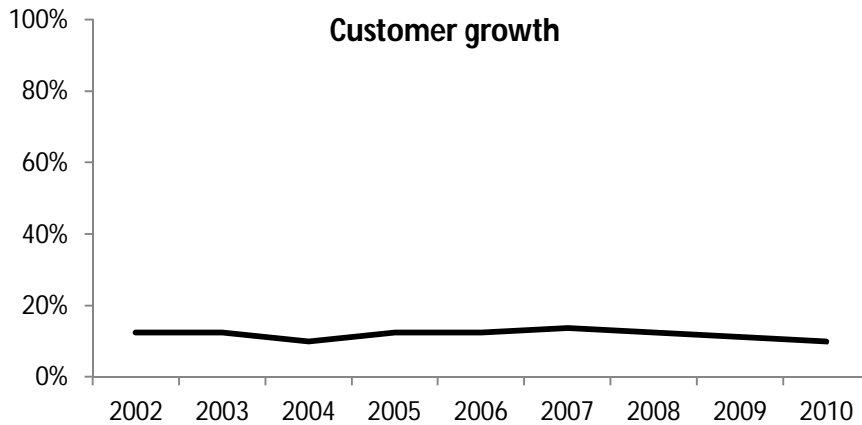
revenues and expenses associated with sales and cost data in Mashhad depend Shop the store over the past 5 years will be reviewed.



Sale growth was in the total decline so that the 41.09 percent in 2007 is reached to 12.92 percent in 2010. The sale growth was in 2008, although growth rose in 2009, but has declined in the last year.



Growth of total cost was variable between 2007 and 2010. Growth rate of total cost was 62.22 percent at 2007 while it was -2.36 percent in 2010.



The growth of customers in the store and during almost constant process of Mashhad depend on volatility is about 12 percent. Customer growth in 2004 was associated with a cut of up to 2007, but in later years it has become a rising trend. Customer growth in the period 2008 to 2010 has declined in the last 2010 where the growing several customers in the 9.89 percent is reached.

2.7 Comments about the proposed site selection

This project is in one of the mainly street in Mashhad (Spring St.) and has many features that can be said about the needs of a complex covers. This location is near the confluence of two subway lines and other public transportation system. Also, around that, there are one of the main ways to go to holy shrine and other tourist palaces.

3. MATERIALS AND METHODS

Then, by these criteria, justified or not justified by the project's conclusion. Equation 1 is calculated as the present value of income:

$$PV_{\text{income}} = \sum_{t=1}^n \frac{I_t}{(1+i)^t}$$

In the above equation PV_{income} , the present value of future income, i the discount rate and t is time. Present value of costs is got by Equation 2:

$$PV_{\text{cost}} = \sum_{t=1}^n \frac{C_t}{(1+i)^t}$$

PV_{cost} in the present value of costs, i have my t -year discount rate and the cost shows C_t . Net present value is calculated by Equation 3:

$$NPV = \sum_{t=1}^n \frac{I_t}{(1+i)^t} - \sum_{t=1}^n \frac{C_t}{(1+i)^t} = \sum_{t=1}^n \frac{P_t}{(1+i)^t} - TC$$

In this regard, TC first cost of investment and the net cash flow at time t is P_t . If the net present value is greater than zero, then the plan's discount rate is assumed to have an economic justification. Internal rate of return, the rate at which the current value of a project is equal to the present value of the costs and the net present value of zero is got. So, the rate is calculated using equation 4:

$$IRR : \sum_{t=1}^n \frac{I_t}{(1+i)^t} = \sum_{t=1}^n \frac{C_t}{(1+i)^t} \text{ or } \frac{\sum_{t=1}^n \frac{I_t}{(1+i)^t}}{\sum_{t=1}^n \frac{C_t}{(1+i)^t}} = 1$$

Identification of investment costs

What was reached in this study is listed in Table 1.

