

## The University of Chicago Graduate School of Business

## Final Project – Business Plan



Bus 484-81 Prof. Robert J. Calvin New Enterprise & Small Business Management

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#### Introduction / Executive Summary

According to Costwatch Consulting Group: "There are more than 1,000 long distance providers. AT&T, MCI and Sprint have over 300 different rate plans. Costs for the same call can vary by as much as 400%!"

TollSaver is seeking \$750,000 from outside investors in return for 45% of the company. TollSaver's strategic goal is to revolutionize the way customers choose their long distance carrier (& verify their phonebills) through a new software/hardware solution (new technology). TollSaver wants to be for the telecommunications industry what "Sabre" was for the airline/reservation industry. It will be a valuable tool not only in terms of tracking existing telephone calls, but also in finding the best provider given automatically monitored call patterns, etc.. The initial target market is small business and residential customers with long distance phonebills of \$200 or more (especially international callers). While TollSaver expects to patent its technology, there is concern about the long term defensibility and sustainability of a technological lead. TollSaver expects to compensate losses to competitors through the introduction of new products and services, and key partnerships with telecommunication consultants and long distance providers, among others, to strengthen its lead in this area. Long term, TollSaver is also planning to use its technology to expand into other telecommunication market segments, where billing verification and comparisons may be useful, such as calling cards, internet services, etc.. (Down the road, the technology may also be applied to other industries, such as cable TV, gas, electricity, etc., which will become more important as these industries gain competition through deregulation and other means). The management team will be ideally equipped to lead TollSaver into the 21st century. Besides personal experience in telecommunications, it has a wide range of abilities in management, marketing, sales, research, technology, manufacturing, and small enterprise operations.

#### Background - targeting a niche in an ever growing market

There are over one thousand long distance providers in the US (and increasingly so in other parts of the world). Each in turn has hundreds of different calling plans, price discriminating users on their calling pattern. Some of the typical plans target business or residential users, domestic or international callers, in addition to the typical day, evening, and weekend time slots. Furthermore, frequent billing errors are common, especially as average monthly call volume rises. Billing errors in turn are hard to track (unless manually going through bill), and even if errors are found, there is often no way to prove these. Automatically analyzing call patterns, based on usage, such as in the form of a call monitoring system, are not usually geared towards small business or residential customers, and none of the existing systems link call patterns with rate plans. Ultimately, there is no "neutral / unbiased" source of verifying the most inexpensive provider (based on call patterns), and existing system are simply inconvenient, inefficient, filled with inaccuracies, and totally user-unfriendly. Thus, small businesses, international callers, and volume domestic callers represent the most underserved segments, and in turn the target segments for TollSaver.

#### TollSaver - The Product<sup>1</sup> - Features/Benefits, Costs, Staffing, Pricing and more

TollSaver combines two major activities for customers. TollSaver will have a hardware device, which will be hooked up to your telephone and automatically track all outgoing telephone calls. The collected information can be used to create multiple reports. The hardware device can either be immediately connected to a computer, or be attached a later point to automatically upload all tracked call information. In addition, TollSaver will have a software solution, which will allow customers to firstly create all sorts of call reports, using the tracked confirmation. More importantly, the software will also match the collected call information and patterns against stored telephone rate information from different companies to identify the least expensive provider. (Automatic rate updates will be available for download on a monthly basis).

Initial Start-up costs will include \$100,000 to develop software, \$50,000 to develop product, \$50,000 to produce the first 1000 units and run a limited test market, prior to Q.1. In terms of periodic direct costs / variable costs, it is anticipated that material and miscellaneous will cost \$30 per unit (\$19 hardware + \$11 software, as broken down in the schematic chart, in the Appendix). We are looking to outsource/subcontract production to a lower cost manufacturer within 1 year, though, thus \$30 being a fairly conservative estimate. Additional costs include labor of \$2 per unit, sales commission of 5% of revenue, and sales support of 3% of revenue. In terms of periodic fixed costs 14 researchers will be hired to gather information on call plans and prices, 2 researchers for product development, as well as 3 managers (sales, marketing and operations). In terms of advertising, costs of \$500,000 per year are anticipated and planned for. Lastly, there will be other supplementary costs associated with facilities, web site maintenance, patenting, trademarking, administration, etc..

