

This report has been prepared for Global Livingston Institute (GLI) by the Denver MBA (DMBA) in February 2018.

Executive Summary

Following the mantra of “Listen, Think, Act,” the DMBA team has provided a thorough audit of the current Entusi Boat operation and a recommendation for alternative uses of the boat.

Listen. The DMBA team made it a point of emphasis to diligently listen prior to arriving at conclusions. Through observational research, surveys conducted at the Rutinda market both before and upon arrival, and interviews with villagers, vendors, the Entusi staff, and Ugandan businessmen and businesswomen, the DMBA team gathered diverse perspectives and a considerable amount of information to digest.

Think. The DMBA team reconciled the research findings with the assumptions of the previous Denver MBA project. After thinking, it was apparent several prior assumptions did not hold: (i) Demand for the Entusi Boat service was much lower, and less consistent than expected; (ii) An expectation of immediate profitability of the service was unrealistic; and (iii) In the eyes of locals, the Entusi Boat does not provide a significant competitive advantage for person transport.

Additionally, the DMBA team distilled the most common pain points from the research findings. After thinking, the pain points were evident: (i) Villagers around Lake Bunyonyi have limited access to commonly used goods; (ii) Acquiring these goods is costly; (iii) There is not an organized system to acquire goods.

Act. Based on the thought analysis, the DMBA team has two primary recommendations.

First, the current operation of the Entusi Boat needs to be streamlined. The team recommends continuing scheduled service during times of high demand (Rutinda market days) and eliminating scheduled service during times of low demand (Tuesday through Thursday, and weekends). During off-peak times, the Entusi Boat should only be used for high capacity rides (special hires, church/funeral services). Additionally, the team recommends continuing the school children transport service to facilitate trust with villages and give back to the community.

Second, the DMBA recommends implementing a delivery service as an additional revenue stream. The delivery service offers many advantages: (i) It solves a focal pain point of villagers by providing access to hard-to-find goods at an affordable price; (ii) It utilizes current Entusi operations (traveling to Kabale Town to pick up goods for the resort); (iii) It requires relatively little capital investment (the service is recommended to begin as a pilot program, delivering a small quantity of goods to one village); and (iv) The delivery service can occur during low demand times, providing additional income and moving toward a sustainable operation of the Entusi Boat.

In the report that follows, the DMBA provides more detail around the audit and recommendation, and the methodology, research findings, and analysis that led to the team’s conclusions.

Project Overview

Phase 1:

The first phase analyzes the previous team's recommendations and provides insight into why the scheduled transportation service was not feasible as initially proposed. This phase begins with a review of the assumptions made in the previous team's report. This leads into an overview of the research performed by this year's DMBA team and exploration as to why many of those assumptions were inaccurate. This section concludes with a recommendation for general boat operation.

Phase 2:

The second phase explores additional opportunities for the boat. The DMBA team provides a recommendation and implementation strategy for a delivery service on non-market days. This phase introduces a pilot program in a village that the team has identified as an ideal location to test the service. Included is a marketing strategy, a financial analysis, and an outline of key considerations that have been identified by the team.

Phase 1 - Audit

Overview

The DMBA team audited the current operation of the Entusi boat within the framework of recommendations made by the previous team. This includes an analysis of previous assumptions, a review of financial data, and determination of necessary revisions for the current boat operation.

Assumptions

The previous University of Denver MBA team relied on a number of assumptions that were necessary to recommend the purchase of the boat for the Entusi Resort. Below, you will find the prior assumptions and the current DMBA team's analysis as to why these assumptions were inaccurate or prevented the plan from working as recommended.

1. *A transportation service would be profitable immediately after the initial purchase of the boat. Initial costs for starting up were covered by the donation. The team built in a month's worth of costs as back-up.*

Conclusion

Businesses require an initial learning period to become established. One month's worth of funding was not sufficient to cover marketing costs, initial fuel costs, and address cultural issues. The boat service needed much longer than one month to establish rapport and trust among the villagers.

The Ugandan culture is relationship-based, and relationships are built on trust. It takes time for villagers to trust a new system (i.e. daily scheduled boat service). The boat needed to run longer on a scheduled loop to establish loyalty through a consistent and trustworthy service. Instead, the lack of immediate profitability led to the abandonment of the recommended scheduled loop by the Entusi staff.

