2. ENROLLMENT ROI

DELIVERABLES

- ✓ *JCamp 180's Enrollment ROI Analysis Model: A tool to quantify exactly how investments in recruitment, retention, or both have disproportionate impacts on population and revenue.*
- ✓ *Fluency in the concepts needed to generate data required by the model and apply the results.*

A. ENROLLMENT ROI MODEL OVERVIEW

Recruiting or retaining even a single camper has a financial impact, and a longer-term impact on enrollment, that far exceeds what most people assume. Even in the context of reduced revenue and the uncertainty associated with Covid-19, being able to quantify this impact can be eye opening, and can help justify new investment in enrollment to board members, donors, and others. JCamp180 has developed a model that helps a camp track enrollment and retention (baseline), as well as project (and track) the impact of new investments designed to improve your camp's enrollment numbers.

Before using the tool, it is important to point out what this tool does not do. It does not tell you how to invest your new enrollment and retention dollars. The rest of this curriculum will lead you through that planning process. And it does not tell you how many campers will initially result from your investment—only the financial implications and the longer-term impact on enrollment.

ROI Model Summary	(Sample numbers)
Tuition for one additional camper for one session (2 weeks)	**2,300**
Subtract incremental expenses	375
Multiply by average sessions per summer	1.2
Multiply by average number of years camper comes to camp	2.7
Net direct lifecycle income for one camper	**8,667**
Plus net *referral* lifecycle net income (referral rate of 1.0)	8,667
Total net income	**17,334**
Initial investment to recruit one camper	5,000
Return on investment	**347%**

Total net income x 12 new campers recruited	156,006
Cost of new 12-camper cabin	100,000

B. HOW TO COLLECT DATA AND ENTER IT INTO TOOL

ENROLLMENT RETURN ON INVESTMENT (ROI) WORKSHEET

Understanding your return on enrollment investments will help you determine how much to spend on marketing and retention efforts. Often camps underestimate their ROI, and therefore under-invest in recruitment and retention efforts. Below is a simple method to estimate return on investment in enrollment. Make sure to adapt assumptions and numbers to your camp.

Issue to Address	Illustrative Response	Your Camp's Answer
1.What is your camp's tuition for a session?	(A) $3,500	
2.What percentage of tuition is paid, on average, after taking into account financial aid, early bird, sibling and other discounts? What is the net tuition? (A) – (B)	(B) 20% or $700 $2,800 ($3,500-$700)	
3.What, on average, are your camp's out of pocket costs for say a new camper for a session?	Food - $350 Arts and crafts - $50 Other supplies - $100 Transportation - $100 Other - $200 (D) Total - $800	

Issue to Address	Illustrative Response	Your Camp's Answer
4.What are average counselor costs per camper for a session? Assume, conservatively • 2 counselors at $600 per session for salary totaling $1,200 and $500 for each for food and other expenses for $1,000 or $2,200 for 10 new campers or $220 per new camper • 1 specialist at $1,800/session for salary and $600 for expenses per 30 campers or *$80* per new camper • kitchen, maintenance, senior management, admin and other staff at $3,000/30 campers per summer or $50/session and $50 for expenses for *$100* per camper • total of $400 per new camper. You may wish to adjust upwards or downwards to reflect that staff expenses would not be incurred for small increases	(E) $400	
5.Assume the worst case that an extra cabin is required at $100,000/10 campers or $10,000/camper and is financed at 6% or $600 per year or $60/camper or $30/session plus $20/camper/session for maintenance. (Assumes fundraising will raise principal)	(F) $50	
6. Conservatively assume financing of other capital expenditures (e.g., septic system, bathrooms) per camper. Adjust as you see fit. (Assumes fundraising will ultimately raise principal)	(G) $50	
7.What are total costs per camper per session? (D)+(E)+(F)+(G)+(H) = (F)	(F) = $800+$400+$50+$50 = $1,300	
8.What is net income per camper/session (B)- (F) = (G)	$2,800-$1,300 = $1,500	
9.What is your camp's average retention rate	78%	
10.What is your average number of camper years? As a rule of thumb, for 70% retention, assign 3 and for every percentage increase add .1% so that 75% would be 3.5 and 80% would be 4	(H) 78% = 3+.8 = 3.8	
11.What is your life cycle net income per camper. Multiply Row 4 x Row 6. This is quite conservative and doesn't account for campers shifting to the full summer over time.	(I) $1,500 x 3.8 = $5,700	

