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Objectives



Upon completion of this course, attendees will be able to:

- Broadly describe worldwide spending/attendance forecasts for the global amusement park and attractions industry
- Identify the major players in the industry
- Define the major income and expense items for facilities
- Describe the financial metrics that attractions should be monitoring regularly and why
- Explain depreciation, amortization, EBITDA, and Cash Flow
- Explain Capital Budgeting processes and evaluations modules

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Theme parks of today



185.6 million

Total theme park attendance for top 25 worldwide parks

121.4 million

Total visits to the top 20 parks in North America

57.3 million

Attendance for the top 20 European parks

65.5 million

Total visits to the top 10 Asian parks

12.3 million

Attendance to top 10 parks in Mexico and Latin America

20.7 million

Top 20 worldwide waterparks attendance in 2009

12.8 million

Total visitation to top 15 waterparks in US

2009 TEA/AECOM Report

Finance

Global Themepark Revenues *



Global Theme Parks and Amusement Parks Market (US\$ Millions)

Region	2003	2004	2005	2006	2007p	2008	2009	2010	2011	2012	2008-12 CAGR
United States	10,300	10,775	11,230	11,524	11,990	12,476	12,959	13,540	14,034	14,538	
% Change	4.0	4.6	4.2	2.6	4.0	4.1	3.9	4.5	3.6	3.6	3.9
EMEA	4,099	4,320	4,511	4,727	4,946	5,174	5,455	5,795	6,198	6,828	
% Change	1.2	5.4	4.4	4.8	4.6	4.6	5.4	6.2	7.0	10.2	6.7
Asia Pacific	5,487	5,640	5,710	6,110	6,367	6,697	7,062	7,499	7,896	8,419	
% Change	0.5	2.8	1.2	7.0	4.2	5.2	5.5	6.2	5.3	6.6	5.7
Latin America	248	252	241	247	261	273	285	299	313	328	
% Change	-2.4	1.6	-4.4	2.5	5.7	4.6	4.4	4.9	4.7	4.8	4.7
Canada	404	454	463	482	487	511	527	549	566	588	
% Change	0.7	12.4	2.0	4.1	1.0	4.9	3.1	4.2	3.1	3.9	3.8
Total	20,538	21,441	22,155	23,090	24,051	25,131	26,288	27,682	29,007	30,701	
% Change	2.4	4.4	3.3	4.2	4.2	4.5	4.6	5.3	4.8	5.8	5.0

Sources: PricewaterhouseCoopers LLP, Wilkofsky Gruen Associates

*PWC Global Entertainment and Media Outlook 2008 - 2012

Finance

Global Themepark Revenues (2007) *

Region	Revenue US\$ millions	%
USA	\$11,990.00	49.85%
Europe	\$4,946.00	20.56%
Asia Pacific	\$6,367.00	26.47%
Latin America	\$261.00	1.09%
Canada	\$487.00	2.02%
Total	\$24,051.00	100.00%

*PWC Global Entertainment and Media Outlook 2008 - 2012

Finance

Theme Park Market

EMEA	2003	2004	2005	2006	2007p	2008	2009	2010	2011	2012
Attendance (Millions)	128	131	133	136	139	142	146	151	157	168
Per Capita Spending† (US\$)	32.02	32.98	33.92	34.76	35.58	36.44	37.36	38.38	39.48	40.64
Total Spending† (US\$ Millions)	4,099	4,320	4,511	4,727	4,946	5,174	5,455	5,795	6,198	6,828

†At average 2007 exchange rates.

Sources: PricewaterhouseCoopers LLP, Wilkofsky Gruen Associates

Theme Park Spending by Country† (US\$ Millions)

