

Group Introduction

Dana LeBherz Ritchie Tan Henry Quin







Thumb Overview

Safe rides for college students, by college students!



Scope of Work

- Revenue/Cost Model
- Per-ride vs. Subscription-based Service





Work Performed

Extensive Research on Costs

Created a modifiable cost and revenue modelling tool

Derived constructs and assumptions for costing and planning

Results



Fixed Costs

	Measure	Assumptions		Month		Year 1		Year 2		Year 3
Starting Costs										
Licenses/Permits/incorporation fees					\$	300.00	\$	300.00	\$	300.00
Legal (Contracts)					\$	2,500.00	1			
Legal Counsel (\$50/Hour)	5		\$	250.00	\$	3,000.00	\$	3,000.00	\$	3,000.00
App Development										
Web Hosting			\$	300.00	\$	3,600.00	\$	3,600.00	\$	3,600.00
Data Storage			\$	300.00	\$	3,600.00	\$	3,600.00	\$	3,600.00
App Development (From Logan)					\$	572,500.00				
App Maintenance			\$	4,000.00	\$	48,000.00	\$	48,000.00	\$	48,000.00
Liability Insurance										
General Liability Insurance			\$	170.00	\$	2,040.00	\$	2,040.00	\$	2,040.00
Corporate Liability Insurance			1		Ś	2,500.00	Ś	2,500.00	Ś	2,500.00
Rideshare Insurance			\$	30.00	\$	360.00	\$	360.00	\$	360.00
Administrative Costs										
Advertising & Marketing			Ś	10,000.00	\$	120,000.00	s	120,000.00	\$	120,000.00
Banking Fees			\$	-	\$		\$		\$	-
Call center Support					\$	8,400.00	\$	12,790.80	\$	17,395.49
Office Space (\$19/sqft x 1000 sqft)	\$19.00	1000.00	1		\$	19,000.00	\$	19,000.00	\$	19,000.00
Office Utilities (\$2/sqft x 1000 sqft)	\$2.00	1000.00	1		\$	2,000.00	\$	2,000.00	\$	2,000.00
Accounting Services			\$	1,000.00	\$	12,000.00	\$	12,000.00	\$	12,000.00
Marketing Coordinator Salary	\$35.38	4.00%			\$	73,590.40	\$	76,534.02	\$	79,595.38
Human Resources (5 hrs/wk, 50 wk/yr)	\$30.00	2.00%]		\$	7,500.00	\$	10,710.00	\$	14,045.40
				TOTALS	\$	880,890.40	\$	316,434.82	Ś	327,436.26

	Measure	Assumptions		Month		Year 1		Year 2		Year 3
Starting Costs					Г					
Licenses/Permits/incorporation fees					\$	300.00	\$	300.00	\$	300.00
Legal (Contracts)					\$	2,500.00				
Legal Counsel (\$50/Hour)	5		\$	250.00	\$	3,000.00	\$	3,000.00	\$	3,000.00
App Development										
Web Hosting			\$	300.00	\$	3,600.00	\$	3,600.00	\$	3,600.00
Data Storage			\$	300.00	\$	3,600.00	\$	3,600.00	\$	3,600.00
App Development (From Logan)					\$	572,500.00				
App Maintenance			\$	4,000.00	\$	48,000.00	\$	48,000.00	\$	48,000.00
Liability Insurance										
General Liability Insurance			\$	170.00	Ś	2,040.00	Ś	2,040.00	Ś	2,040.00
Corporate Liability Insurance			*		\$	2,500.00	\$	2,500.00	Ś	2,500.00
Rideshare Insurance			\$	30.00	\$	360.00	\$	360.00	\$	360.00
Administrative Costs										
Advertising & Marketing			\$	10,000.00	Ś	120,000.00	Ś	120,000.00	Ś	120,000.00
Banking Fees			\$	-	Ś	-	\$	-	\$	
Call center Support			Ι΄.		\$	8,400.00	\$	12,790.80	\$	17,395.49
Office Space (\$19/sqft x 1000 sqft)	\$19.00	1000.00	1		\$	19,000.00	\$	19,000.00	\$	19,000.00
Office Utilities (\$2/sqft x 1000 sqft)	\$2.00	1000.00	1		\$	2,000.00	\$	2,000.00	\$	2,000.00
Accounting Services			\$	1,000.00	\$	12,000.00	\$	12,000.00	\$	12,000.00
Marketing Coordinator Salary	\$35.38	4.00%			\$	73,590.40	\$	76,534.02	\$	79,595.38
Human Resources (5 hrs/wk, 50 wk/yr)	\$30.00	2.00%]		\$	7,500.00	\$	10,710.00	\$	14,045.40
				TOTALS	Ś	880,890.40	Ś	316,434.82	\$	327,436.26