Issue to Address	Illustrative Response	Your Camp's Answer
12.What is the average number of session referrals per new/retained camper. This could be siblings, family members, friends. Conservatively, assume slightly more than 1. This does not take into account referred campers shifting to the full summer.	(J) 1.2	
13.What is net income from referrals (Row 8 x Row 7) (I) x (J) = (K)	(K) = 6,840	
14.What is total net life cycle income expected per additional new/retained camper per session.This includes the camper (I) plus any referrals (J) (I) + (K) = (L). *Remember this is only a per session calculation not for the entire summer.*	(L) $5,700+$6,840 = **$12,540**	
15. In otherwords, even if you invested less than half this amount – say $5,000, it would make economic sense if the result was a new camper.		
16. How many new campers would a $20,000 investment require for break-even? Note: The cash flow would come in over time. For example, in Year 1 costs would say be $20,000 and return (say) 5 campers at $1,300/ camper or $6,500. In Year 2, there would be no further costs for this revenue stream and further revenue of say $5,000 assuming some attrition. Say in Year 3 ,there would be a bit more attrition, on average, of say $4,000 but referred campers amounting to $5,000 for $9,000. So cash break-even would be three years. And there would be an additional $9,000 a year for the next several years – all stemming from the original investment of $20,000.	$20,000/(L) = $20,000/$12,540 = about 1.6 campers	

Issue to Address	Illustrative Response	Your Camp's Answer
17. What are the obstacles to using this analysis to increase your investment 1- I don't believe it. 2- We need to understand the analysis more, apply it more rigorously. 3- The parameters don't apply to our camp. There really isn't a good return on investment. 4- We don't have the cash to finance the first year where we have more costs than income. 5- We aren't sure how to invest the dollars. (e.g., programming, marketing, recruitment etc.) 6- We don't have enough time to focus on this. 7- No obstacles – We are ready to study this more and act if the numbers are as they seem.		
18. How can you deal with these obstacles? What are the next steps?		

RETURN ON INVESTMENT ANALYSIS (ROI) FOR ENROLLMENT:

Now you're ready to plug in your numbers and see the results

A. DETERMINE REVENUES (Per Camper/Session)

Model can be run for 1 session of any length or whole summer

	YOUR CAMP
Camp tuition	$3,200
% discounted due to financial aid	9%
% other discounts (e.g., siblings, early bird)	5%
% total discounted	14%
Average tuition	$2,752
Other camper based revenue (e.g travel, canteen, program fees)	$100
Anticipated fundraising per average camper	$75

You can input into any fields in yellow
Other fields are automatically calculated

Numbers shown here are illustrative. Can be customized to your camp within minutes.

Most revenue numbers can be derived from the camp budget divided by the number of campers. Make adjustments if target group is expected to be different than the current camper mix.

Net Revenues	**$2,927**

B. DETERMINE OUT OF POCKET INCREMENTAL EXPENSES (PerCamper/ Session)

	YOUR CAMP	Per Camper/ Day	Days / Session
			25
Food	$300	$12.00	25
Laundry	$75	$3.00	25
Arts and crafts supplies	$75	$3.00	25
Sports, medical and other supplies	$175	$7.00	25
Transportation to/from camp	$50	$4.00	25
Other per diem	$50	$2.00	25
Bank, office, administrative, insurance	$35		
Utility, energy, water	$30		
Allowance for wear and tear maintenance	$25		
Other			

Indicate incremental expenses that arises from having extra campers. Do not use average - focus just on the extra costs.

Illustrative - more work needed to refine method of estimation

Total Expenses	**$815**

C. DETERMINE INCREMENTAL STAFF COSTS (Per Camper Per Session)

	YOUR CAMP	
1 Counsellor salary/ session	$600	Full summer/2
1 Counsellor expenses	$627	Based on camper expenses in Section B. Formula is 120% food + 110% laundry, + 33% (arts supplies+sports supplies + travel) + 100% (other per diem+bank+other). Formula can be manually overridden.
# of Campers per cabin	12	A limited number of additional campers usually can be accomodated in cabins (with vacancies) without any increase in staff. However, in some circumstances, only a few more campers require additional staff/new cabin. This approach provides an average cost that probably overestimates in most cases.
# of Counsellors per cabin	2	
Cost/counsellor/camper	**$200**	
1 Programming Specialist salary/session	$1,100	Full summer/2. If the Camp adds a limited number of campers, it is unlikely to require additional specialists. In such a case, set salary at $0.
1 Programming Specialist expenses per session	$627	Assumed to be same as Counsellor, but formula can be overridden.
# of campers per new Programming Specialist	25	If an additional Specialist is required, indicate the number of new campers that would trigger this.
Average Programming Specialist cost/camper	**$69**	
Other staff salary/session (e.g.,kitchen,maintenance, security, admin)	$1,000	If no additional staff are required, set salary at zero.
# of Campers	25	
Average cost/camper	**$40**	
Total Staff	**$309**	