2. *The Bunyonyi villagers live on a linear time schedule as opposed to a flexible time schedule.*

Conclusion

Ugandans, in general, have a flexible time schedule. The previous team recommended a schedule-based service, which was a new concept for the locals. Ugandans are not used to being at the dock at a scheduled time. Rather, they tend to simply walk to the dock when transportation is needed, regardless of the expected wait time.

3. *Waiting at each stop for five minutes is enough time to allow passengers to embark and disembark.*

Conclusion

As described in the previous conclusion, five minutes does not appear to be enough time for embarking and disembarking. Passengers are used to boats waiting until they are full to depart, negotiation over cost of transportation is frequent, and goods must also be loaded, leading to a process that takes much longer than five minutes.

4. *Lake Bunyonyi villagers are less concerned with loyalty than consistency.*

Conclusion

Uganda's trust-based culture emphasizes loyalty. Many villagers were reluctant to try the new service due to loyalty to their prior boat service; villagers who did switch received backlash from their former boat captains for their disloyalty.

5. *Safety is an important issue when villagers consider a boat service.*

Conclusion

The previous team emphasized safety as a point of differentiation for the Entusi boat. While the "high quality reputation" of the Entusi boat was established, the villagers are unable and/or unwilling to pay additional fees for higher quality and greater safety. Our market and observational research confirmed that price is a far greater concern than safety.

6. *There is enough demand in the southern villages to pick-up at least 6 passengers at each stop, and a break-even point of 98 passengers/day is attainable.*

Conclusion

Locals travel on the lake primarily between the hours of 7-9am and 4-6pm on Mondays and Fridays when the market at Rutinda is active. There is not enough consistent demand across other times and days of the week to allow the service as proposed by the previous MBA team to operate sustainably. The boat has averaged 9 passengers per day in the last four months.

Financial Analysis

As part of the audit, the DMBA team analyzed financials from a four-month period in 2017. The financial data included basic revenue and expense figures for the Entusi boat from July 1, 2017 through October 31, 2017. From this data, the Denver MBA team created profit and loss reports on two bases: (i) Monthly, and (ii) Daily.

Monthly Analysis

Figure [1]. Monthly Profit and Loss – Totals and Per Passenger.

Monthly Totals						Monthly Per Passenger					
	Jul	Aug	Sep	Oct	Total		Jul	Aug	Sep	Oct	Total
No. Passengers	359	308	234	224	1,125	Avg Passenger/Day	11.6	9.9	7.8	7.2	9.1
Gross Income	1,017,500	977,000	661,000	786,000	3,441,500	Gross Income/Passenger	2,834	3,172	2,825	3,509	3,059
Fuel	504,000	572,000	324,000	401,000	1,801,000	Fuel	1,404	1,857	1,385	1,790	1,601
Oil	10,000	11,000	18,000	30,000	69,000	Oil	28	36	77	134	61
Transport	26,000	36,000	22,000	40,000	124,000	Transport	72	117	94	179	110
Staff Lunch	74,000	97,000	83,000	84,000	338,000	Staff Lunch	206	315	355	375	300
Porters	16,000	13,000	14,500	2,000	45,500	Porters	45	42	62	9	40
Parking Fee	11,000	5,000	8,000	3,000	27,000	Parking Fee	31	16	34	13	24
Tax	2,000	-	-	-	2,000	Tax	6	-	-	-	2
Salaries	200,000	200,000	200,000	200,000	800,000	Salaries	557	649	855	893	711
Others	-	1,500	1,000	25,000	27,500	Others	-	5	4	112	24
Total Expenses	843,000	935,500	670,500	785,000	3,234,000	Total Expenses/Passenger	2,348	3,037	2,865	3,504	2,875
Net Profit	174,500	41,500	(9,500)	1,000	207,500	Net Profit/Passenger	486	135	(41)	4	184

From the analysis, the main takeaways are as follows:

(i) On average, the Entusi Boat is (marginally) profitable.

Over the period, total profits were 207,500 UGX. This figure represents average monthly profits of ~50,000 UGX and annualized profits of ~623,000 UGX. It should be highlighted, however, that profits declined substantially over the period. While profits from the first two months totaled 216,000 UGX, the boat operated at a net loss over the final two months. This trend demonstrates the variability of profit, supporting the need for additional revenue streams to stabilize cash flows.