Variable Costs

			Year 1	Year 2	Year 3
Variable Cost Analysis (Per Ride)		FLD's	5	6	8
	"	Real Drivers"	10	12	16
Driver Starter Kit		Unit cost			
Breathalyzer	\$	90.54	\$ 905.40	\$ 1,086.48	\$ 1,448.6
Dash Cam	\$	180.00	\$ 1,800.00	\$ 2,160.00	\$ 2,880.0
Phone Holder	\$	10.00	\$ 50.00	\$ 120.00	\$ 160.0
Stickers	\$	0.69	\$ 6.90	\$ 8.28	\$ 11.0
Magnets for Car Doors	\$	27.00	\$ 270.00	\$ 324.00	\$ 432.0
Background Check	\$	26.00	\$ 260.00	\$ 312.00	\$ 416.0
Subtotal			\$ 3,292.30	\$ 4,010.76	\$ 5,347.6
Transaction Cost					
Card Fee		\$0.30	\$ 22,248.00	\$ 29,664.00	\$ 37,080.0
Card Fee Percentage Cost		2.90%	\$ 43,012.80	57,350.40	\$ 71,688.0
ACH Debit		0.80%	\$ 11,865.60	\$ 15,820.80	\$ 19,776.0
Subtotal			\$ 77,126.40	\$ 102,835.20	\$ 128,544.0
App Store Cost					
Apple App Hosting		0%	\$ -	\$ -	\$ -
Google App Hosting		30%	\$ 444,960.00	\$ 593,280.00	\$ 741,600.0
Subtotal			\$ 444,960.00	\$ 593,280.00	\$ 741,600.0
Trip Cost					
Drivers Wage per Hour	\$	15.00	\$ 141,900.00	\$ 170,280.00	\$ 227,040.0
Subtotal			\$ 141,900.00	\$ 170,280.00	\$ 227,040.0
		TOTALS	\$ 667,278.70	\$ 870,405.96	\$ 1,102,531.6

			Year 1		Year 2		Year 3
Variable Cost Analysis (Subscription)	FLD's		5		6		8
	"Real Drive	ers"	10		12		16
Driver Starter Kit	Unit cos	st					
Breathalyzer	T	90.54	\$ 905.40	\$	1,086.48	\$	1,448.64
Dash Cam	•	80.00	\$ 1,800.00	\$	2,160.00	\$	2,880.00
Phone Holder	\$ 1	10.00	\$ 50.00	\$	120.00	\$	160.00
Stickers	\$	0.69	\$ 6.90	\$	8.28	\$	11.04
Magnets for Car Doors	\$ 2	27.00	\$ 270.00	\$	324.00	\$	432.00
Background Check	\$	26.00	\$ 260.00	\$	312.00	\$	416.00
Subtotal			\$ 3,292.30	\$	4,010.76	\$	5,347.68
Transaction Cost							
Card Fee	\$0.30		\$ 1,390.50	Ś	1,854.00	Ś	2,317.50
Card Fee Percentage Cost	2.90%		\$ 32,259.60		43,012.80	-	53,766.00
ACH Debit	0.80%		\$ 8,899.20		11,865.60	-	14,832.00
Subtotal			\$ 42,549.30	\$	56,732.40	\$	70,915.50
App Store Cost							
Apple App Hosting	0%		\$ -	\$	-	\$	-
Google App Hosting	30%		\$ 333,720.00	\$	444,960.00	\$	556,200.00
Subtotal			\$ 333,720.00	\$	444,960.00	\$	556,200.00
Trip Cost							
Drivers Wage per Hour	\$ 1	15.00	\$ 141,900.00	\$	170,280.00	\$	227,040.00
Subtotal			\$ 141,900.00	\$	170,280.00	\$	227,040.00
	TOTALS	•	\$ 521,461.60	\$	675,983.16	\$	859,503.18