EMEA	2003	2004	2005	2006	2007p	2008	2009	2010	2011	2012	2008-12 CAGR
Western Europe											
Denmark	309	317	327	335	350	365	382	395	410	419	3.7
France	1,073	1,102	1,123	1,148	1,204	1,259	1,314	1,368	1,423	1,478	4.2
Germany	588	595	602	613	640	668	698	725	753	780	4.0
Italy	301	308	315	323	337	349	363	376	391	404	3.7
Netherlands	354	365	380	379	391	405	427	442	456	469	3.7
Norway	64	68	72	76	81	85	90	94	98	102	4.7
Spain	274	281	287	294	301	311	322	333	343	354	3.3
United Kingdom	930	962	996	1,046	1,086	1,128	1,166	1,210	1,250	1,300	3.7
Middle East/Africa											
Saudi Arabia/Pan Arab	NA	NA	NA	NA	NA	NA	50	130	260	550	—
Rest of the Region	206	322	409	513	556	604	643	722	814	972	11.8
Total	4,099	4,320	4,511	4,727	4,946	5,174	5,455	5,795	6,198	6,828	6.7

†At average 2007 exchange rates.

Sources: PricewaterhouseCoopers LLP, Wilkofsky Gruen Associates

Theme parks of today



Size of the European Theme park industry

308 parks - 146 mio. visits

€4,3 bn. total revenue, 47,000 FTE, €700 mio. in tax contribution and €8,6 bn. in total economic impact of onsite-spending.

Size of the other European leisure industries

Waterparks: 170 parks - 50 mio. visitors

Zoos & Aquariums: 270 facilities - 140 mio. Visitors

Museums: 19.000 museums - 460 mio visitors

Finance

Latin America Attendance by Park 2009



LATIN AMERICA TOP 10 AMUSEMENT AND THEME PARKS

1	SIX FLAGS MEXICO Mexico City, Mexico	1,950,000 visitors	↓ 3.5%
2	PLAYCENTER São Paulo, Brazil	1,700,000 visitors	↑ 6.3%
3	HOPI HARI São Paulo, Brazil	1,500,000 visitors	↑ 2.9%
4	LA FERIA DE CHAPULTEPEC Mexico City, Mexico	1,400,000 visitors	↓ 5.0%
5*	FANTASIALANDIA Santiago, Chile	1,100,000 visitors	↔ 0%
5*	PARQUE DE LA COSTA Tigre, Argentina	1,100,000 visitors	↑ 6.2%
7*	BETO CARRERO WORLD Santa Catarina, Brazil	1,000,000 visitors	n/a
7*	EL SALITRE MAGICO Bogotá, Colombia	1,000,000 visitors	↓ 6.6%
9	PLAZA DE SESAMO Monterrey, Mexico	970,000 visitors	↓ 5.4%
10	KIDZANIA Mexico City, Mexico	601,000 visitors	↓ 24.1%

12.3 million attendance to top 10 parks in Mexico and Latin America up 1.3 percent from 2008.

*Source AECOM / TEA 2009 Theme Index

Finance

Latin America Attendance and Growth 2008 -2012



Theme Park Market

Latin America	2003	2004	2005	2006	2007p	2008	2009	2010	2011	2012
Attendance (Millions)	30.6	31.0	28.6	28.9	29.9	30.6	31.3	32.2	33.1	34.0
Per Capita Spending [†] (US\$)	8.09	8.14	8.41	8.55	8.73	8.92	9.10	9.28	9.46	9.65
Total Spending* (US\$ Millions)	248	252	241	247	261	273	285	299	313	328

†At average 2007 exchange rates.

Sources: PricewaterhouseCoopers LLP, Wilkofsky Gruen Associates

Theme Park Market Growth (%)

Latin America	2003	2004	2005	2006	2007p	2008	2009	2010	2011	2012	2008-12 CAGR
Attendance	-2.2	1.3	-7.7	1.0	3.5	2.3	2.3	2.9	2.8	2.7	2.6
Per Capita Spending	-0.1	0.6	3.3	1.7	2.1	2.2	2.0	2.0	1.9	2.0	2.0
Total Spending	-2.4	1.6	-4.4	2.5	5.7	4.6	4.4	4.9	4.7	4.8	4.7

Sources: PricewaterhouseCoopers LLP, Wilkofsky Gruen Associates

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Latin America Attendance and Growth 2008 -2012



Theme Park Spending[†] (US\$ Millions)

Latin America	2003	2004	2005	2006	2007p	2008	2009	2010	2011	2012	2008-12 CAGR
Argentina	31	32	33	35	36	37	39	40	42	44	4.1
Brazil	98	97	86	87	95	100	103	107	111	116	4.1
Colombia	21	22	24	24	25	26	28	32	34	36	7.6
Mexico	90	93	90	93	97	102	106	111	116	121	4.5
Other Countries	8	8	8	8	8	8	9	9	10	11	6.6
Total	248	252	241	247	261	273	285	299	313	328	4.7

†At average 2007 exchange rates.

