

# SIBM

## Spartina Internet Business Model: Manage Cash, Increase Revenue, Grow Profit

Congratulations on choosing to run an Internet business. It is quite unlike any other, with real-time feedback, and the unique feature of being able to scale and grow with limited costs in human resources and facilities. This financial model addresses the unique aspects of your Internet business.

### Revenue & Costs

A key differentiator for Internet businesses is that revenues are based on traffic. Your financial model must take into account and forecast traffic accurately. The revenue forecasting is a function of how the traffic converts to various monetization activities, such as a user clicking on a Google AdSense ad placement or buying a subscription. We believe all Internet businesses should look at their total revenue divided by their total visitors to derive a **Revenue per Visitor (RPV)**. Your mission is to grow traffic and optimize conversion to increase **RPV**.

The cost structure of an Internet business is also unique. You have many advantages: the company can be virtual to start. You may “only need a Macbook,” as the ad says, to start it. Development costs are low with advanced software development environments (Ruby on Rails) and open source tools ready for off the shelf integration. You should be employee efficient, since the technology that you build to run website can be leveraged for use by any human resources.

### Financial Model

At Spartina, our goal is to run a business at the lowest cost without jeopardizing the business opportunity. We have created a customizable model and used it successfully across many different Internet companies.

The model is designed to help you focus and think about the right levers that bring you to cash flow breakeven, and, then help you scale to large profits.

In this document, we will go through the various worksheets that you will engage with. There are also instructions within the Spartina Internet Business Model (SIBM) spreadsheet as well. The purpose of spreadsheet is modeling/forecasting your business and creating a budget, which you can then transfer into your accounting system if desired.

The model is based on a 12-month period, and not necessarily tied to your fiscal year. You can transfer the appropriate data to a fiscal year when you set up your accounting system.

In the model, you will find cells highlighted in **Yellow**: these are the ones where you will be entering information. The other cells are derived from your entered data. Instructions are provided in **Green**-highlighted cells. In this document we **bold** or underline words that refer to cells in the spreadsheet.

When you are ready to use the Business Model, we recommend this order:

- Step 1: Forecast your traffic on Traffic Waterfall sheet (Row 4, all across)
- Step 2: Go to Revenue and fill out the numbers.
- Step 3: Think about how many people to meet the headcount; Fill in the Heads, forecast headcount.
- Step 5: Go to the Budget Sheet
- Step 6: Complete Cash Waterfall – “always know when you will run out of cash.”
- Step 7: Go to line 10 of Roll up and add growth rates.

## Headcount

The model starts with **headcount**, the HR resources that you need to deliver your business. The principle is to be as lean as you can. ([See our article on staffing](#) ) Lean staff = more efficient communication = higher productivity.

Your number one job is to hire great people and wait if you are ever unsure. Of course, every company wants that. But for an Internet company, one great programmer is better than three good ones. One “rock star” developer gives the programmer complete control, and they can work with super efficiency. Several of our partner companies have been created with a CTO that codes, producing amazing results in time to market and product evolution.

Your Company Name				
Headcount - Confidential		Month 1	Month 2	Month 3
CEO		\$10,000	\$10,000	\$10,000
CFO				
CTO & Lead Developer		\$5,000	\$5,000	\$5,000
Developer				
Dir. Engineering				
Front End Developer				
Business Dev't & Sales				
Client Support				
VP Marketing				
Dir Product Mgmt		\$2,500	\$2,500	\$2,500
Graphic design				
		\$17,500	\$17,500	\$17,500
Bonus reserve	5.00%	\$875	\$875	\$875
Total with bonus		\$18,375	\$18,375	\$18,375
Taxes & benefits	11.00%	\$2,021	\$2,021	\$2,021
TOTAL		\$20,396	\$20,396	\$20,396
Headcount		3	3	3

In our sample company, we indicate 3 people. Adjust this based on your situation.