General Operating Assumptions

- NWSU has 3 semesters
 - Spring Semester 16 weeks
 - Fall Semester 16 weeks
 - Summer Semester 11 weeks
 - Total weeks of operation = 43



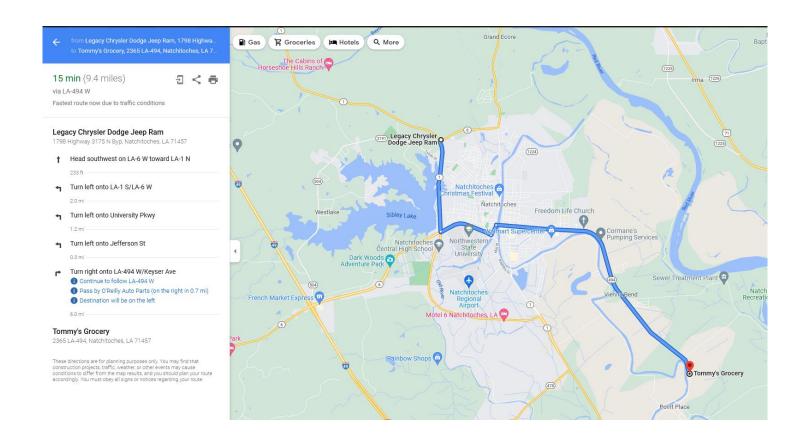
Service Hour Assumptions

	Thumb's Hours of Operation												
Thursday	Friday	Saturday	Sunday	Total Hours of Operation Weekly									
12pm - 2am Friday	12pm–3am Saturday	12pm - 3am Sunday	10am–1am Monday	44									

- Thumb is not available 24/7
- Thumb needs to be open when students are most likely to need safe rides
- Proposed schedule requires 44 hours of coverage needed per week

What kind of trips will Thumb users take?

- Downtown Natchitoches has a 5-mile radius/10-mile diameter approx., so most trips will be around 5 miles one-way
- Per Google Maps, it seems likely that a
 Thumb Driver could drive maximum 45
 miles in one hour, consisting of 9 trips of
 5 miles each



Let's extrapolate a bit

Hour

- 45 miles
- 9 trips

Week

- 44 X 45 = 1980 miles
- 44 x 9 = 396 trips

Semester

- 1980 x 16 = 31680 (F or S, 21780 Summer)
- 396 X 16 = 6336 (F or S, 4356 Sm)

Year

- $1980 \times 43 = 85140 \text{ miles}$
- 3% × 43 = 17028 trips



Fully-Loaded Driver

- Not a real person, but a construct
- Drives 44 hours/week, 43 weeks/year
- No idle time, in constant motion

- Can provide up to 17, 028 trips per year
- Unrealistic for college student drivers
 - Too many hours
 - They want to party, too!



General Assumptions

- Revenue is based on a \$20 price per ride.
- Revenue is based on a \$240 price per subscription/semester.
- Owner's draw begin once breakeven has been achieved.
- Based on collectedd Data.



Insights

- Break even may be achieve as early as the second year.
- Many costs are inter-related; there are domino effects that need to be considered
- Our research indicates Thumb is a viable business opportunity.



Break Even – Per Ride

Northwestern Expected Semester Registration # of rides per subscription Suggested Price Per Ride Suggested Price Per Subscription # of rides a FLD can give per year Nachitoches Sales Tax Research & Development % Allocation Real Drivers: FLD's Ratio