Sources: PricewaterhouseCoopers LLP, Wilkofsky Gruen Associates

Finance



Latin America Attendance and Growth 2008 -2012



Size of the Latin American Theme park industry:

- Theme park spending will increase from \$261 million in 2007 to a projected \$328 million in 2012, a 4.7 percent compound annual increase.
- Attendance will expand at an estimated 2.6 percent annual rate from 29.9 million in 2007 to 34.0 million in 2012.

Finance

Asian Attendance and Growth 2008 -2012



Theme Park Market

Asia Pacific	2003	2004	2005	2006	2007p	2008	2009	2010	2011	2012
Attendance (Millions)	232	236	234	244	249	257	265	274	281	290
Per Capita Spending [†] (US\$)	23.65	23.90	24.40	25.04	25.57	26.06	26.65	27.37	28.10	29.03
Total Spending [†] (US\$ Millions)	5,487	5,640	5,710	6,110	6,367	6,697	7,062	7,499	7,896	8,419

[†]At average 2007 exchange rates.

Sources: PricewaterhouseCoopers LLP, Wilkofsky Gruen Associates

Theme Park Market Growth (%)

Asia Pacific	2003	2004	2005	2006	2007p	2008	2009	2010	2011	2012	2008-12 CAGR
Attendance	-1.3	1.7	-0.8	4.3	2.0	3.2	3.1	3.4	2.6	3.2	3.1
Per Capita Spending	1.9	1.1	2.1	2.6	2.1	1.9	2.3	2.7	2.7	3.3	2.6
Total Spending	0.5	2.8	1.2	7.0	4.2	5.2	5.5	6.2	5.3	6.6	5.7

Sources: PricewaterhouseCoopers LLP, Wilkofsky Gruen Associates

Finance

Asian Attendance and Growth 2008 -2012



Theme Park Spending by Country¹ (US\$ Millions)

Asia Pacific	2003	2004	2005	2006	2007p	2008	2009	2010	2011	2012	2008-12 CAGR
Australia	153	159	163	171	180	188	197	205	213	223	4.4
China	1,216	1,268	1,320	1,398	1,483	1,575	1,674	1,821	1,950	2,061	6.8
Hong Kong	73	94	146	314	359	388	408	428	447	468	5.4
Japan	3,407	3,486	3,436	3,556	3,709	3,875	4,066	4,269	4,431	4,626	4.5
South Korea	581	570	565	587	549	582	622	676	732	909	10.6
Other Countries	57	63	80	84	87	89	95	100	123	132	8.7
Total	5,487	5,640	5,710	6,110	6,367	6,697	7,062	7,499	7,896	8,419	5.7

¹At average 2007 exchange rates.

Sources: PricewaterhouseCoopers LLP, Wilkofsky Gruen Associates

Finance

Top 15 amusement parks/theme parks in Asia-Pacific



1. Tokyo Disneyland, Japan	14,452,000
2. Tokyo Disney Sea, Japan	12,663,000
3. Universal Studios Japan, Osaka, Japan	8,160,000
4. Everland, Kyonggi-Do, South Korea	6,884,000
5. Lotte World, Seoul, South Korea	5,551,000
6. Hong Kong Disneyland	5,200,000
7. Ocean Park, Hong Kong	5,100,000
8. Nagashima Spa Land, Kuwana, Japan	4,465,000
9. Hakkeijima Sea Paradise Yokohama, Japan	4,023,000
10. OCT EAST, Shenzhen, China	3,530,000
11. Happy Valley, Shenzhen, China	3,050,000
12. HAPPY VALLEY, Beijing, China	2,734,000
13. Window on the World	2,651,000
14. DUNIA FANTASI, Jakarta, Indonesia	2,400,000
15. CHIMELONG PARADISE, Guangzhou, China	2,400,000