We include an optional Bonus reserve percent. If you are planning on paying a bonus at the end of year, you should accrue for it, so you set aside money. It's not going to affect your cash but you know that it is a true cost. We include this in the model and in the budget. In addition, please accrue the amount in your accounting system.

There is also a line for Taxes and Benefits. You could modify this and include an individual line for each of the

taxes (city, state, federal). In our model, we use an estimate for all the taxes. The range for taxes is 11%-18.5 % depending on the location, and whether you have a local or city tax as well.

Benefits can be as high as 15 – 33% once you provide health insurance and a 401k plan. Note that in the long run, the real price of an employee, including benefits, administrative overhead, etc. is almost double what you are paying out in cash. However, as a startup, often these costs are non-cash, since you may be offering stock incentives, and not offering benefits, etc. (See Spartina.com compensation articles).

In your accounting software, be sure to accrue what actually gets debited and what the forecast number is, so that you can accrue taxes and bonuses correctly.

All the figures in the headcount worksheet automatically roll up to the **Budget** worksheet, which is the next place you need to enter some data.

## Budget Worksheet:

FINANCIAL PROJECTIONS		January	February
		Month 1	Month 2
<b>REVENUE</b>			
	All Revenue (tab Rev)	\$77	\$153
<b>EXPENSES</b>			
<b>STAFF</b>			
	All Headcount (Heads)	\$20,396	\$20,396
<b>CONSULTANTS</b>			
	Finance	\$250	\$250
	Legal	\$500	\$500
	Technology	\$500	\$500
	Content & Editorial	\$500	\$500
	Website Design	\$500	\$500
	Marketing (SEO, PR)	\$500	\$500
	Other	\$500	\$500
		\$3,250	\$3,250
<b>TOTAL STAFF &amp;</b>		<b>\$23,646</b>	<b>\$23,646</b>

**Staff:** The figures for this line are automatically transferred from the **Heads** worksheet.

**Consultants:** In addition to employees, consultants are a way to get best quality work done, be efficient and not have employee overhead for something you don't need on a full-time basis. Typically you will need consultants for finance, legal, additional technology, content, and web design. Each of these categories fluctuates in the amount that you need and when you need them.

Our spreadsheet considers consultants as virtual staff, which is why they are up at the top of the spreadsheet. However, in accounting terms, each of the consultants might be distributed across categories, such as product development (for web design) etc. We leave it to you to set up the accounting system to work best for you.

Financial consultants include your bookkeeper and accountant. Expect to spend \$250-\$1,500/month on this category, depending on what is happening at any given time. For example, tax returns will cost about \$1k-\$5k depending on the complexity, and a good bookkeeper for a few hours a week will cost about \$50/hr.

We amortize these expenses over the year. If you just put the cost in the month, i.e., tax returns in April, then you don't get a true sense for a given expense.

If you are trying to manage the cash (i.e., putting your actuals into this spreadsheet) then you might group them around when they occur. But in the beginning it's helpful to get the overview of what it will cost to do your business. We encourage you to use your accounting software for the actuals.

Legal Consultants: It is really important to do things right; fixing things costs more in the long run here. Our [second favorite quote](#) seen in an auto parts store, is "The inconvenience of poor quality lingers longer than the thrill of a bargain."

Get legal help from people who know start-ups and will do things with a not-to-exceed quote. However, you can still expect to spend a fair amount of money, especially if you are doing a funding event, issuing stock options, or entering into significant agreements with third parties.

When you work with a lawyer, get a template agreement so you don't need the lawyer every time. For example, consultant agreements can be drawn up once by the lawyer, and then used repeatedly. The one exception is stock options. You really want them to issue all the paperwork, because if you do it wrong, you will pay multiple people to try to fix it.

To keep funding transaction costs down, see Spartina.com link to [YCombinator forms](#) and our article on [Convertible Notes](#).

Technology: This line item is for additional programmer services that are easily outsourced. If you are doing everything with a single employee you can delete this line.