D. DETERMINE IF NEW CABIN/INFRASTRUCTURE COSTS WILL BE INCLUDED (Per Camper Per Session)

Costs to Amortize a Cabin/Infrastructure	YOUR CAMP
Cost to build a cabin	$90,000
Mortgage rate	4.25%
Number of years for mortgage term	25
Annual mortgage	$5,851
Maintenance and repair/year	$400
Total costs/year	$6,251
Number of sessions	2
Cost per session	$ 3,125
Number of campers per cabin	12
Cost per camper	**$260**

Note: This module can be used for any infrastructure

Usually, camps can accommodate limited enrollment growth within existing cabins. However, new cabins sometimes are required to accommodate growth. Usually, cabins are financed from a capital campaign. However, this model indicates how a cabin can be financed from enrollment growth.

Include cabin costs - YES or NO	**NO**	**$0**

Indicate "No" or "Yes"to include cabin costs in model.

E. Determine Life Cycle Net Costs Per Camper/Session

		YOUR CAMP	
Identify net revenues		**$2,927**	
Identify costs			
Out of pocket expenses	**$815**		
Staff	**$309**		
Allocated cabin costs	**$0**		
Total Costs		**$1,124**	
NET INCOME		**$1,803**	
Average Retention Rate		83%	Filled in via retention worksheet
Equivalent number of Average Camper years		4.4	This is automatically calculated based on retention data
Adjustment for moving to 2nd session		0%	If new campers were all conservatively assumed to stay for one session for their entire time at camp, set field at 0% as there is no adjustment. On the other extreme, if all new campers were assumed to move to 2nd session for all their time at the camp after Year 1, and 2nd session incremental prices/costs were the same as first session, the factor would be 75% based on 100% session 1 * 75% (a general estimate of the Number of Equivalent Number of Camper Years minus the first year(4.4-1)/3.4)). If for example, incremental prices for the 2nd session were 75% of one session and campers spent (only) half all their camp years in 2nd session,the factor would be 75% x 50% or 37.5%.A more finetuned analysis can be achieved by using the revenue and cost modules to assess the full session. This element can be further refined in future models.
Direct Life Cyle Net income		**$7,900**	
Referrals Per Camper		1.25	Includes siblings, relatives, friends plus additional persons they directly refer.
Adjustment for moving to 2nd session		0%	Same approach as above for direct campers
Life cycle Income from Referrals		**$9,876**	
Total Life Cycle Direct and Referral Income/Camper		**$17,776**	

F. Determine Life Cycle Net Income Over Time for 1 Additional Recruited or Retained Camper

Net Life Cycle Income/ Camper

	Retention Rate	Attrition Rate	(Assume Youngest Campers) Direct Income	Referral Income	Total Income	YOUR CAMP Cumulative Net Income
Age 8- Yr 1	75%	25%	$1,803	`	$1,803	**$1,803**
Age 9- Yr 2	78%	23%	$1,352		$1,352	**$3,155**
Age 10- Yr 3	85%	15%	$1,048	$2,254	$3,302	**$6,457**
Age 11- Yr 4	90%	10%	$891	$1,690	$2,581	**$9,038**
Age 12- Yr 5	80%	20%	$802	$1,310	$2,112	**$11,149**
Age 13- Yr 6	80%	20%	$641	$1,113	$1,755	**$12,904**
Age 14- Yr 7	85%	15%	$513	$1,002	$1,515	**$14,419**
Age 15- Yr 8	95%	5%	$436	$802	$1,238	**$15,657**
Age 16- Yr 9	na		$414	$641	$1,056	**$16,713**
Age 17- Yr 10				$545	$545	**$17,258**

Total income sums direct income for 1 camper and related referral income for that camper.

Cumulative Net income aggregates total income over time.

Referrals and related income are assumed to start in Year 3.

Declining direct and referral income over time reflects the retention/attrition rate, i.e.,with each passing year, there is a reduced likelihood of the camper staying at at camp.

G. Determine ROI over Time for a One Year Enrollment Investment - An Illustrative Scenario

Based on your projected one-time investment in enrolment boosting activities and the anticipated increase in the number of campers, this tool projects the direct and referral revenues and net income after considering the investment costs.

Revenues are calculated by multiplying the number of campers by the projected net income for each year taking into account retention/attrition.