Sources: Economics Research Associates, Themed Entertainment Association (2010)

Finance

FunWorld Park's Financial Statement



FunWorld Park revenue

	IAAPA Survey	FunWorld Park (2010)		FunWorld Park (2009)	
	PER CAPS	ACTUALS	PER CAPS	ACTUALS	PER CAPS
CAPITAL IMPROVEMENTS		\$1,374,252.00		\$1,328,469.00	
ATTENDANCE		751,565		745,000	
REVENUES					
TICKETS	7.31	\$13,967,030.00	18.58	\$13,484,500.00	18.10
FOOD	3.39	\$2,574,000.00	3.42	\$2,495,750.00	3.35
GAMES	1.26	\$1,120,000.00	1.49	\$1,043,000.00	1.40
ATTRACTIONS	1.50	\$173,945.55	0.23	\$171,350.00	0.23
RETAIL	1.46	\$826,000.00	1.10	\$856,750.00	1.15
PARKING	0.14	\$375,620.26	0.50	\$357,600.00	0.48
SPONSORSHIP	0.37	\$167,072.86	0.22	\$160,000.00	0.21
OTHERS	3.55	\$198,999.45	0.26	\$186,800.00	0.25
TOTALS	18.98	\$19,402,668.12	25.82	\$18,755,750.00	25.18

FunWorld Park's Financial Statement (cont'd)



Income highlights

- Gross Revenue

	(A) IAAPA Survey	(B) FunWorld Park (2010)	Variance (B-A)
	(%)	(%)	(%)
REVENUES			
TICKETS	41.5%	72.0%	30.5%
FOOD	16.3%	13.3%	-3.0%
GAMES	9.7%	5.7%	-4.0%
ATTRACTIONS	9.0%	0.9%	-8.1%
RETAIL	6.4%	4.3%	-2.1%
PARKING	1.0%	1.9%	0.9%
SPONSORSHIP	2.2%	0.9%	-1.3%
OTHERS	13.9%	1.0%	-12.9%
TOTALS	100%	100.0%	-

FunWorld Park's Financial Statement (cont'd)



Income highlights

- Per Caps

	(A) FunWorld Park (2010)	(B) FunWorld Park (2009)	Variance (A-B)
REVENUES	Per Caps (\$)	Per Caps (\$)	(%)
TICKETS	18.58	18.10	2.7%
FOOD	3.42	3.35	2.2%
GAMES	1.49	1.40	6.4%
ATTRACTIONS	0.23	0.23	0.6%
RETAIL	1.10	1.15	-4.4%
PARKING	0.50	0.48	4.1%
SPONSORSHIP	0.22	0.21	3.5%
OTHERS	0.26	0.25	5.6%
TOTALS	25.82	25.18	2.5%

FunWorld Park's Financial Statement



FunWorld Park's Other operating characteristics

- 126 Operating Days
- Pricing Policy – Regular Adult, \$23.99; Child, \$16.99; Senior/Handicap, \$12.99
 - Season pass holders
 - Individual, \$54.99
 - Early Bird, \$39.99
 - After 2:00 pm, \$16.99
 - Discounts
 - Family of 4 Discount, \$15.00/family
 - Discount tickets, \$10.50
 - Coupons
 - Bring the price down to \$12.07



FunWorld Park's Financial Statement



Key metrics

- These metrics should be monitored daily:
 - Per caps
 - Daily attendance
 - Planned/budgeted income versus actual
 - Labor costs (can be hourly labor, or a productivity metric)
- Daily, weekly, monthly, quarterly, and annual tracking of actuals against the budget
- Increases in *daily attendance* are worth more to the bottom line than increased per caps for the same day
- Good budgeting anticipates known causes of revenue increases or decreases; e.g., special events that will bring in more guests