Table 1: List of investment costs (RIs)

	Costs	Amount	Price per unit	Total price	Share of fixed investment
1	Land Purchase	4000	35,000,000	140,000,000,000	56.1%
2	Building Permits	3000	11,000,000	33,000,000,000	13.2%
3	Site Preparation (Trade part)	3400	6,000,000	20,400,000,000	8.2%
4	Site Preparation (Official part)	600	7,000,000	4,200,000,000	1.7%
5	Depot and Parking	4000	4,000,000	16,000,000,000	6.4%
6	Elevators	4	800,000,000	3,200,000,000	1.3%
7	Escalators	4	1,500,000,000	6,000,000,000	2.4%
8	Installation	4000	1,500,000	6,000,000,000	2.4%
9	Designing	4000	4,800,000	1,624,000,000	0.7%
10	Utility	3000	1,500,000	4,500,000,000	1.8%
11	Management	4000	697,500	2,790,000,000	1.1%
12	Unpredicted	-	-	11,885,700,000	4.8%
	Fixed Investment	-	-	249,599,700,000	% 100
	Working Capital	-	-	43,562,519,815	-
	Total Investment	-	-	293,162,219,815	-

3.1 Identify the cost of the operation phase

In this study, to identify the cost of the operation phase of the ten-year cost of Mashhad in the years 2001 to 2010 were used to build the store. Mashhad was considered. The expansion of the scale of, economies of scale will apply to this project. Means that costs less than growth of business scale grows. a. Likely results in better real-world conditions that are outlined in this report. The calculating this figure before the 24.15 percent estimated.

3.2 Revenue recognition phase operation

Revenue in this project involves five different kinds. Hypermarket after starting should focus on them to raise its profit. After evaluation the growth of sales averagely is equal to 27.75.

3.3 Profit and Loss Forecast

After illustration revenue and costs in hypermarket, profit and loss forecast show in table 2 and 3. But before presenting the case to the income statement according to the following is required:

- The table presents the results directly extracted from COMFAR software is extracted.
- A realistic approach, 10 percent of the first year was a boom for sale.
- Performance for realistic financial model to reach 10 percent of sales and 5 percent for doubtful receivables is considered income and is applied every year.

Net Income Statement

	Production 2013	Production 2014	Production 2015	Production 2016	Production 2017
Sales revenue	1,593,810.00	2,262,247.00	2,889,921.00	3,691,742.00	4,716,036.00
Less variable costs	1,298,745.00	1,612,422.00	2,001,863.00	2,485,362.00	3,085,636.00
variable margin	295,065.00	649,825.00	888,058.00	1,206,380.00	1,630,400.00
in % of sales revenue	18.51	28.72	30.73	32.68	34.57
Less fixed costs	65,835.94	76,442.94	89,610.94	105,960.94	126,258.94
operational margin	229,229.06	573,382.06	798,447.06	1,100,419.06	1,504,141.06
in % of sales revenue	14.38	25.35	27.63	29.81	31.89
interest on short-term deposits	-	-	-	-	-
Financial costs	-	-	-	-	-
gross profit from operational	229,229.06	573,382.06	798,447.06	1,100,419.06	1,504,141.06
in % of sales revenue	14.38	25.35	27.63	29.81	31.89
Extraordinary income	-	-	-	-	-
Extraordinary loss	-	-	-	-	-
depreciation allowances	-	-	-	-	-
gross profit	229,229.06	573,382.06	798,447.06	1,100,419.06	1,504,141.06
investment allowances	-	-	-	-	-
taxable profit	229,229.06	573,382.06	798,447.06	1,100,419.06	1,504,141.06
income (corporate) tax	57,307.26	143,354.52	199,611.77	275,104.77	376,035.27
Net profit	171,921.79	430,036.55	598,835.30	825,314.30	1,128,105.79
in % of sales revenue	10.79	19.01	20.72	22.36	23.92
Dividends	-	-	-	-	-
Retained profit	171,921.79	430,036.55	598,835.30	825,314.30	1,128,105.79
Ratios					
Net profit to equity (%)	58.64	146.69	204.27	281.52	384.81

