

5 Feasibility Study

5.1 Economic Feasibility

The cost benefit analysis is a layout and overview used to determine all of the expenses that are associated with the project at hand. It is a tool that is very important to utilize when trying to figure out how much profit (benefit) will be gained accounting for costs that will be need for the system to be initialized and maintained.

As far as benefits are concerned, there are primarily two types of benefits that are discussed in cost benefit analysis: intangible and tangible benefits. . Intangible benefits are benefits that cannot be measured with money. On the other hand there are tangible benefits that can be assign a money value. Intangible benefits in our system are user-friendliness, user satisfaction, and better image. Features such as the message board, history section, contact us section, videos, and written description add on to the user satisfaction, since they will improve the user-friendliness of our web site. User friendliness and user satisfaction add to our image, and could possibly convert to tangible benefits by increasing the sale of DVDs.

Tangible benefits are measure in the cost benefit analysis. There are two types of cost in the cost benefit analysis; the first type is called one-time cost. One-time costs include any initial expenses that must be made when starting a project or business. Such expenses may include: cost of a location/site, hardware and software needed, employee training, and any other type of cost that directly relates to the project at hand. The second type of cost is the recurring cost. Recurring costs are those costs that occur after the initialization of the project. Examples include software upgrades, patches, annual maintenance fees, and other continuous expenses; these costs are to support the system.

Cost Benefit Analysis was actually very helpful in our project because it allowed us to analyze of the system's expenses on a broader scale rather than just the cost of a video and the profits. Like many e-commerce sites, there are a variety of costs that go into the initialization of the web site and continuous costs that must be made to maintain the system. Our data is essential in determining whether or not our project will be economically feasible:

The original objective of our project was to have a fully functional on-line business. The business was going to have several employees: an administrator, developers, dancers, video technicians, accountants and shipping personnel. According to our research we estimated that our one-time cost would be \$72,344 and that includes the employees, software, hardware and licenses we would need to develop the web site. Our recurring cost would be about \$175,962 a year plus the amount of DVD sold divided by \$5, for the first 6 years of operation. All of these values are described in detail in the tables below.

One-time Cost	Amount (\$)
Employees	70,000
5 Laptops	4,345
Macromedia Studio	900
Video Camera	900
WildForm Flix	150
PhotoShop	609
Merchant Account	400
Domain Name/Disk Space	40
Total One-time Cost	72,344

Recurring Costs	Amount (\$)
Employees	175,000
Merchant Account	26/month
Domain Name/Disk Space	50/month
Site Promotion	50/year
Production	5/DVD
Total	175,962

Explanation of One-Time Costs:

It will cost about \$70,000 in employees to develop the site and the videos. This includes hiring developers, video technicians and dancers. To be able to develop the web site and videos within the time constraint the following hardware is necessary: five laptops (\$4345) and a video camera (\$900). The software needed is Micromedia Studio (\$900), to develop the web site, and WildForm Flix (\$150), to vectorize the videos. Our project also requires merchant account (\$400) necessary to received online payments. To deploy our web site and store our video database we are going to need a domain name and disk space and that is going to cost \$40 initially.

Explanation of Recurring Costs:

To maintain our online business we will need a web administrator, an accountant, shipping personnel, dancers, and video technicians. To hire all of the previously mentioned employees \$175,000 is necessary. We also need to continue paying for the domain name and disk space, which costs \$50 per month. To keep our merchants account active a fee of \$26 must be paid every year. In addition to this, we will also need to promote our site so we can obtain new clients. Companies that provide this service charge about \$50 per year to continuously submitted our web site to 100 different search

engines. Finally, the on average a DVD will cost us \$5 to make, therefore the recurring benefit divided by \$5 will be another recurring cost.

The cost analysis (table A) shows the profits that we would make if our business were executed. In the analysis you can see that in “Year 0” we will not be making any profit since we will be implementing the development phase of our project. In “Year 1” we estimate that since our web site is new and we wont have a lot of market space we will only make about \$250,000. Our profit will continue to increase as we gain market; therefore in “Year 2” we estimate we’ll make about \$325,000. The profit for the following years will continue to increase until we reach \$450,000 in year 6.

Table A: Cost and Benefit Analysis

	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Totals
Monetary benefit	\$ -	\$ 250,000	\$ 325,000	\$ 375,000	\$ 375,000	\$ 425,000	\$ 450,000	
Discount rate (11%)	1.000	0.901	0.812	0.731	0.659	0.593	0.535	
PV of Benefits	\$ -	\$ 225,225	\$ 263,777	\$ 274,197	\$ 279,961	\$ 267,053	\$ 240,588	
NPV of all Benefits	\$ -	\$ 225,225	\$ 489,003	\$ 763,199	\$1,043,160	\$ 1,310,213	\$ 1,550,801	\$ 1,550,801
One-time Costs	\$ (72,344)							
Recurring Costs	\$ -	\$(225,962)	\$(240,962)	\$(250,962)	\$(250,962)	\$(260,962)	\$(265,962)	
Discount rate (11%)	1.000	0.901	0.812	0.731	0.659	0.593	0.535	
PV Recurring Costs	\$ -	\$(203,569)	\$(195,570)	\$(183,501)	\$(165,316)	\$(154,868)	\$(142,194)	
NPV of all Costs	\$ (72,344)	\$(275,913)	\$(471,484)	\$(654,985)	\$(820,301)	\$(975,169)	\$(1,117,364)	\$(1,117,364)
Overall NPV								\$ 433,438
Overall ROI								0.388
Break-even								
Yearly Cash Flow	\$ (72,344)	\$ 21,656	\$ 68,207	\$ 90,696	\$ 114,644	\$ 112,185	\$ 98,394	
Overall Cash Flow	\$ (72,344)	\$ (50,688)	\$ 17,519	\$ 108,214	\$ 222,859	\$ 335,044	\$ 433,438	
Break even point	2.74	years						

Analysis:

The overall profit in the seven years studied is \$433,438. We will reach our break-even point in 2.74 years; this means that we would have cover our expenses and begin to make a profit in less than 3 years. The analysis also gave us a ROI of .388, which means that for every dollar we spend will receive about 40% return on our investment. In comparison the market's return on investment our ROI is moderately good. This means that our online business will be able to compete with organizations since we are making about the same profit. Overall, based on this analysis our business will be a profitable investment in less than 3 years, therefore the implementation of SalsaPartyWalk.com will continue as scheduled with few modifications as explained below.

In reality we don't have the sufficient funds to start a business of this magnitude. To cut down on expenses the group members will act as the employees. Our software and hardware requirements will be met thanks to our sponsor Dr. Fritman. He will provide the laptops, video camera and software. The only thing that will not be provided for us is the merchant's account, which costs \$400 initially and \$26 for every month of use. Due to our lack of funds we cannot afford the merchant account, therefore the back-end design of the shopping cart will not be designed, but our web site will have the front-end design.