FunWorld Park's Financial Statement



FunWorld Park revenue

	IAAPA Survey	FunWorld Park (2010)		FunWorld Park (2009)	
	PER CAPS	ACTUALS	PER CAPS	ACTUALS	PER CAPS
CAPITAL IMPROVEMENTS		\$1,374,252.00		\$1,328,469.00	
ATTENDANCE		751,565		745,000	
REVENUES					
TICKETS	7.31	\$13,967,030.00	18.58	\$13,484,500.00	18.10
FOOD	3.39	\$2,574,000.00	3.42	\$2,495,750.00	3.35
GAMES	1.26	\$1,120,000.00	1.49	\$1,043,000.00	1.40
ATTRACTIONS	1.50	\$173,945.55	0.23	\$171,350.00	0.23
RETAIL	1.46	\$826,000.00	1.10	\$856,750.00	1.15
PARKING	0.14	\$375,620.26	0.50	\$357,600.00	0.48
SPONSORSHIP	0.37	\$167,072.86	0.22	\$160,000.00	0.21
OTHERS	3.55	\$198,999.45	0.26	\$186,800.00	0.25
TOTALS	18.98	\$19,402,668.12	25.82	\$18,755,750.00	25.18

FunWorld Park's Financial Statement



FunWorld Park expenses

EXPENSES	IAAPA Survey	2010		2009	
	% Total Rev		% Total Rev		% Total Rev
SALARIES/WAGES (INCL TAXES)	31.10%	\$6,400,000.00	32.99%	\$6,120,000.00	32.63%
MARKETING	8.00%	\$1,170,000.00	6.03%	\$1,015,000.00	5.41%
TRAVEL/ENTERTAINMENT	3.20%	\$75,000.00	0.39%	\$70,000.00	0.37%
REPAIRS & MAINT	11.40%	\$1,400,000.00	7.22%	\$830,000.00	4.43%
OTHERS	17.70%	\$3,379,084.00	17.40%	\$3,205,000.00	17.09%
		\$12,424,084.00	64.03%	\$11,240,000.00	59.93%

FunWorld Park's Financial Statement



Expense highlights

- FunWorld Park's 2010 Expenses
 - Total cost of goods sold (F&B, games, and retail) was \$1,622,980, or 36.0% of revenue from those areas
 - Cost of goods sold was a slight decrease from 2009, which was \$1,628,943, or 37.1% of revenue
 - Total expenses for 2010 were \$12,424,084, an increase of 10.5% over 2009

FunWorld Park's Financial Statement (cont'd)



Global attractions data (cont'd)

- **Fixed and Variable costs**

- **Fixed costs** - A fixed cost is a cost whose total dollar amount remains constant as the activity level changes.

Include rides, facilities, buildings, equipment

The industry has very high fixed costs – Very capital intensive

Fixed items must be paid for whether the park is open or closed; whether there are guests or not

- **Variable costs** – A variable cost is a cost whose total dollar amount varies in direct proportion to changes in the activity level.

Include labor (largest component), and all non-capital costs, such as electricity, supplies, etc. A park must cover both its fixed and variable costs out of generated revenue – Once these are paid, the remaining amount is profit

Seasonal facilities lose money when they're closed – This is why peak season is so critical to these facilities

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FunWorld Park's Financial Statement



FUNWORLD PARK	2010	2009
	ACTUALS	ACTUALS
REVENUES	\$19,402,668.12	\$18,755,750.00
COST OF GOODS SOLD	\$1,622,980.00	\$1,628,942.50
EXPENSES	\$12,424,084.00	\$11,240,000.00
EBITDA	\$5,355,604.12	\$5,886,807.50
GROSS MARGIN	91.6%	91.3%
EBITDA as % of TOTAL REVENUE	27.6%	31.4%

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Theory and Practice



EBITDA (Earnings Before Interest, Taxes, Depreciation and Amortization)

- An approximate measure of a company's operating cash flow based on data from the company's income statement. Calculated by looking at earnings before the deduction of interest expenses, taxes, depreciation, and amortization
 - Offers an indication of how much cash the company is generating
 - Such an earnings measure is of particular interest in cases where companies have large amounts of fixed assets which are subject to heavy depreciation charges (such as the theme park/amusement/attractions industry)

Theory and Practice (cont'd)



Interest: A Charge made for the use of borrowed Funds; results from a mortgage on a principal or second residence is typically deductible.

Taxes: Real-estate taxes, personal property taxes and state and local income taxes are deductible.

Amortization: The allocation of the cost of intangible assets to the accounting periods benefited.