10300
16
\$20.00
\$240.00
17028
9.95%
2%
2

Breakeven Analysis (Per Ride)	FLD'	's		5				6				8
Thumb		Yea	ar 1			Yea	ar 2			Yea	ar 3	
Thumb proposed Market Share		15%				20%				25%		
# of expected students Riders				1545			-	2060				2575
# of expected rides per semester				24720				32960	l			41200
# of expected rides per year				74160				98880				123600
Expected Semester Revenue			\$	494,400.00			\$	659,200.00			,	\$824,000.00
Expected yearly Per Trip revenue			\$1	,483,200.00			\$1	,977,600.00			\$	2,472,000.00
Cost of Service	\$	667,278.70			 	870,405.96			S	1,102,531.68		
Gross Margin	*	001,270110	\$	815,921.30	*	0.0,.00.00	\$1	,107,194.04	ľ	.,,	\$	1,369,468.32
Price Allocation for Variable cost		\$9.00	·	\$11.00		\$8.80	'	,,		\$8.92	Ì	.,,
Price allocation for Fixed Cost.		\$11.00				\$11.20				\$11.08		
On another all Cost		990 900 40				246 424 92			,	227 426 26		
Operational Cost	\$	880,890.40		90065	\$	316,434.82	_	20260	\$	327,436.26	_	20552
Rides needed to cover Fixed cost				80065	ł			28260	ł		_	29552
EBITDA			-	\$64,969.10			\$	790,759.22			\$	1,042,032.06
Municipal Taxes												
Corporate Tax			\$	-			\$	166,059.44			\$	218,826.73
Research & Development			\$	29,664.00			\$	39,552.00				\$49,440.00
Owner's draw			\$	-			\$	-			\$	-
TOTAL LIABILITIES			\$	(29,664.00)			\$	(205,611.44)			\$	(268,266.73)
NET INCOME		-\$94,6	33.1	10		\$585, ²	147.	79		\$773,	765.	32

Break Even – Subscription

Year 1

Northwestern Expected Semester Registration # of rides per subscription Suggested Price Per Ride Suggested Price Per Subscription # of rides a FLD can give per year Nachitoches Sales Tax Research & Development % Allocation Real Drivers : FLD's Ratio

10300
16
\$20.00
\$240.00
17028
9.95%
2%
2

Breakeven Analysis (Subscription)

Thumb

Hidilib		100	a1 1	- (6)		10	ui L	9		10	ui o	
Thumb proposed Market Share		15%		1		20%		87		25%		
# of expected students Riders				1545			63	2060			88	2575
# of expected Subscriptions per semester	l			1545	l			2060	l			2575
# of expected Subscriptions per year				4635				6180				7725
Expected Semester Revenue			\$	370,800.00				\$494,400.00				\$51,500.00
Expected yearly Per subscription revenue	7		\$1	,112,400.00			\$	1,483,200.00			\$	1,854,000.00
Cost of Service	\$	521,461.60		590,938.40	\$	675,983.16	,	\$807,216.84	\$	859,503.18		\$994,496.82
Dollar Allocation for Variable cost		\$112.51	•	000,000.40	\vdash	\$109.38	1	φουτ, Σ 10.04	-	\$111.26	Ι '	,400.0 <u>2</u>
Dollar allocation for Fixed Cost.		\$127.49				\$130.62	1			\$128.74		
Operational Cost	\$	880,890.40			\$	316,434.82			\$	327,436.26		
Subscriptions needed to cover Fixed cost	Scotts.	100-00-00- 1 800-00-00-00-00-00-00-00-00-00-00-00-00-	i e	6909			Ĭ	2423		50 100 000 TO 40 000 00 00 00 00 00 00 00 00 00 00 00	ů	2543
EBITDA			-\$	5289,952.00				\$490,782.02			:	\$667,060.56
Municipal Taxes												
Corporate Tax	l		\$	-	l		\$	103,064.23	l		\$	140,082.72
Research & Development	l		\$	22,248.00	l		\$	29,664.00	l		\$	37,080.00
Owner's draw	l		\$	-	l		\$	-	l		\$	-
TOTAL LIABILITIES			\$	(22,248.00)			\$	(132,728.23)	L		\$	(177,162.72)
NET INCOME	E -\$312,2		200.00			\$358,053.80		\$489,8		397.84		

Year 2

Year 3

Additional Recommendations

- FLDs vs Algorithm
- Student and Parent Surveys
- University Connections
- Use a Combination approach for larger revenue





What We Learned

- The value of Information, Data, and proper Research
- The value of the Business Model Canvas
- The value of the understanding Customer's needs

- The power of a well-made financial structure
- The reality of iterative strategic planning