Content and Editorial: This is also a unique part of Internet business. Content drives traffic. Every website should have a meaningful amount of content and it's development should be on-going. Additionally, an editorial eye is essential for readability and meeting company standards and philosophy. Both of these, the content writing (or sourcing) and the editing can be contracted out.

Website Design: Prior to the development, be sure you have designed, and tested several designs for usability. Outsource the designer rather than having a full-time employee.

Marketing: This line item relates to marketing consultants (other marketing costs are found below.) The key to success in an Internet business is Search Engine Optimization (SEO). As soon as the site is nearing completing, it is essential for a qualified SEO consultant to look at it and make recommendations. This is a great service to outsource. In addition, no need to have an in-house PR team. There are many on-line services acting as newswires that can disseminate your press release. You may also contract out the writing of press releases and ads. We encourage you to make direct media contact; a blog is one great way to do this.

<b>MARKETING</b>	<b>Marketing (Paid traffic)</b>	\$100	\$100
<b>OPERATIONS</b>	<b>Hosting Provider</b>	\$100	\$100
	<b>Phone</b>	\$125	\$125
	<b>Rent</b>	\$500	\$500
	<b>Office Internet</b>	\$150	\$150
	<b>SaaS</b>	\$150	\$150
	<b>Software/License Renew</b>	\$50	\$50
	<b>Equipment (Hardware)</b>	\$250	\$250
	<b>Supplies, Office Furn.</b>	\$50	\$50
	<b>Travel</b>	\$500	\$500
	<b>Conference/Tradeshows</b>	\$500	\$500
	<b>Dues/Subscriptions</b>	\$50	\$50
	<b>Insurance</b>	\$50	\$50
	<b>Petty Cash/Entertainmer</b>	\$150	\$150
		<b>\$2,625</b>	<b>\$2,625</b>
<b>CAPITAL EXPENSES</b>			
	<b>DC Equipment</b>	\$0	\$0
<b>TOTAL EXPENSE</b>		<b>\$26,271</b>	<b>\$26,271</b>

**Marketing:** Paid Traffic. Buying traffic from Google, Yahoo, Facebook. You want most of your traffic to come from SEO, but you may want to test terms, or jumpstart the company. This Paid Traffic figure comes up from the **Revenue Worksheet**, described in the next part in this series.

**Operations:**

Hosting: This is a cost unique to Internet businesses. Managed hosting solutions are preferable over buying boxes and putting them somewhere. Engineyard, Slicehost, and Amazon Cloud offerings

are examples of managed hosting.

With co-located hosting, ultimately you pay more because you need more administrative people and you have a bigger risk when the system goes down. Managed Hosting solutions are also a more scalable system. When your traffic ramps up, you don't have to buy additional hardware, depreciate it, etc. It simplifies the business model. Yes, you do pay more in the short term but...

Phone: If you can just use cell phones, do it. If you need a phone system, it could be as much as \$50/employee/month. It's not cheap! VOIP services are worth looking at. In reality, you use the phone less and less, and with an Internet business, even your customer service can be on line. We recommend RingCentral and OneBox.

Rent: If you don't need an office, don't get one. It's a hassle. You think it might be cheap but then you have to deal with general liability insurance, furniture, cleaning, utilities, security. A better solution is to meet with your people at a coffee shop or your lawyer's conference room. We found that renting the fully-serviced office spaces are too expensive, and you pay for services you probably don't need, like sophisticated and costly phones; kitchen amenities, etc.

Office Internet: You may not need it, but if you do shop with your phone provider first, or cable company.

SaaS Services: (Application Service Providers, or Software as a Service)... things such as Bill.com, GoToMeeting, Earthclass Mail, PayCycle... everything that you are paying by the month that is an internet-based business services. If you like, you can add rows for each product you are using, or track them all on one row. For reviews of Saas products, visit [CoolBizApps.com](http://CoolBizApps.com).