Depreciation

- Measuring the loss in value of an asset. In accounting, the allocation of the cost of an asset over its economic life. Covers deterioration from use, age, and exposure to the elements
- Depreciation is a very important factor in the attractions industry, because of the high fixed cost investments in rides and ride machinery, equipment, and buildings

- **Example:**

New roller coaster cost:	\$10 Million
Depreciation period:	10 years
Annual depreciation amount:	\$1 Million

- Second year purchase: \$500,000 ride, 5 years
- What will the depreciation amount be in the second year?

Is EBITDA and Cash Flow the Same?

Theory and Practice (cont'd)



NO

They Are different

EBITDA does not take into account the actual cash inflows and outflows.

Example:

- Principle payment is not reflected in EBITDA
- Account Receivable Collection
- Accounts Payable Payments
- Interest & Loan Repayments

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Skills Exercise : Case Study



FunWorld's Finance Department is planning an investment...

- What will be the return?
- How many years should the loan be for?
- How is the return calculated?
- What will be the impact on revenues and how will that be calculated?

How Do I Decide?



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Six Stages in Capital Budgeting



Identification Stage – determine which types of capital investments are necessary to accomplish organizational objectives and strategies

Search Stage – explore alternative capital investments that will achieve organization objectives

Information-Acquisition Stage – consider the expected costs and benefits of alternative capital investments

Selection Stage – choose projects for implementation

Financing Stage – obtain project financing

Implementation and Control Stage – get projects under way and monitor their performance

Skills Exercise : Case Study

(cont'd)



Asset management and valuing a facility

- Management should develop a rationale and a set of well-defined steps to govern the investment process

HOW?

Skills Exercise : Case Study (cont'd)

GLOBAL SURVEYS OF COMPANY PRACTICE

Comparison of Capital Budgeting Methods

What methods do companies around the world use for analyzing capital investment decisions? The percentages in the following table indicate how frequently particular capital budgeting methods are used in eight countries. The reported percentages exceed 100% because many companies surveyed use more than one method.

	United States ^a	Australia ^b	Canada ^c	Cyprus ^d	Japan ^e	Poland ^f	Scotland ^g	United Kingdom ^h
Payback	35%	61%	50%	37%	52%	40%	78%	70%
IRR	45%	37%	62%	4%	4%	25%	18%	81%
NPV	50%	45%	41%	11%	0%	30%	48%	80%
AARR	5%	24%	17%	4%	38%	—	31%	58%
Other	8%	7%	8%	40%	5%	50%	—	31%

Some observations about these surveys:

1. Companies in the United States, Australia, Canada, Poland, Scotland, and the United Kingdom tend to use more than one method to evaluate capital investments. (The sum of the capital budgeting percentages in the columns for each of these countries ranges from approximately 150% to 300%.)
2. Japanese and Cypriot companies tend to use one method. (The sum of the capital budgeting percentages for Japan and Cyprus are approximately 100%.)
3. The payback method is popular in all countries. Japanese companies use the payback method as their primary method of analysis in their capital budgeting decisions. Companies in the United States, Australia, Canada, Poland, Scotland, and the United Kingdom use discounted cash flow (DCF) methods (IRR and NPV) extensively.
4. In addition to Canada and the United Kingdom, IRR is the most-used capital-budgeting method in Singapore and Thailand.ⁱ
5. The AARR method lags behind DCF methods in all surveyed countries except Japan, where it is preferred over IRR and NPV.

^a K. Hyan and G. Hyan, "Capital Budgeting."
^b P. Daynes and I. Yokohama, "Comparative Analysis."
^c Y. Jung and A. Subramanian, "Corporate Financial Decision Making."
^d I. Lazaridis, "Capital Budgeting Practices."
^e A. Szachts, "The Scope and Application."
^f A. Sangster, "Capital Investment Appraisal."
^g G. Arnold and P. Hatzipoulos, "The Theory-Practice Gap."
^h O. Keeter and T. Chung, "Capital Budgeting Practices."
ⁱ D. Ararajongphet, G. Keeter, and I. Shultz, "Financial Policies."
 Full citations are in Appendix A at the end of the book.