#### Sales, Market Projections, Financing, Pricing & Future Options (Including product development and exit)

As far as sales are concerned, this is a growing market. In addition, as mentioned above residential and private customers are under-served, i.e. their needs not being met by the long distance providers. Annual sales are estimated to be around \$12 million, with 3% penetration of small business segment, as well as 3% penetration of the household segment. This forecast does not include additional product lines that are expected to be launched in years2 and 3, based on the same technology. It also does not include an anticipated industry adaptation making this technology into a commodity product comparable to "Sabre" for the airline industry. Based on these relatively conservative estimates, a gross margin of 42.8%, and a net margin of 18+% are forecasted, as outlined in the financial data included in the Appendix.

Initial financing of \$100,000 is being provided through the founding management team of four University of Chicago MBA students. The funds stem from personal savings, and funds raised through home loans, bank overdraft/credit lines, family, and friends. An additional \$750,000 are being sought from outside investors in return for 45% of the company. The company will also look into small business grants, loans, special government funding and other sources, if necessary.

1 See Appendix for detailed product flow-chart, outlining product/user set-up, as well a another chart showing breakdown of component costs

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In terms of a long run exit strategy, or future potential, there are a lot of options. TollSaver could opt to merge with another software company; it could license its technology to outside consulting firms, or even sell-out to a major telecommunication provider (who wants imperfect information). Additionally, TollSaver might launch other products (expand the product line), or it may be even go public.

Future Features might include an increased breadth of rate information for smaller long distance retailers. Again, other "spin-off" products may also be launched for other markets, where rate comparisons may be useful. Using the Internet as an initial sales medium, combined with the utilization of domestic partnerships with international corporations, the company might also expand internationally, e.g. through a package comparing rates for different Callback providers. Additionally, TollSaver might set up sales/commission contracts with telecommunication providers, as another retail outlet. The management team is also looking into allow automatic long distance provider switching through its software and web site. While this would guarantee the company referral commissions from long distance companies, it might jeopardize its "neutrality" in the eyes of the customers. The options will be carefully studied. TollSaver will also continue to work on product updates, to incorporate market changes, such as finding ways to take advantage of phone companies posting bills online in the future. One such update may include an "online reader" feature, which will automatically "read" these bills and verify them automatically against information stored in TollSaver. Furthermore, the company is ideally set up to monitor calls made through Internet Telephony (telephone calls made via the Internet), which TollSaver will be able to monitor, too.

The company will pursue perceived value pricing. Assuming a very conservative average phone bill of \$100 every month, or \$1,200 per year, a consumer is typically over-spending by at least 10%. Based on this the total loss is \$120 per year due to over-billing and/or lack of knowledge about lower cost calling plans. At a price of \$65, TollSaver thus pays for itself.

#### Marketing and Distribution Strategies

In regards to promotion TollSaver will engage in advertising, including magazines (Inc., Entrepreneur, Ethnic / International Community Publications), direct mail / direct e-mail to address lists obtained through small business agencies and organizations. The company will also pursue alliances, co-branding and corporate sponsorships, such as from Intuit QuickBooks, Peachtree Office Accounting, or other small business accounting packages, etc.. It will also look to work closely with or through financial institutions that make small business loans and other organizations, companies and publications serving the small business segment. In addition, the company will pursue active web advertising on consumer and small business oriented web sites, telecommunication web sites, and more.

Sales and product placement will be pursued through direct sales, phone orders (1-800-TollSaver), a web store front (www.TollSaver.com), trade shows, specialty stores/catalogs (e.g. Hello Direct) and download sites, as well as outside agents.

