	2008	2009	2010	Total
Increased sales from new customers	0	750,000	772,500	
Increased sales from existing customers	0	1,875,000	1,931,250	
Reduction in customer complaint calls	0	50,000	50,000	
TOTAL BENEFITS:	**0**	**2,675,000**	**2,753,750**	
PV of BENEFITS:	**0**	**2,521,444**	**2,520,071**	**5,041,515**
PV of ALL BENEFITS:	**0**	**2,521,444**	**5,041,515**	
Labor: Analysis and Design	42,000	0	0	
Labor: Implementation	120,000	0	0	
Consultant Fees	50,000	0	0	
Training	5,000	0	0	
Office Space and Equipment	2,000	0	0	
Software	10,000	0	0	
Hardware	25,000	0	0	
TOTAL DEVELOPMENT COSTS:	254,000	0	0	
Labor: Webmaster	85,000	87,550	90,177	
Labor: Network Technician	60,000	61,800	63,654	
Labor: Computer Operations	50,000	51,500	53,045	
Labor: Business Manager	60,000	61,800	63,654	
Labor: Assistant Manager	45,000	46,350	47,741	
Labor: 3 Staff	90,000	92,700	95,481	
Software Upgrades	1,000	1,000	1,000	
Software Licenses	3,000	1,000	1,000	
Hardware Upgrades	5,000	3,000	3,000	
User Training	2,000	1,000	1,000	
Communications Charges	20,000	20,000	20,000	
Marketing Expenses	25,000	25,000	25,000	
TOTAL OPERATIONAL COSTS:	446,000	452,700	464,751	
TOTAL COSTS:	700,000	452,700	464,751	
PV of COSTS:	**679,612**	**426,713**	**425,313**	**1,531,638**
PV of ALL COSTS:	**679,612**	**1,106,325**	**1,531,638**	
Total Project Benefits − Costs :	**(700,000)**	**2,222,300**	**2,288,999**	
Yearly NPV:	**(679,612)**	**2,094,731**	**2,094,758**	**3,509,878**
Cumulative NPV:	**(679,612)**	**1,415,119**	**3,509,878**	
Return on Investment:	229.16%	(3,509,878/1,531,638)		
Break-even Point:	**1.32 years**	(Break-even occurs in year 2; $(2,094,731 - 1,415,119]/2,094,731 = 0.32$)		
Intangible Benefits:	Greater brand recognition			
	Improved customer satisfaction			

FIGURE 2-15 Economic Feasibility Analysis for CD Selections

Nonfunctional Requirements

1. Operational Requirements

   1.1 The Internet sales system will draw information from the main CD information database, which contains basic information about CDs (e.g., title, artist, ID number, price, quantity in inventory). The Internet sales system will not write information to the main CD information database.

   1.2 The Internet sales system will store orders for new CDs in the special order system and will rely on the special order system to complete the special orders generated.

   1.3 A new module for the in-store system will be written to manage the "holds" generated by the Internet sales system. The requirements for this new module will be documented as part of the Internet sales system because they are necessary for the Internet sales system to function.

2. Performance Requirements

   No special performance requirements are anticipated.

3. Security Requirements

   No special security requirements are anticipated.

4. Cultural and Political Requirements.

   No special cultural and political requirements are anticipated.

Functional Requirements

1. Maintain CD Information

   1.1 The Internet sales system will need a database of basic information about the CDs that it can sell over the Internet, similar to the CD database at each of the retail stores (e.g., title, artist, ID number, price, quantity in inventory).

   1.2 Every day, the Internet sales system will receive an update from the distribution system that will be used to update this CD database. Some new CDs will be added, some will be deleted, and others will be revised (e.g., a new price).

   1.3 The electronic marketing (EM) manager (a position that will need to be created) will also have the ability to update information (e.g., prices for sales).

2. Maintain CD Marketing Information

   2.1 The Internet sales system provides an additional opportunity to market CDs to current and new customers. The system will provide a database of marketing materials about selected CDs that will help Web users learn more about them (e.g., music reviews, links to Web sites, artist information, and sample sound clips). When information about a CD that has additional marketing information is displayed, a link will be provided to the additional information.

   2.2 Marketing materials will be supplied primarily by vendors and record labels so that we can better promote their CDs. The EM manager of the marketing department will determine what marketing materials will be placed in the system and will be responsible for adding, changing, and deleting the materials.

3. Place CD Orders

   3.1 Customers will access the Internet sales system to look for CDs of interest. Some customers will search for specific CDs or CDs by specific artists, whereas other customers will want to browse for interesting CDs in certain categories (e.g., rock, jazz, classical).

   3.2 When the customer has found all the CDs he or she wants, the customer will "check out" by providing personal information (e.g., name, e-mail, address, credit card), and information regarding the order (e.g., the CDs to purchase, and the quantity for each item).

   3.3 The system will verify the customer's credit card information with an online credit card clearance center and either accept the order or reject it.

   3.4 Customers will also be able check to see if their preferred stores have the CDs in stock. They will use zip code to find stores close to their location. If the CD is available at a preferred store, a customer can immediately place a hold on the CD in stock and then come into the store and pick it up.

   3.5 If the CD is not available in the customer's preferred store, the customer can request that the CD be special ordered to that store for later pickup. The customer will be notified by e-mail when the requested CD arrives at the requested store; the CD will be placed on hold (which will again expire after 7 days). This process will work similarly to the current special order systems already available in the regular stores.

   3.6 Alternatively, the customer can mail order the CD (see requirement 4).

4. Fill Mail Orders

   4.1 When a CD is mail-ordered, the Internet sales system will send the mail order to the mail order distribution system.

   4.2 The mail-order distribution system will handle the actual sending of CDs to customers; it will notify the Internet sales system and e-mail the customer.

   4.3 Weekly reports can be run by the EM manager to check the order status.

FIGURE 4-15   CD Selections Requirements Definition