Skills Exercise : Case Study (cont'd)

Budgeting Methods to Analyze Financial Information

Net Present Value (NPV) Method



NPV Method calculates the expected monetary gain or loss from a project by discounting all expected future cash inflows and outflows to the present point in time, using the Required Rate of Return

Exercise:

Deep SeaLand Park intends to invest \$800 in Project A that generated net receipts of \$200, \$300 and \$400 in the first, second and third years respectively.

Required Rate of Return : 10%	
Year	PV in 2012 (\$)
2012	1
2013	0.9091
2014	0.8264
2015	0.7513

Questions: What is the NPV of the Project A?

Should the Deep SeaLand Park go ahead with the project?

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Internal Rate of Return (IRR) Method



The IRR Method calculates the discount rate at which the present value of expected cash inflows from a project equals the present value of its expected cash outflows

Exercise :

Magic Zoo intends to invest \$1,200 in Project X that generated net receipts of \$350, \$450 and \$550 in the first, second and third years respectively.

Cost of Capital : 8%	
Year	Cashflow (\$)
2012	-1,200
2013	350
2014	450
2015	550

IRR = 5.7%

Question : Should the Magic Zoo go ahead with the project?

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Payback Method



Payback measures the time it will take to recoup, in the form of expected future cash flows, the net initial investment in a project

Exercise :

So So Studio intends to invest \$1,600 in Project H that generated net receipts of \$400, \$600 and \$800 in the first, second and third years respectively.

Year	Cashflow (\$)
2012	-1,600
2013	400
2014	600
2015	800

Question : What is the Payback period of the Project H?

Accounting Rate of Return Method (ARR)



ARR Method of appraising a capital project is to estimate the accounting rate of return that the project should yield.

$$\text{ARR} = \frac{\text{Annual Profit (Exclude Depreciation)}}{\text{Investment Outlay} / 2}$$

Exercise :

Wonder Park intends to invest \$400 in Project M and generates average annual profit of \$150 for 3 years with a straight-line depreciation of \$50 per year.

Investment in 2012	\$400
Annual Depreciation	\$50
Year	Accounting Profit
2013	100
2014	150
2015	200

Question : What is the ARR for Project M?

Performance Methods

Return on Investment (ROI)

ROI is an accounting measure of income divided by an accounting measure of investment

$$ROI = \frac{\text{Income}}{\text{Investment}}$$

Exercise : SeaWorld intends to invest \$800 in Project K that generated net receipts of \$200, \$300 and \$400 in the first, second and third years respectively.

Year	Cashflow (\$)
2012	-800
2013	200
2014	300
2015	400

Question : What is the ROI of the Project K?

Residual Income



Residual Income (RI) is an accounting measure of income minus a dollar amount for required return on an accounting measure of investment

$$RI = \text{Income} - (\text{Required Rate of Return} \times \text{Investment})$$

Required Rate of Return times the Investment is the imputed cost of the investment

Exercise : Kitty Park intends to invest \$1,600 in Project D that generated net receipts of \$400, \$600 and \$800 in the first, second and third years respectively.

Required Rate of Return : 10%	
Year	Cashflow (\$)
2012	-1,600
2013	400
2014	600
2015	800

Question : What is the RI of the Project D?

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Skills Exercise : Case Study

(cont'd)



Which method is Best?

It Depends!!!

Key:

Take an intelligent approach to investments.

Be consistent!!!

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Skills Exercise : Case Study

(cont'd)



Let's review what new tools we have added to our tool box this morning

Basic Industry Data

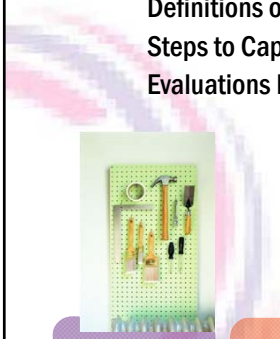
Identified Major Players

Look at major Income and Expense

Definitions of Key Accounting Terms

Steps to Capital Budgeting

Evaluations Methods



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Skills Exercise : Case Study

(cont'd)



**When all else fail
you could just roll the dice**



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Skills Exercise : Case Study (cont'd)



Thank You

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Sources



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