Software Licenses are any software that you purchase to run your business or build your product... MS Office, WebAppBuilding tools.

**Small Equipment:** This is your budget for the year, other than items over \$2,000, which come later under Capital Expenses.

The next lines are obvious: Supplies, Office Furniture, Conferences/Tradeshows, Dues/Subscriptions

**Insurance** (see article.) Start with General liability, under \$500 a year. As you grow and take outside investments, you will need Directors&Officers insurance at \$5,000 a year.

**Entertainment:** It's important to have fun. We encourage giving the budget to your employees and let them determine the fun things to do with these funds.

**Capital Expenses:** For example, if you decide to host the site yourself, you would need to include the cost of the servers. We generally expense items under \$2,000, which includes most desktop computers.

**Bottom Lines:** At the bottom of the Budget Worksheet, we add a few useful figures. First, the standard Gross Profit, by subtracting the marketing costs, and then, Net Profit. (Read our article on [Big Profits.](#))

TOTAL EXPENSE		\$26,271	\$26,271
GROSS PROFIT (Sales - Marketing)		-\$24	\$53
NET PROFIT		-\$26,271	-\$26,271
Interest Earned	0.00%	\$0	\$0
New Capital Interest			
CASH ON HAND	\$100,000	\$73,729	\$47,458

**Cash on Hand** is a calculation that helps you gauge your cash position, starting with your initial cash, and then deducting or adding the profits or losses. In our example, \$100,000 would be entered by the user, but it

will reflect the actual starting cash. **New investment** is when you receive new investment money. It then gets factored into your cash position.

The next worksheet, **Revenue** will show us where the revenue figures come from.

## Revenue Worksheet

In an ideal Internet business, you will have multiple revenue streams. The more you have, the more likely the business will succeed. The **SIBM** (Spartina Internet Business Model) allows for multiple revenue streams, such as digital subscriptions, advertising, affiliates, and others.

Each revenue stream monetizes at a certain rate. Some monetize by visitors and some by pageviews. For example, subscriptions are usually calculated based on the number of visitors:

$$\text{Subscription Revenue \$} = \text{Price} * \% \text{Conversion rate} * \text{Number of visitors}$$

The unique feature of the **SIBM** is the ability to track/estimate revenue flows from visitors to your website based on their monetization action. There are multiple monetization actions that describe how visitors convert to revenue.

All of this complexity of your business forecast is handled in the **Revenue and Traffic Forecast Waterfall** worksheets.

META Revenue		
	January	February
Traffic (Visitors)	500	1,000
Pageviews/Visitor	2	2
Pageviews (PV)	1,000	2,000
<b>Clickthrough Rate/Visitor</b>		
Affiliate Network	0.50%	0.50%
AdSense	0.50%	0.50%
Subscription	0.10%	0.10%
E-commerce	0.10%	0.10%
<b>Total CTR/Visitor</b>	<b>1.20%</b>	<b>1.20%</b>
<b>CPM (% Pages with Ads)</b>		
	50.00%	50.00%

**Revenue** begins with traffic, which comes from a **Traffic Forecast Waterfall** worksheet.

In our model, we assume in month one, you get 500 visitors, and that each visitor visits 2 pages. This yields 1,000 pageviews where they could generate a monetizable action, such as clicking on Affiliate link or AdSense ad. They could also buy something, such as a Subscription or E-commerce item.

Each revenue stream has a conversion rate at which it occurs. The conversion rate is where your focus will be, and your goal will be to drive the rate up. In general, you would start your model at a low percent, (i.e., a low rate of conversions). In the above model, we assume

.5% of page views will generate a click. As you get actual data, adjust your forecast going forward. Google Analytics can help you track conversions.

**CPM** (display advertising) is another revenue stream. In this case, you would join an ad network (Glam, etc.), and they pay based on the number of 1,000s of page views. You sell someone a percentage of total page views for the display advertising placement. So in this part of the spreadsheet we are tracking what percentage of our pages have ads on them, i.e., 50% (rather than the other numbers which were a percentage of our page views that generated a click.)