Further exploration is needed to determine if this period variance is representative of an entire year’s operation. For instance, are the number of passengers month-to-month mostly random, or are there consistently more riders in the summer months? When an analysis can be performed over a longer time period (2-3 years), this information will become clearer.

(ii) Demand for the boat is relatively low.

To operate at a break-even point, the previous team concluded that the Entusi boat would need to carry ~85 passengers per day. From July through October, the Entusi boat carried only 9 passengers per day. In addition, the number of passengers steadily declined over the period, from 12 per day in July to 7 per day in October. The low number of passengers per day supports a need for additional, non-person revenue streams.

(iii) The efficiency (demand) of the Entusi boat is not consistent.

Per passenger analysis provides insight into how efficiently the Entusi boat operates. For example, an efficient ride would consist of a boat at near capacity traveling a short distance. Such a trip would generate a high profit per passenger, as income from fares would outweigh the limited costs of transportation (fuel expense). If the Entusi boat generally sees similar demand, profit per passenger should be consistent. This was not the case over the analyzed period. The Entusi boat saw profits per passenger of ~500 UGX in July, compared to losses of ~40 UGX per passenger in September. The discrepancy is likely a result of inconsistent demand.

This finding highlights the importance of selective operation of the Entusi boat. For the Entusi boat to be sustainable, it needs to only take rides when there are a sufficient number of passengers. In July and August, for instance, gross income was similar, at ~1,000,000 UGX. Net profit, however, was more than four times greater in July than it was in August. The difference in net profit was driven by efficient operations in July, with an expense per passenger of only 2,300 UGX (compared to an expense of greater than 3,000 UGX in August).

Daily Analysis

Figure [2]. Daily Profit and Loss – Totals and Per Passenger

Daily Totals, Jul - Oct									Daily Per Passenger, Jul - Oct								
	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total		Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
No. Passengers	185	117	107	111	217	210	178	1,125	Avg Passenger/Day	10.3	6.5	6.3	6.5	12.8	11.7	9.9	9.7
Gross Income	323,000	415,000	309,500	563,000	469,000	706,000	656,000	3,441,500	Gross Income/Pass	1,746	3,547	2,893	5,072	2,161	3,362	3,685	3,059
Fuel	218,000	193,000	122,000	291,000	225,000	366,000	386,000	1,801,000	Fuel	1,178	1,650	1,140	2,622	1,037	1,743	2,169	1,601
Oil	9,000	8,000	5,000	9,000	8,000	15,000	15,000	69,000	Oil	49	68	47	81	37	71	84	61
Transport	16,000	14,000	10,000	18,000	19,000	24,000	23,000	124,000	Transport	86	120	93	162	88	114	129	110
Staff Lunch	43,000	40,000	53,000	52,000	40,000	58,000	52,000	338,000	Staff Lunch	232	342	495	468	184	276	292	300
Porters	4,000	-	2,000	16,500	-	13,000	10,000	45,500	Porters	22	-	19	149	-	62	56	40
Parking Fee	13,000	-	2,000	-	12,000	-	-	27,000	Parking Fee	70	-	19	-	55	-	-	24
Tax	2,000	-	-	-	-	-	-	2,000	Tax	11	-	-	-	-	-	-	2
Salaries*	114,286	114,286	114,286	114,286	114,286	114,286	114,286	800,000	Salaries	618	977	1,068	1,030	527	544	642	711
Others	1,000	-	1,000	2,000	23,000	500	-	27,500	Others	5	-	9	18	106	2	-	24
Total Expenses	420,286	369,286	309,286	502,786	441,286	590,786	600,286	3,234,000	Total Expenses/Pass	2,272	3,156	2,891	4,530	2,034	2,813	3,372	2,875
Net Profit	(97,286)	45,714	214	60,214	27,714	115,214	55,714	207,500	Net Profit/Pass	(526)	391	2	542	128	549	313	184

From the analysis, the main takeaways are as follows:

(i) Demand is greatest on Rutinda market days and weekends.