Total Equity Invested

	Construction 2012	Production 2013	Production 2014	Production 2015	Production 2016	Production 2017	Scrap
Total Cash Inflow	-	193,841.74	451,956.48	620,755.23	847,234.23	1,150,025.73	183,562.52
Surplus (deficit)	-	193,841.74	451,956.48	620,755.23	847,234.23	1,150,025.73	183,562.52
Dividends	-	-	-	-	-	-	-
Equity capital refund	-	-	-	-	-	-	-
Total cash outflow	293,162.22	-	-	-	-	-	-
Equity capital paid	293,162.22	-	-	-	-	-	-
Net cash return	(293,162.22)	193,841.74	451,956.48	620,755.23	847,234.23	1,150,025.73	183,562.52
Cumulative Net cash return	(293,162.22)	(99,320.48)	352,636.00	973,391.24	1,820,625.47	2,970,651.21	3,154,213.72
Net present value	(293,162.22)	161,534.78	313,858.67	359,233.35	408,581.32	462,169.55	73,769.66
Cumulative Net present value	(293,162.22)	(131,627.44)	182,231.23	541,464.58	950,045.91	1,412,215.46	1,485,985.12
Net present value	at 20 %	1,485,985.12					
Internal rate of return	122.70%						
Modified internal rate of return	122.70%						
short net present value	at 20 %	1,412,215.46	for 6 years				
Normal payback	at 00 %	2.22 years	2014				
Dynamic payback	at 20 %	2.42 years	2014				
NPV Ratio	5.07						
Net present values discounted to	Dec-12						

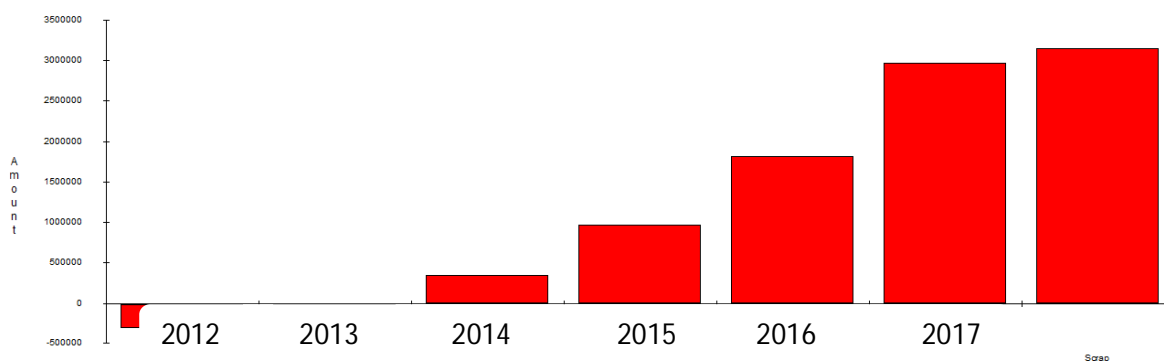
For better understanding in this section, first wrote a brief overview of each indexes, and the results are discussed.

3.4 Payback period

Payback period as years (periods), the first investment is required to be covered by the cash generated by the project, is defined. This is caused by the focus is on the early phases of the project (production) and the following years because of the general lack of attention to the time value of money, the expectations are.

In this project, based on calculations made by software COMFAR Payback period is equal to 2.22 years.

	Cumulative net cash flow
2012	(293,162.22)
2013	(99,320.48)
2014	352,636.00
2015	973,391.24
2016	1,820,625.47
2017	2,970,651.21
Scrap	3,154,213.72



3.

The net present value method, we discounted cash flow inputs and outputs of a fixed rate of interest (cost of capital) and of a certain period (project planning) is used. Operating cash discount from the most basic starting point of the project is done. Discount rates that show the opportunity cost of capital show the rate at which the investors or creditors, your payments (same as cash) Elsewhere in the capital markets, investments were received, with the If the investment risk is the same in cases. If the calculated NPV is positive, the project profitability over the discount rate and therefore can accept the project if the NPV was negative, the opposite is true. This rate is also an indicator of the profitability of the project is used for comparison.