As you get the real information, you will change your forecast. That's the beauty of the model... it continues to adapt based on real conditions that you update. (See our metrics dashboard, which allows you to watch the performance each week and update your model.)

## Revenue Per Click

After you have estimated the rate of conversion, you can look at the revenue that each action will generate. In other words, what is each click worth? (Note that while we call this Revenue Per Click (RPC), you may also see it called Cost Per Click (CPC), as it is the cost that the advertiser incurs by having the ads on your site.)



To understand the revenue from Affiliates, in general you will learn from experience. Each affiliate pays at a different rate, and for different actions: clicks, purchases, etc. We can come up with a low average, such as \$.10 and adjust as you go along. Note that you are taking conversion rate risk for affiliate programs, so test, test, and test to find good ones.

<b>Revenue Rates</b>			
Affiliate Network	\$0.10	\$0.10	\$0.10
AdSense	\$0.25	\$0.25	\$0.25
CPM	\$1.00	\$1.00	\$1.00
Subscription	\$99.00	\$99.00	\$99.00
E-commerce	\$49.00	\$49.00	\$49.00
<b>Revenue</b>			
Affiliate Network (V)	\$0.25	\$0.50	\$1.25
AdSense (PV)	\$1.25	\$2.50	\$6.25
CPM (PV)	\$1.00	\$2.00	\$5.00
Subscription (V)	\$49.50	\$99.00	\$247.50
Ecommerce (V)	\$24.50	\$49.00	\$122.50
<b>Total revenue</b>	\$77	\$153	\$383
<b>Revenue per visitor</b>	\$0.15	\$0.15	\$0.15

To know your monetization rate for Google AdSense, you will need to watch your reports and keep your spreadsheet up to date as real numbers come in. \$.25 is a good starting point, but be sure to check this at least weekly.

Regarding the CPM ad revenue, a good estimate is that for every 1,000 pageviews you get something like \$1-\$5 cpm. This can sometimes be much higher if your site is in a highly monetizable category such as real estate, finance, or travel.

Subscription Revenue is assuming that you sell a subscription product. Delete the row if it doesn't apply. Otherwise, you would fill in the value of the subscription that you are selling. You might consider netting the price to reflect your refund/cancel rate. For example, if your subscription price is \$50/yr, but you experience 20% refunds, use a \$40/yr price for the Subscription price.

E-commerce represents any digital or physical products you are selling, such as reports, books, software, etc.

After filling in the Revenue Rates, the total revenue is then calculated for you based on the Rate of Conversions times the Revenue Rates. The Revenue Per Visitor (RPV) is calculated by dividing by the Total Revenue divided by the number of visitors.

The bottom line "Total Revenue" is carried back into the Budget worksheet.

### Revenue: Costs

The Revenue Worksheet also contains figures on costs for the revenue so that we get accurate net results.

<b>Paid Traffic Budget</b>	\$100	\$100
Cost per visitor (Paid Traffic)	\$0.30	\$0.30
Paid visitors	333	333
% paid	67%	33%
% free	33%	67%
<b>Blended cost/visitor</b>	\$0.20	\$0.10
<b>NET</b>	(\$24)	\$53
<b>NET PER VISITOR</b>	(\$0.05)	\$0.05

The first figure, Paid Traffic Budget, is how much you are spending on your paid traffic. This line item shows up in the Budget under Marketing: Paid Traffic, i.e., it is carried from this worksheet to the Budget worksheet.

The Cost per visitor comes from the reports you get via the AdWords dashboard. (Assuming you use Google Adwords to buy traffic.) Once you

know the cost per visitor, you can calculate the number of Paid visitors. In other words, dividing your total budget for paid traffic by the cost per visitor tells you how many visitors you are "buying."