#### Management

The TollSaver management team is made up of four MBA students from the University of Chicago. They share a unique combination of sales, marketing, and technology related backgrounds, among other things. There are 15 years of software experience; 5 years of digital communications hardware experience; 1 year of telecommunications experience; 5 years of international sales and marketing experience; 5 years of management and operations expertise; 2 years of small-enterprise management experience; 2 previous start-up experiences; as well as 3 years of Internet commerce, advertising, and direct-email experience. Furthermore, the management team has access to contacts and advice from consultants, telecommunication insiders, ad-agencies and more.

#### Competition, Barriers to Entry & Risks

Potential competition may come from existing and future software / hardware providers, who currently only serve telecommunication firms and large business customers. Ultimately, their infrastructure is not set up to deal with individual private customers, or small business sales. These are generally companies who provide a solution for companies to track all outgoing calls and offer the option to generate all sorts of various reports. None of them provide extensive rate comparisons. Other potential entrants may include companies who provide call management accounting software packages, or specialty telephone product related companies, such as HelloDirect. This may be partially overcome through strategic partnerships, licensing of the technology and barriers to entry. Potential barriers to entry relate to speed to market, technological knowhow, patents/trademarks (though virtually impossible to defend), and very importantly strategic partnerships.

#### Agents:

Consultants who analyze bills and make suggestions

FoneSaver (\$30)

Unitel (per assignment basis)

Websites that offer online rate comparisons & ability to switch to one of their partner carriers

These do not, however, look at individual call patterns

Smaller long-distance providers who offer customers the option to fax in their phone bills for a rate comparison

#### Plan Data Providers:

Web sites that provide call plan information

They do not analyze your bill

#### Summary:

What is the essence?

Innovation & New Technology

(Image Marketing)

#### Why do people buy?

Comfort in knowing they are not getting ripped off by phone companies

Phone bill monitoring at anytime

Time & cost savings as a result of identification of optimal long distance provider given individual call patterns

Least expensive possible phone bills for volume and international callers

Monthly (free) updates of new & additional calling plans

#### What is ROI vs. Risk

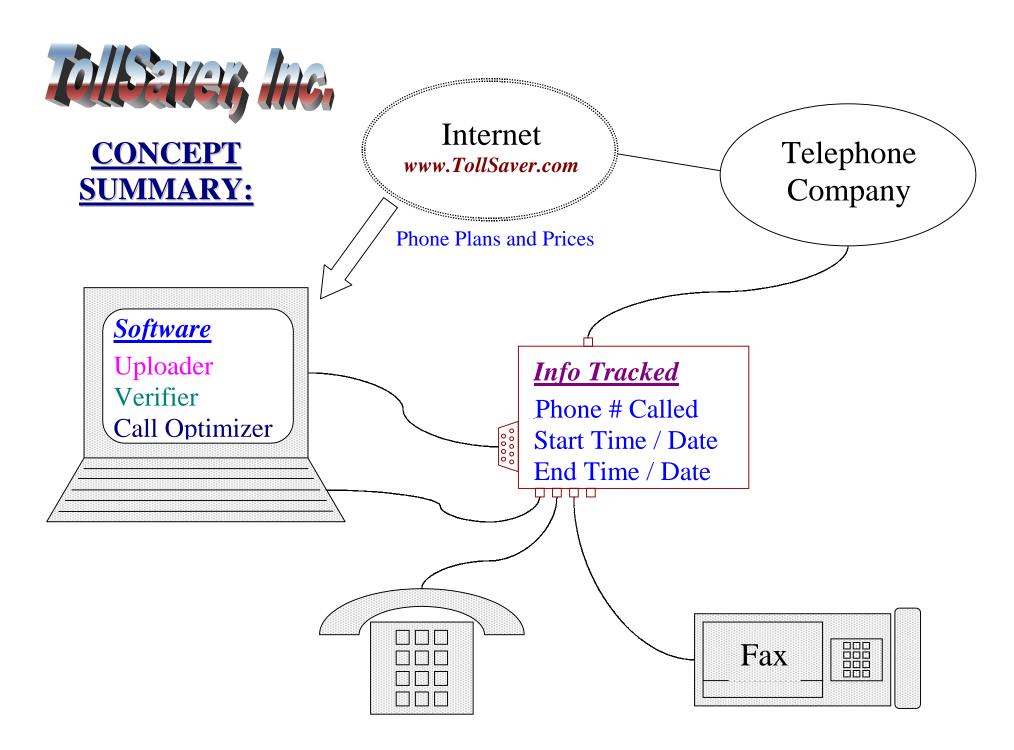
Expected IRR is 57% in real terms (60% in nominal terms)