The project's net present value calculations are based on the same 1485985.1178 million RIs, which implies the present value of the project is reasonable.

3.6 Internal rate of return

Internal rate of return, a rate that is using the present value of cash flow output is equal to the present value of the project cash flows and other words in the rates, NPV is zero. These rates show the true profitability of the project. So when choosing a project, a project is selected as the calculated IRR is higher than cost and Risk Premium is required. When choosing a project among other projects, the project with the higher IRR is preferred.

The project's internal rate of return is equal to 122.70 percent. So, return for each year on average is about 122 percent (taking into account the time value of money). The internal rate of return in calculating net income a period, not only financially but also taken into account is the size of the first investment. But, the traditional interest rate (accounting) income statement based on what index is a measure of income and expenses is the same fiscal period.

3.7 Sensitivity Analysis

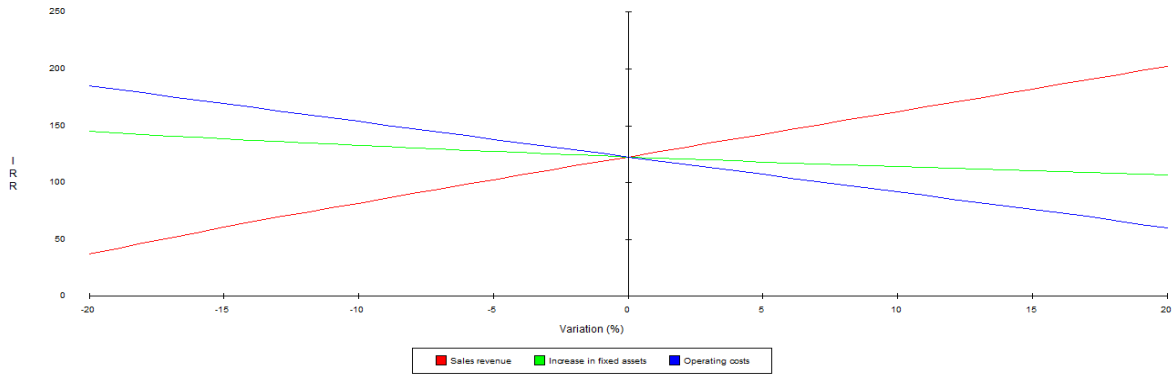
In this project, the variables mentioned above, any sensitivity analysis is presented.

A) Internal rate of return

In Table 5 Sensitivity analysis, these variables were calculated by the software in different modes is presented.

Table 5

Variation (%)	Sales revenue	Increase in fixed assets	Operating costs
-20%	37.37%	144.99%	185.25%
-16%	56.30%	139.80%	172.61%
-12%	73.90%	135.03%	160.04%
-8%	90.41%	130.62%	147.52%
-4%	106.65%	126.52%	135.08%
0%	122.70%	122.70%	122.70%
4%	138.65%	119.13%	110.38%
8%	154.54%	115.79%	98.10%
12%	170.40%	112.64%	85.86%
16%	186.26%	109.69%	73.62%
20%	202.11%	106.89%	60.40%