As previously mentioned, the Entusi boat averaged 9 passengers per day over the period. The number of passengers, however, varied throughout the week. Demand was consistently highest on market days (Monday and Friday) and on weekends (Saturday and Sunday). These days all saw 10 or more passengers per day, with the highest being Friday, at ~13 passengers per day. Tuesday, Wednesday, and Thursday saw nearly identical low demand, at ~6.5 passengers per day. This analysis supports finding additional use of the boat on non-market weekdays, when demand is lowest.

(ii) Passenger fares are substantially lower on market days.

From the per passenger daily analysis, it is evident that the Entusi boat charges its lowest fares on Mondays and Fridays. Gross income per passenger was 1,750 UGX on Monday and 2,200 UGX on Friday, compared to over 3,000 UGX on average.

(iii) Net profits by day of the week are inconclusive.

One limitation of the given financial data is the method by which revenues and expenses were recorded. Daily Entusi boat P&L entries frequently show income without any associated fuel, oil, or transportation expenses. This would indicate that expenses are not always properly aligned with income (for instance, purchasing fuel on Monday that is used for a Tuesday ride). This method of recording makes it difficult to determine the profitability of days of the week. Going forward, the DMBA team recommends assigning fuel, oil, and transport expenses based on estimated distance traveled. Properly allocating costs to revenues will allow for more accurate analysis and will allow the Entusi staff to determine which operations are most profitable.

Conclusions & Recommendations

Conclusions:

- It is not feasible to continue running the boat for transportation purposes 7 days per week due to the low and inconsistent demand.
- The competitive advantages of the Entusi boat are not apparent to the local villagers.
- The greatest demand for transportation on Lake Bunyonyi conflicts with when the school children are transported by the Entusi boat.

Recommendations:

The Entusi staff should continue operations as they currently are on Mondays and Fridays. Monday & Friday operations should be streamlined to efficiently work with the students' school schedules. For example, after dropping the kids at school, start a pick-up route at the villages closest to the school while operating in the direction of Rutinda. This will help save on time/fuel by routing the least distance possible. Additionally, it can help build rapport within the communities near the school which has the potential to evolve into recurring passengers on market days. Locals in the villages near the school can then rely on a consistent service and will preferably use the Entusi service.

In order to continue transporting the children to/from school Monday - Friday, the Entusi resort will need to implement a new business strategy to operate the boat on Tuesdays - Thursdays when transportation demand is at its lowest.

Phase 2 - Alternative Strategy

Given the lack of demand for transportation beyond rush-hours and on Rutinda market days, as well as the desire to continue operation of the school transportation service, the DMBA team explored additional opportunities. In conversations with market-goers, market-vendors, and, in particular, villagers from around Lake Bunyonyi, the large cost of transporting goods on the lake was a common pain point.

For many villagers, a trip to Kabale to purchase commercial goods unavailable at the Rutinda market can cost up to 40,000-50,000 UGX. Many villages will pool together a list of needed items and send a single representative on a shopping trip to limit these high transportation costs. While a single trip on behalf of a group is far more cost-effective than multiple trips for individual needs, a single trip still requires a significant investment and removes a villager from their day-to-day work. Villagers and small shop owners consistently expressed a need for factory produced goods, such as soap, sugar, rice, maize flour, beans, and g-nut paste, as well as fuel.

The staff from Entusi Resort frequently makes trips to Kabale to acquire necessary items that are not available at the Rutinda market. This includes both factory-produced items and produce that is of greater quantity and/or quality than what can be found closer to the resort. Conversations with the staff indicated that shopping trips to Kabale occur at least weekly. The trips involve driving the boat to the dock at Rutinda, chartering a motor vehicle to Kabale, shopping at the various shops and markets in Kabale, and then returning to Rutinda by vehicle before departing back to Entusi via boat.

As Entusi staff members are already visiting Kabale on a regular basis, the DMBA team identified a village bulk-order delivery service as a potential use for the large boat. In addition to the items employees would naturally pick up, villages could provide a shopping list of 3-5 easy to find items that are needed on a weekly basis. This would add minimally to the duties already being performed, while leveraging the size of the boat to accommodate orders that others on the lake may not be able to handle. Furthermore, this could be performed on non-Rutinda market days between morning and afternoon school services. This may be a particularly appealing solution as it provides a use for the boat during a time when it would otherwise sit idle, and still allows for continued transportation operation as currently performed.

In what follows, the DMBA team has provided a strategic operation and marketing plan, as well as a financial analysis for the proposed delivery service.