Risk: above average

Being lessened for through a limited test market prior to Q.1

Risk being spread through aggressive product development & product portfolio diversification

New Technology, patents & trademarks will have a resale value





# Can check phone expenses anytime, instead of just once a month!!!

## **SAMPLE Verification Report**

(Ouery: items since 12/1/98)

Today's date:	12/4/98
Last upload:	12/4/98

Phone Called	<u>Location</u>	<u>Date</u>	<u>Time</u>	<b>Duration</b>	\$ Amount	<u>Plan</u>
Source Phone: (3	312) 555-1111					
(612) 383-2929	Washington D.C.	12/01/1998	3:30pm	56 min	\$8.96	MCI Residential (weekend)
(721) 833-1929	Tulip, AR	12/02/1998	11:21am	30 min	\$2.40	10-10321 (weekend)
9663-878-5181	Unock, Madagascar	12/03/1998	2:33pm	1 hr 30 min	\$97.20	MCI Residential (day)
(838) 837-1827	Anaheim, CA	12/04/1998	9:30am	45 min	\$2.40	1-800-Call-AT&T (evening)
					\$2.40	

## **Taxes and Additional Charges**

<u>Plan</u>	<u>Description</u>	\$ Amount	
10-10056	State Infrastructure Maintenance Fee	\$0.01	
	Municipal infrastructure Maintenance Fee	\$0.02	
	Federal at 3%	\$0.03	
	Illinois at 7%	\$0.08	
	Municipal at 5%	\$0.05	
		\$0.19	
MCI Residential	Domestic Toll Free	\$0.58	
	Domestic Outbound	\$2.35	
	International Outbound	\$4.03	
	International Calling Plan	\$3.00	
		\$9.96	(cont'd)





Call Optimizer is updated once a month via a free downloadable upgrade with new calling plans and prices

(The top 4 long distance companies share 85% revenue market share. Thus TollSaver may initially provide rate comparisons for the top 20 providers, looking to include rate information about additional carriers constantly.)

## The Call Optimizer...

#### On initial install of *TollSaver* software

- Survey wizard determines expected calling pattern
- Recommends base calling plan

#### Optional - Before making call

- Prompts caller for out-going number
- Recommends least expensive plan
- Auto-dial

## After history of calls

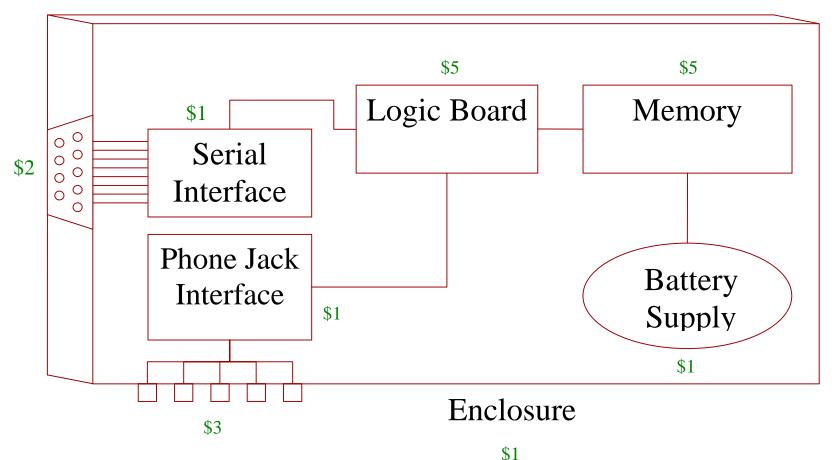
- AI module constantly scans for "core" pattern
- Recommends new base calling plan