Note: The investment could be anything that strengthens retention or recruitment - e.g., programs, recruitment staff, marketing, facility enhancements, improved customer service etc.

	YOUR CAMP	
Investment in Year 1	-$20,000	
Net Increase in (Youngest) Campers	7	The result is positive cash flow very early on, followed by positive cumulative net income shortly after.

	Investment Costs to Grow Enrollment	Direct Income	Referral Income	Total Income	Cumulative Net Income	If this investment and return occurred every year, the results would be significantly more as shown below in Section H.
Yr 1-Invest	-$20,000			-$20,000	-$20,000	
Yr 1-Income		$12,621		$12,621	-$7,379	
Yr 1 - Net	-$20,000	$12,621		-$7,379	-$14,759	
Yr 2-Income		$9,465		$9,465	-$5,293	
Yr 3-Income		$7,336	$15,776	$23,111	$17,818	
Yr 4-Income		$6,235	$11,832	$18,067	$35,885	
Yr 5-Income		$5,612	$9,170	$14,781	$50,667	
Yr 6-Income		$4,489	$7,794	$12,284	$62,950	
Yr 7-Income		$3,592	$7,015	$10,606	$73,557	
Yr 8-Income		$3,053	$5,612	$8,665	$82,221	
Yr 9-Income		$2,900	$4,489	$7,390	$89,611	
Yr 10-Income			$3,816	$3,816	$93,427	

H. DETERMINE RETURN ON INVESTMENT ANALYSIS OVERTIME - AN ILLUSTRATIVE SCENARIO

Investment	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	
Personnel	-$20,000	-$22,000	-$25,000							
Marketing	-$5,000	-$2,000	-$3,000							
Other	-$2,000	-$4,000	-$2,000							
Total Annual Investment in Enrollment Growth	**-$27,000**	**-$28,000**	**-$30,000**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	Direct
Cumulative Investment	**-$27,000**	**-$55,000**	**-$85,000**	**-$85,000**	**-$85,000**	**-$85,000**	**-$85,000**	**-$85,000**	**-$85,000**	Referral

Impact on Numbers of campers arising from…										Campers Ratio
Year 1 Investment - Direct	**3**	**4**	1							8
Year 1 Investment - Referral		*2*	*2*	*2*	*1*					7 0.88
					2					
Year 2 Investment - Direct		**4**	**3**							7
Year 2 Investment - Referral				*4*	*1*	*2*				7 1.00
Year 3 Investment - Direct			**4**	**1**	**1**					6
Year 3 Investment - Referral				*1*	*4*	*1*				6 1.00
Total New Campers Started that Year	**3**	**10**	**10**	**8**	**9**	**3**	**0**	**0**	**0**	**43**

H. *continued*

Investment	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9
Cumulative Campers after accounting for attrition/retention - Assume all start as youngest campers									
From Year 1	3.0	2.3	1.7	1.5	1.3	1.1	0.9	0.7	0.7
From Year 2		10	7.5	5.8	4.9	4.4	3.6	2.8	2.4
From Year 3			10	7.5	5.8	4.9	4.4	3.6	2.8
From Year 4				8	6.0	4.7	4.0	3.6	2.8
From Year 5					9.0	6.8	5.2	4.4	4.0
From Year 6						3.0	2.3	1.7	1.5
From Year 7							0.0	0.0	0.0
From Year 8								0.0	0.0
From Year 9									0.0
Total All New Campers Enrolled	**3**	**12**	**19**	**23**	**27**	**25**	**20**	**17**	**14**
Total Revenues	$5,409	$22,086	$34,695	$41,097	$48,836	$44,811	$36,584	$30,427	$25,753
Cumulative Revenues	$5,409	$27,495	$62,190	$103,288	$152,124	$196,935	$233,519	$263,946	$289,699
Net Annual Income	**-$21,591**	**-$5,914**	**$4,695**	**$41,097**	**$48,836**	**$44,811**	**$36,584**	**$30,427**	**$25,753**
Net Cumulative Income	**-$21,591**	**-$27,505**	**-$22,810**	**$18,288**	**$67,124**	**$111,935**	**$148,519**	**$178,946**	**$204,699**