Overview of Delivery Service Operations

On a weekly basis, the Entusi Boat should be used to deliver goods from Kabale to villages on Lake Bunyonyi. The DMBA team recommends an initial pilot program with one village to ensure the feasibility of this operation and identify potential challenges before expanding the service. Deliveries should be made between the hours of 10am and 3pm on non-market days (Tuesday-Thursday) when the Entusi staff must also travel to Kabale for supplies. This will avoid extraneous trips and allow for continued transportation of school children and market-goers, as well as special hires for weekend events. Based on its relative proximity, the relationship with current Entusi staff, and interest expressed in this type of service when interviews were performed, the DMBA team suggests starting with Buhutu village.

The Entusi staff should establish a standing weekly order for factory-made goods with the village. Items such as sugar, rice, soap, and fuel were commonly desired; however, the specific order should be determined with the village leaders, as each location may vary slightly in the need for specific items in differing quantities. In order to simplify the initial process, the DMBA team recommends limiting orders to five different items. It will be important to select items that are easily secured in Kabale without

requiring substantial additional work on the part of the Entusi staff when purchasing goods for the resort.

Once an order is placed, agreement on payment must also be established. When first creating the program, the DMBA team suggests allowing payment upon delivery of items in order to facilitate trust, with the clear expectation that payment for 1/2 of the value of the order will be expected up front in the future. It should also be articulated to the village customer that payment both for the goods delivered and a delivery fee is required. The delivery fee will be less than what is typically paid for transportation by individuals traveling to Kabale and therefore represents substantial savings, not only in payment but also the productivity of a day of work that is saved when market trips are no longer necessary. An initial working capital investment to fund initial purchases and supplies will be required from GLI.

Once an order is placed via prearranged agreement, or update via phone call or text, and payment is collected (either the preceding week or when children are transported to or from school), the Entusi staff will travel to Kabale and acquire the goods while also picking up supplies for the resort. After traveling back to Rutinda, the Entusi Boat will be used to deliver bulk goods to the ordering village(s) before afternoon transport of the school children. Payment in full for goods delivered along with the delivery fee should be collected at that time.

If the pilot program with one village proves successful, delivery services may be expanded to other villages. Financial modeling indicates that a delivery service can be profitable with two deliveries made per week. In order to minimize operational costs, including fuel and oil, the Denver MBA team recommends identifying villages that are on the route of the school transportation service and therefore already visited at least once per week.

Financial Analysis

A financial model was created by the DMBA team to forecast investment requirements and future performance of the Entusi Boat operation. This includes transportation services on market days, the school transportation program, special hires, and the new delivery service. The following are the key drivers and assumptions for the model:

Figure [3]. Delivery Service: Key Model Drivers and Assumptions

Entusi Boat Proforma		Entusi Boat Proforma					
Key Drivers and Assumptions		Key Drivers and Assumptions					
<i>Model Drivers</i>		<i>Delivery Service Drivers and Assumptions</i>					
Fuel Cost, UGX/Litre	3,600			UGX			
Fuel Efficiency, Km/Litre	1.6	GLI Initial Working Capital Investment	300,000				
Cost Per Kilometer	2,250	<i>Incremental Income</i>					
<i>Current Monthly Averages</i>		Revenue Per Delivery (Delivery Fee)		20,000			
		<i>Delivery Logistics</i>					
<i>Income</i>		# of Villages Served		1	2	3	4
Passengers	275	Villages Served, Per Delivery Trip	1	2	3	4	
Fare	3,000	Delivery Days/Month	4	4	4	4	
Fares Per Day	9	Additional Kilometers Per Delivery Day	7	10	12	14	
<i>Expenses</i>		Additional Kilometers Traveled Per Month	28	40	48	56	
Fuel	450,250	<i>Incremental Expenses, Per Month</i>					
Oil	17,250	Fuel	63,000	90,000	108,000	126,000	
Transportation	31,000	Oil	2,300	3,286	3,943	4,600	
Staff Lunch	84,500	Transportation	25,000	25,000	50,000	100,000	
Porters	11,375	Staff Lunch	-	-	-	-	
Parking Fees	6,750	Porters	5,000	7,500	9,375	10,313	
Taxes	500	Parking Fees	-	-	-	-	
Salaries	200,000	Taxes	-	-	-	-	
Other	6,875	Salaries	20,000	30,000	37,500	41,250	
		Other	-	-	-	-	
		Total Delivery Expenses	115,300	155,786	208,818	282,163	