## **Total Cost of Hardware Components: \$19**

(+ Software Approximately: \$11)





#### 1992 Economic Census -- Enterprise Statistics

Geography: United States Industry (SIC): All industries

Receipt size	No. Estab	Employees		
\$5 million or more \$2.5 to \$4.9 million \$1 to \$2.49 million \$500 to \$999 thousand \$250 to \$499 thousand \$100 to \$249 thousand	249,757 520,426 629,549 869,124 1,196,681	5,943,957 8,115,675 5,884,840 4,966,631 3,890,235		
Less than \$100 thousand	1,175,653	1,915,081		
	4,641,190	30,716,419		

Source: U.S. Bureau of the Census

# How did I compute 9,500 per quarter unit sales to small businesses?

Number employees per unit: 5
# Target consumer group units: ######

Penetration: 3%
Years turnover of businesses: 5

Annual sales (1992) 36,860
Quarterly sales (1992) 9,215



Years 1 & 2
(Dollar values expressed in real terms)

		Yr1, Qtr 1	Yr1, Qtr 2	Yr1, Qtr 3	Yr1, Qtr 4	Yr2, Qtr 1	Yr2, Qtr 2	Yr2, Qtr 3	Yr2, Qtr 4
Price		\$65	\$65	\$65	\$65	\$65	\$65	\$65	\$65
		•	·	·			·		·
Units sold									
Small businesses		-	500	925	1,711	3,166	5,857	10,835	15,000
Household consumers		-	300	555	1,027	1,899	3,514	6,501	12,027
Total		-	800	1,480	2,738	5,065	9,371	17,336	27,027
Revenue		-	52,000	96,200	177,970	329,245	609,102	1,126,839	1,756,745
Variable Costs	Per Unit								
Direct material	\$30	-	(24,000)	(44,400)	(82,140)	(151,959)	(281,124)	(520,080)	(810,805)
Direct labor	\$2	-	(1,600)	(2,960)	(5,476)	(10,131)	(18,742)	(34,672)	(54,054)
Sales commission	5%	-	(2,600)	(4,810)	(8,899)	(16,462)	(30,455)	(56,342)	(87,837)
Sales support	3%	-	(1,560)	(2,886)	(5,339)	(9,877)	(18,273)	(33,805)	(52,702)
		-	(29,760)	(55,056)	(101,854)	(188,429)	(348,594)	(644,899)	(1,005,399)
Gross Profit		-	22,240	41,144	76,116	140,815	260,508	481,941	751,346
Gross Profit %		n/a	42.8%	42.8%	42.8%	42.8%	42.8%	42.8%	42.8%
OH Costs									
Researchers (price plans)	14	(105,000)	(105,000)	(105,000)	(105,000)	(105,000)	(105,000)	(105,000)	(105,000)
Research (for product development)	2	(150,000)	(26,250)	(26,250)	(26,250)	(26,250)	(26,250)	(26,250)	(26,250)
Management Salaries	3	(45,000)	(45,000)	(45,000)	(45,000)	(45,000)	(45,000)	(45,000)	(45,000)
Advertising		<del>-</del>	(125,000)	(125,000)	(125,000)	(125,000)	(125,000)	(125,000)	(125,000)
Office, warehouse leases		(15,000)	(15,000)	(15,000)	(15,000)	(15,000)	(15,000)	(15,000)	(15,000)
Web site hosting costs		(2,500)	(2,500)	(2,500)	(2,500)	(2,500)	(2,500)	(2,500)	(2,500)
Administration		(25,000)	(25,000)	(25,000)	(25,000)	(25,000)	(25,000)	(25,000)	(25,000)
Total		(342,500)	(343,750)	(343,750)	(343,750)	(343,750)	(343,750)	(343,750)	(343,750)
Operating Profit Interest		(342,500)	(321,510)	(302,606)	(267,634)	(202,935)	(83,242)	138,191	407,596
Taxes	34%	116,450	109,313	102,886	90,995	68,998	28,302	(46,985)	(138,583)
Net Profit		(226,050)	(212,197)	(199,720)	(176,638)	(133,937)	(54,939)	91,206	269,014