1. THINKING ABOUT RETENTION

Age	8	9	10	11	12	13	14	15	16	Total
Campers - Base Year	45	50	55	50	55	50	45	40	38	428
New Campers per Year	45	20	23	9	15	6	5	2	0	124
Eligible for retention		45	50	55	50	55	50	45	40	390
Total Retained - Year 1		30	33	41	40	44	40	38	38	304
Retention rate by cohort	66.7%	65.0%	75.0%	80.0%	80%	80.0%	85.0%	95.0%		77.95%
Increase retention by	10%	10%	10%	10%						
Adjusted retention rate	75.0%	77.5%	85.0%	90.0%	80.0%	80.0%	85.0%	95.0%		83.21%
Eligible for retention										
Additional campers retained - Year 1		4	6	6	5	0	0	0	0	20
Total Retained - Year 1		34	39	47	45	44	40	38	38	325
New Campers per Year	**45**	**20**	**23**	**9**	**15**	**6**	**5**	**2**	**0**	**124**
Year 1 - Total Campers	**45**	**54**	**61**	**56**	**60**	**50**	**45**	**40**	**38**	**448**

Age	8	9	10	11	12	13	14	15	16	Total	Increase in Campers		New Campers
Impact of Increase in Retention overall by 5.3%											#s	%	
Base	45	50	55	50	55	50	45	40	38	428		Base	
Year 1 - Total Campers	45	54	61	56	60	50	45	40	38	448	20	5%	123.999
Year 2 - Total Campers	45	54	64	61	65	54	45	40	38	466	38	9%	123.999
Year 3 - Total Campers	45	54	64	63	70	58	48	40	38	480	52	12%	123.999
Year 4 - Total Campers	45	54	64	63	72	62	51	43	38	492	64	15%	123.999
Year 5 - Total Campers	45	54	64	63	72	64	54	45	41	502	74	17%	123.999
Year 6 - Total Campers	45	54	64	63	72	64	56	48	43	509	81	19%	123.999
Year 7 - Total Campers	45	54	64	63	72	64	56	49	46	512	84	20%	123.999
Year 8 - Total Campers	45	54	64	63	72	64	56	49	47	514	86	20%	123.999
Year 9 - Total Campers	45	54	64	63	72	64	56	49	47	514	86	20%	123.999

J.AVERAGE NUMBER OF CAMPER YEARS for CAMPERS WHO START IN YEAR 1

Age	8	9	10	11	12	13	14	15	16	Total
Retention Factor	66.7%	65.0%	75.0%	80.0%	80.0%	80.0%	85.0%	95.0%		**77.9%**
Number of campers at beginning of year	100	67	43	33	26	21	17	14	13	
# of Campers exited/don't return	33	23	11	7	5	4	2	1	13	100
Number of years attended camp	1	2	3	4	5	6	7	8	9	
Total Years	33	47	33	26	26	25	17	6	121	334
Weighted Factor										**3.34**

Retention Factor	75.0%	77.5%	85.0%	90%	80.0%	80%	85%	95%	0%	**83%**
Number of campers	100	75	58	49	44	36	28	24	23	
# of Campers exited after end of year	25	17	9	5	9	7	4	1	23	100
Number of years attended camp	1	2	3	4	5	6	7	8	9	
Total Years	25	34	26	20	44	43	30	10	207	438
Weighted Factor										**4.38**

AVERAGE NUMBER OF CAMPER YEARS for CAMPERS WHO START IN YEAR 3 ASSUMING RETENTION RATE IS A 50% MIX OF NUMBER OF YEARS AT CAMP AND AGE

	8	9	10	11	12	13	14	15	16	
Retention Factor - By Age	66.7%	65.0%	75.0%	80.0%	80.0%	80.0%	85.0%	95.0%	0.0%	77.9%
Retention Factor - By Year Started			66.7%	65.0%	80.0%	80.0%	80.0%	85.0%		
Retention Factor - 50% mix of above			70.8%	72.5%	80.0%	80.0%	82.5%	90.0%		
Number of campers at beginning of year			100	71	51	41	33	27	24	
# of Campers exited/don't return	-	-	29	19	10	8	6	3	24	100
Number of years attended camp			1	2	3	4	5	6	7	
Total Years			29	39	31	33	29	16	171	348
Weighted Factor										**3.48**

C. ROI MODEL CONCLUSIONS:

- Camper revenue should be considered as life-time, not annual income
- Capital investments should be evaluated on cost and value per camper per year
- Retaining one current camper has the same financial benefit as recruiting 2.8 new campers

D. DEVELOPING YOUR OWN CASE FOR NEW ENROLLMENT INVESTMENT

One important use for this enrollment model is to make a compelling and rigorous case to your board and to funders in support of a new investment that will improve enrollment and retention. By adding your own data to the model, you will develop your case for investment. You can make your case using a structure like this:

- To whom?
- For what? (preliminary)
- How much?
- Enrollment impact
- Financial impact
- Data, formats, visuals?
- Other talking points?