The financial model also assumes a pilot period of six months during which the Entusi Boat will deliver to one village per week. The DMBA team feels that this should provide adequate time to address important logistical challenges, adjust the operational plan, and demonstrate proof of concept before expanding to additional villages. After the sixth month, the model anticipates expansion to delivery to two villages per week; in year two, further expansion to three villages per week is anticipated. Under the current assumptions, the Entusi Boat operation will be profitable when making two deliveries per week. The DMBA team anticipates growth to four deliveries per week in the fourth and fifth years of operation. Deliveries beyond four per week will likely require additional trips to Kabale. As this eliminates the synergy obtained from Entusi's regular shopping in Kabale, deliveries beyond four per week should only be considered after the delivery service is established and can support the expense associated with additional shopping trips. The DMBA team feels that four deliveries per week is a feasible goal for the area surrounding Entusi Resort on Lake Bunyonyi.

Based on the financial projections, a working capital investment of 300,000 UGX will be required from GLI. This will ensure the Entusi Boat service has cash necessary to fund market purchases prior to receiving payment and to maintain reserves needed until the operation is cash flow positive. The DMBA team forecasts that the Entusi Boat operation will return the initial working capital investment early in the second year, while generating an IRR of 89% (relative to the initial working capital investment) in the five-year period. By the end of the fifth year, the operation is forecasted to generate an NPV of UGX 1,277,386 using a discount rate of 15%.

Figure [4]. Delivery Service Model Projections

Entusi Boat Proforma																	
Passenger and Delivery Service Projections																	
	Month												Year				
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Year 1	Year 2	Year 3	Year 4	Year 5
No. Passengers	275	275	275	275	275	275	275	275	275	275	275	275	3,300	3,300	3,300	3,300	3,300
Passenger Income	825,000	825,000	825,000	825,000	825,000	825,000	825,000	825,000	825,000	825,000	825,000	825,000	9,900,000	9,900,000	9,900,000	9,900,000	9,900,000
# Village Served	1	1	1	1	1	1	2	2	2	2	2	2	3	3	3	4	4
Delivery Revenues	80,000	80,000	80,000	80,000	80,000	80,000	160,000	160,000	160,000	160,000	160,000	160,000	1,440,000	2,880,000	2,880,000	3,840,000	3,840,000
Total Revenues	905,000	905,000	905,000	905,000	905,000	905,000	985,000	985,000	985,000	985,000	985,000	985,000	11,340,000	12,780,000	12,780,000	13,740,000	13,740,000
Fuel	513,250	513,250	513,250	513,250	513,250	513,250	540,250	540,250	540,250	540,250	540,250	540,250	6,321,000	6,699,000	6,699,000	6,915,000	6,915,000
Oil	19,550	19,550	19,550	19,550	19,550	19,550	20,536	20,536	20,536	20,536	20,536	20,536	240,514	254,314	254,314	262,200	262,200
Transport	56,000	56,000	56,000	56,000	56,000	56,000	56,000	56,000	56,000	56,000	56,000	56,000	672,000	972,000	972,000	1,572,000	1,572,000
Staff Lunch	84,500	84,500	84,500	84,500	84,500	84,500	84,500	84,500	84,500	84,500	84,500	84,500	1,014,000	1,014,000	1,014,000	1,014,000	1,014,000
Porters	16,375	16,375	16,375	16,375	16,375	16,375	18,875	18,875	18,875	18,875	18,875	18,875	211,500	249,000	249,000	260,250	260,250
Parking Fee	6,750	6,750	6,750	6,750	6,750	6,750	6,750	6,750	6,750	6,750	6,750	6,750	81,000	81,000	81,000	81,000	81,000
Tax	500	500	500	500	500	500	500	500	500	500	500	500	6,000	6,000	6,000	6,000	6,000
Salaries	220,000	220,000	220,000	220,000	220,000	220,000	230,000	230,000	230,000	230,000	230,000	230,000	2,700,000	2,850,000	2,850,000	2,895,000	2,895,000
Others	6,875	6,875	6,875	6,875	6,875	6,875	6,875	6,875	6,875	6,875	6,875	6,875	82,500	82,500	82,500	82,500	82,500
Total Expenses	923,800	923,800	923,800	923,800	923,800	923,800	964,286	964,286	964,286	964,286	964,286	964,286	11,328,514	12,207,814	12,207,814	13,087,950	13,087,950
Net Profit	(18,800)	(18,800)	(18,800)	(18,800)	(18,800)	(18,800)	20,714	20,714	20,714	20,714	20,714	20,714	11,486	572,186	572,186	652,050	652,050
Cash Flow Balance																	
Beginning Balance	300,000	281,200	262,400	243,600	224,800	206,000	187,200	207,914	228,629	249,343	270,057	290,771	290,771	311,486	883,671	1,455,857	2,107,907
Net Income	(18,800)	(18,800)	(18,800)	(18,800)	(18,800)	(18,800)	20,714	20,714	20,714	20,714	20,714	20,714	20,714	572,186	572,186	652,050	652,050
Ending Cash Balance	281,200	262,400	243,600	224,800	206,000	187,200	207,914	228,629	249,343	270,057	290,771	311,486	311,486	883,671	1,455,857	2,107,907	2,759,957