# Years 3 & 4 (Dollar values expressed in real terms)

		Yr3, Qtr 1	Yr3, Qtr 2	Yr3, Qtr 3	Yr3, Qtr 4	Yr4, Qtr 1	Yr4, Qtr 2	Yr4, Qtr 3	Yr4, Qtr 4
Price		\$65	\$65	\$65	\$65	\$65	\$65	\$65	\$65
Units sold Small businesses Household consumers Total		15,000 18,877 33,877	15,000 34,922 49,922	15,000 45,000 60,000	15,000 45,000 60,000	15,000 45,000 60,000	15,000 45,000 60,000	15,000 45,000 60,000	15,000 \$45,000 60,000
Revenue		2,201,991	3,244,933	3,900,000	3,900,000	3,900,000	3,900,000	3,900,000	3,900,000
Variable Costs Direct material Direct labor Sales commission Sales support	Per Unit \$30 \$2 5% 3%	(1,016,304) (67,754) (110,100) (66,060) (1,260,216)	(1,497,662) (99,844) (162,247) (97,348) (1,857,100)	(1,800,000) (120,000) (195,000) (117,000) (2,232,000)	(1,800,000) (120,000) (195,000) (117,000) (2,232,000)	(1,800,000) (120,000) (195,000) (117,000) (2,232,000)	(1,800,000) (120,000) (195,000) (117,000) (2,232,000)	(1,800,000) (120,000) (195,000) (117,000) (2,232,000)	(1,800,000) (120,000) (195,000) (117,000) (2,232,000)
Gross Profit Gross Profit %		941,775 42.8%	1,387,833 42.8%	1,668,000 42.8%	1,668,000 42.8%	1,668,000 42.8%	1,668,000 42.8%	1,668,000 42.8%	1,668,000 42.8%
OH Costs Researchers (price plans) Research (for product development) Management Salaries Advertising Office, warehouse leases Web site hosting costs Administration Total	14 2 3	(105,000) (26,250) (45,000) (125,000) (15,000) (2,500) (25,000) (343,750)	(105,000) (26,250) (45,000) (125,000) (15,000) (25,000) (343,750)	(105,000) (26,250) (45,000) (125,000) (15,000) (25,000) (343,750)	(105,000) (26,250) (45,000) (125,000) (15,000) (25,000) (343,750)	(105,000) (26,250) (45,000) (125,000) (15,000) (2,500) (25,000)	(105,000) (26,250) (45,000) (125,000) (15,000) (25,000) (343,750)	(105,000) (26,250) (45,000) (125,000) (15,000) (25,000) (343,750)	(105,000) (26,250) (45,000) (125,000) (15,000) (2,500) (25,000) (343,750)
Operating Profit Interest Taxes	34%	598,025 - (203,328)	1,044,083 - (354,988)	1,324,250 - (450,245)	1,324,250 - (450,245)	1,324,250 - (450,245)	1,324,250 - (450,245)	1,324,250 - (450,245)	1,324,250 - (450,245)
Net Profit IRR (real): IRR (nominal):		394,696	689,095	874,005	874,005	874,005	874,005	874,005	874,005