We can also look at the Paid traffic versus free traffic and come up with a Blended cost per visitor.

The goal over time is to increase the number of free visitors, and decrease the paid visitors, so the cost per visitor begins to go down.

Finally, RPV minus CPV is the net revenue per visitor (NRPV). To calculate your net margin per visitor, divide RPV by NRPV.

### Managing your Revenue

The Revenue sheet of the Financial Model spreadsheet offers two important numbers: Total revenue per visitors and Costs per visitor. The management goal is to increase the revenue/visitor and decrease the cost/visitor. This usually happens naturally as you attract free traffic.

Our financial model has two more unique worksheets: **Traffic Forecast Waterfall** and **Cash Waterfall**. We will explore these next.

### Traffic Forecast Waterfall

A waterfall spreadsheet is an amazing creation, and once you get the hang of using it, you will probably turn to it for many applications. A great article on [Using the Waterfall](#) can be found on Spartina.com.

Traffic Waterfall Forecasting Model Overview				
Traffic				
	January	February	March	April
Plan	500	1,000	2,500	5,000
January		1,000	2,500	5,000
	February		2,500	5,000
		March		5,000
			April	
				May

Our **Traffic Forecast Waterfall** allows for dynamic updating without losing perspective of what you thought you would do in the year or last month. Every month you get a better sense of how things are progressing, and make changes accordingly.

On this sheet, the vertical column is what you think will happen in a month, and the last value in each column is what actually happened. Month by month, you enter the actual data and reforecast the remaining months. As the numbers change here, they will affect the **Revenue** worksheet.

The process is keeping the waterfall up-to-date by fixing the actual traffic number, re-forecasting the rest of the year, which then recreates the revenue and adjusts the budget.

### Cash Waterfall

The same process is used for managing cash. The goal is to make sure you are not going to run out of money.

Cash Waterfall Forecasting Model Overview				
	January	February	March	April
Plan	\$25,000	\$20,000	\$15,000	\$10,000
January		\$20,000	\$15,000	\$10,000
	February		\$15,000	\$10,000
		March		\$10,000
			April	
				May



You start with your projections. Then each month, take the cash figure from your accounting system, and enter the real cash that has gone out. (This doesn't account for the accruals.)

The top line represents the plan or forecast for year, and it won't change. By looking at this waterfall sheet, you can compare actuals to the plan.

### Roll Up Worksheet

The last sheet offers a summary of the first year Revenue, Expenses, and key metrics. It is a way to think about the subsequent years without trying to get precise. Rather you get a sense for the total revenue potential for 5 years, and how costs relate to that revenue. The important principle is that you want to insure that revenue grows faster than expenses.

A portion of this roll-up data goes into the executive summaries that you might use for investor presentations.

<b>REVENUE</b>			
	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>
Average monthly visitors	28,250	150,000	200,000
Average revenue per visitor	\$0.16	\$0.20	\$0.25
Total revenue	\$54,494	\$360,000	\$600,000
<b>EXPENSES</b>			
		25.00%	30.00%
Heads	3.2	4	5
Headcount	\$244,755	305,944	397,727
Consultants	\$39,000	48,750	63,375
			0
Marketing	\$5,800	7,250	9,425
			0
Operations	\$31,500	39,375	51,188
Capital Equipment Purchases	\$0		
Total expenses	<b>\$321,055</b>	<b>\$401,319</b>	<b>\$521,714</b>
<b>NET</b>			
<b>Margin</b>	<b>(\$266,561)</b>	<b>(\$41,319)</b>	<b>\$78,286</b>
			13%
Blended cost per visitor	\$0.02	\$0.05	\$0.08
Net per visitor	\$0.14	\$0.15	\$0.17
Margin per visitor	89%	75%	68%

### Conclusion

Now you've seen all the elements of the Spartina Internet Business Model, and it's time to put it to work for your business, so you can manage your cash, increase your revenue and grow your profits. Best of luck!