Figure [5]. Delivery Service Profitability Metrics

Profitability Metrics	Year					
	0	1	2	3	4	5
Cash Flows	(300,000)	11,486	572,186	572,186	652,050	652,050
Cumulative Cash Flows	(300,000)	(288,514)	283,671	855,857	1,507,907	2,159,957
IRR	95%					
NPV	1,215,859					
Payback Period	2.50					

Implementation Recommendations

Effective marketing will be essential for the success of the delivery service. Based on conversations with staff leaders at Entusi Resort, the DMBA team recommends publicizing the service at community events, including church services, soccer games, and celebratory occasions. Entusi may consider hosting locals from the surrounding area for a party that highlights the new service to increase awareness. Further, the Entusi staff should leverage the relationship it has established with local parents and school teachers as the delivery service will, in-part, subsidize the school transport program. Parents of students using the boat should be encouraged to use the delivery service as they already have a trusting relationship with the Entusi boat.

The order(s) taken each week must be consistent. The delivery service depends on regular business; intermittent disruption of service or irregular orders will make operation far more difficult. The Entusi staff should establish clear expectations of what can be ordered when initially implementing this service. A consistent ordering system is also vital. There is some concern that exclusive use of one village representative could create an unwanted “middle man” scenario. In this scenario, arbitrage could occur, as the recipient of the Entusi delivery could take advantage of the discounted transportation costs and sell the goods to villagers at a premium. Given that the boat travels to the area on a daily basis with the school children, the boat operator may establish a regular weekly routine for a village at which time anyone can place an order. For example, if the shopping and delivery process happens on a Wednesday, the orders should be collected on Tuesday at 3pm prior to picking up the children from school. The 20,000 UGX delivery fee can then be divided amongst those who place an order, as would customarily be done when the village sends a single representative to Kabale for shopping. Payment for orders should be collected upon delivery of goods. The Entusi Resort should not be expected to finance purchases and needs to ensure adequate cash flows to continue operations. Prices for goods must be agreed upon by the village and Entusi prior to fulfillment of each order.

Bulk orders must be of sufficient size to require use of the large boat. The smaller motor boat also used by Entusi is more fuel efficient and therefore represents a more economical mode of transportation on the Lake. As the delivery service evolves, orders should grow to a size beyond the capacity of the smaller boat.

Deliveries should occur on days when the Entusi Resort staff are already traveling to Kabale, minimizing the additional expenses associated with the new service. All possible opportunities to utilize the same resources (i.e. labor and ground transportation from and to Rutinda) should be employed. This may also help establish greater discipline on the part of the Entusi staff when it comes to running errands for supplies.

Locations for deliveries should be strategically selected around the area of Bwama, as this is where the children are dropped off for school. Targeting villages in this area will minimize the additional kilometers traveled and fuel and oil consumed.

Entusi may also consider delivering goods to those within walking distance of the resort. This would similarly reduce the costs locals traditionally incur on market trips and also strengthen Entusi’s relationship with the surrounding community. In addition to the delivery by-boat, Entusi could pick up goods for the nearby villages and have them visit the resort for a celebratory event on a monthly basis.