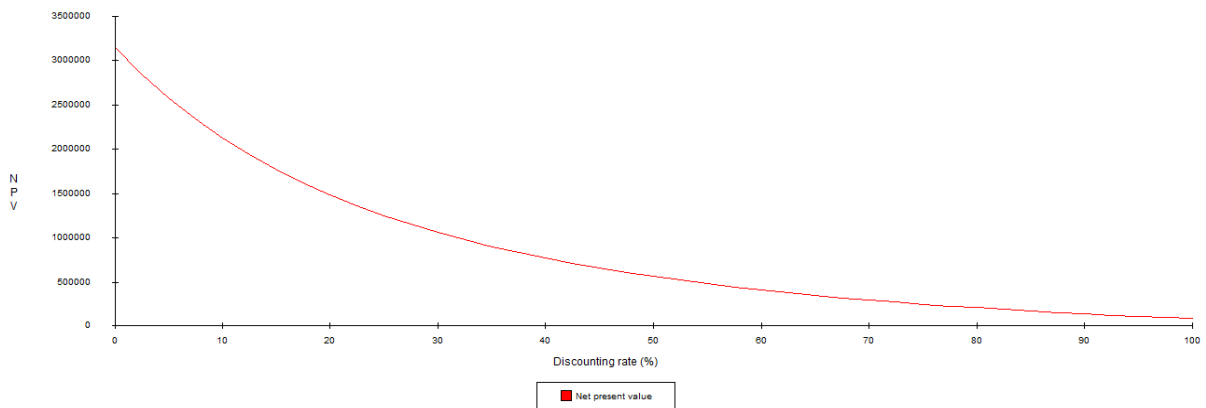


B) Net Present Value

In Table 6 Sensitivity analysis varied in different modes are calculated by the software.

Table 6

Discounting rate (%)	Net present value
0%	3,154,213.72
10%	2,129,683.66
20%	1,485,985.12
30%	1,061,737.79
40%	770,610.96
50%	563,834.10
60%	412,544.51
70%	298,961.98
80%	211,743.67
90%	143,427.52
100%	88,968.95



4. RESULTS

This project involves a total investment IRR 293,162,219,815 249,599,700,000 to 43,562,519,815 RIs IRR fixed investment and working capital needs. Based on field interviews conducted which will be funded entirely from the site. Table 7 below summarizes the financial data associated with this project are presented.

Table 7 (Income and costs, operations)

	First year 2013	Reference year 2015	Last year 2017
Sales Revenue	1,593,810.00	2,889,921.00	4,716,036.00
Factory Costs	1,342,661.00	2,069,554.00	3,189,975.00
Administrative overhead costs	-	-	-
Operating Costs	1,342,661.00	2,069,554.00	3,189,975.00
Depreciation	21,919.94	21,919.94	21,919.94
Financial costs	-	-	-
Total Production costs	1,364,580.94	2,091,473.94	3,211,894.94
Marketing Costs	-	-	-
Costs of Products	1,364,580.94	2,091,473.94	3,211,894.94
Interest on short-term deposits	-	-	-
Gross profit from operations	229,229.06	798,447.06	1,504,141.06
Extraordinary income	-	-	-
Extraordinary loss	-	-	-
Depreciation allowances	-	-	-
Gross Profit	229,229.06	798,447.06	1,504,141.06
Investment allowances	-	-	-
Taxable Profit	229,229.06	798,447.06	1,504,141.06
Income (corporate) tax	57,307.26	199,611.77	376,035.27
Net Profit	171,921.79	598,835.30	1,128,105.79
RATIOS			
Net Present Value of Total Capital Invested	at 20%		1,485,985.12
Internal rate of return on investment (IRR)	122.70%		
Modified IRR on investment	122.70%		
Net Present Value of Total Equity Capital invested	at 20%		1,485,985.12
Internal rate of return on equity (IRRE)	122.70%		
Modified IRRE on equity	122.70%		
Net present values discounted to	Dec-12		

5. SUGGESTIONS

5. Discussion & Suggestions

- Granting authority to the store for pricing
- Brand building on some crops (especially rice)
- Change Sales Procedures in design philosophy that is different and especially at times when sales are lower.
- Once the goods of Wisdom Project
- More attention than other types of retail sales
- Pay special attention to the culture of each region on sales
- According to the catalog of organizations rely on than any other group
- Pay special attention to the promoting good practices and scientific
- Ending restrictions on the sale of products to individual rules and guidelines
- Changing the view on Reliance stores (business perspective rather than a commitment to the families of the armed forces)
- Scale hypermarket attention to quality rather than quantity
- Identify weaknesses in products and plans to cut out its reliance on
- Change and cutting clauses and phrases store input word ((Reliance))

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