

“Angel Theory” Part 1: M-Systems

V4.07

By Nick Ray Ball 5th May 2016

The Hawking-Green Equation

$$(\hat{S} \times \mu) \times \# \square = \mathfrak{R}$$

So named as I was thinking about professor Michael Green’s ‘how small is the universe’ presentation about strings being so small that they could be the thing that contains us all idea. (Actual Quote was: So this thing that you think of as the smallest constituent, may, in fact, be the thing that contains all of us) Whilst listening to professors Leonard Mlodinow and Stephen Hawking audiobook The Grand Design for the 5th or 6th time on my walk, and suddenly I had a thought on how to calculate POP.

This is an equation to measure POP the Power of Profit.

It’s not actually an equation. It is a shortened version of the algorithm for a software program to calculate POP.

This equation has had quite a journey, from the Butterfly Effect to Chaos Theory to The Mandelbrot Fractal to the POP investment system to General Relativity to Newtonian Space and back to General Relativity again then finally we add the Super String Theory.

Phewwww...

It combines with 4 other equations.

1. The Susskind Boost – Measures the amount of marketing and development an S-World company delivers, in comparison to a typical company with the same Gross Profit.

Typically, the Susskind Boost of an S-World company would be about 8 times that of an equal earning competitor.

2. The Green Equation – Calculates the effect of each S-World company on each other, choosing companies that have the maximum impact on the network as a whole.
3. The Amanda Stretch – Calculates the number of reserves or boosting needed for the worst-case scenario of any group of company results.

OK, so using the network in planning, which we call a 'micro string,' we have set a Gross Profit point of \$15,625,000. Once the collection of 8 S-World 'Villa Secrets' companies are making more than \$15,625,000, the additional profit is used to create a new 'micro string.'

As we see above, over time growth increases exponentially, as so we called this effect POP (The Pressure of Profit). It was this math that underpinned the the first book, The Theory of Everything Business.

Seen first as the Butterfly Effect and now as Newtonian Space if all companies in the micro-network/string are similar and have even POP points ($\$15,625,000 \div 8 = \$1,953,125$) Or as General Relativity if there are seven smaller companies and one big one.

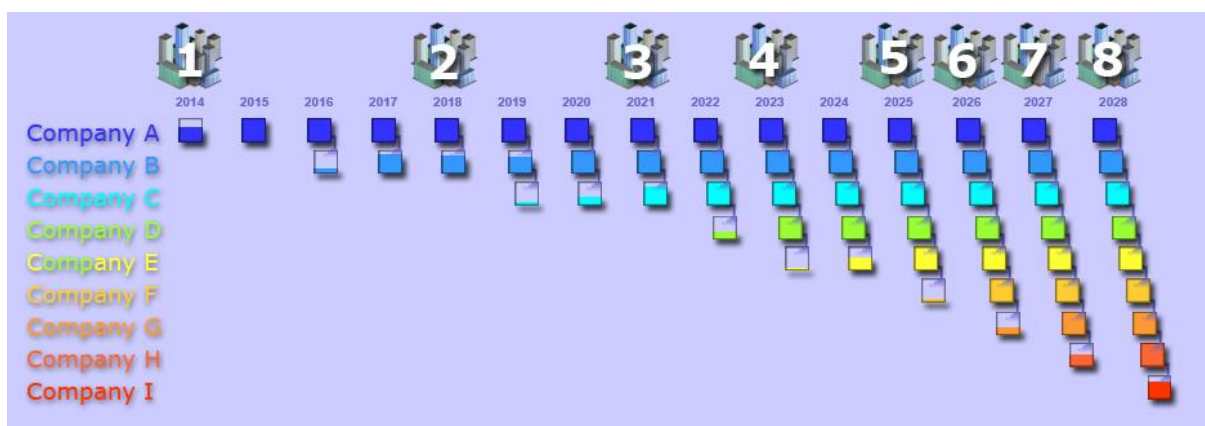
Note, each micro string joins 8 others in the same location creating a standard string of 64 companies, with a POP limit of \$125,000,000. Then 16 standard strings create a superstring of \$2,000,000,000 which folds back on itself with the highest and lowest earners creating a combined POP overflow, adding supersymmetry and greatly increasing the predictability of the overflow.

And so on, creating more and more predictable blocs of known profit and a solid way of calculating the overflow. All the time every single company is being boosted.

Hmmm, I've gone into the details as opposed to working out the equation.

So let me get back on target.

Let's see the graphic again,



So, it takes a year to reach POP and create the second network. Then after 3 years to create the third, then 3 years again to create the 4th at which point it speeds up to one new network per year.

This was from 2011. Now let me apply the current figures and the Susskind Boost.

Let's say the Villa Secrets Network was to make its profit target of \$15,625,000 in 2017.

POP = \$15,625,000 = □ unassigned posts

Let's then consider the Susskind Boost, which we can present as 200% for more resources spent on marketing and development. 200% as there is a much higher business owners to staff rate. 400% due to the TFBMS (Total Financial, Business & Marketing Software) and 200% due to effects on a company due to the other companies in its string.

All effects are effective on each other so we have a boost of 1,600% of which we can say 800% was used to get each company to its POP limit in the first place. So after POP, we have an 800% Susskind Boost

Let's give this a symbol = \hat{S}

So □ = \$15,626,000 and \hat{S} is 800%. But we need to consider the law of diminishing returns, which needs to be pegged to market share. which we shall call d

Now we need to consider the $\hat{S} \times d$ on □ each year.

d should be a slope/curve, not a straight line lessening with the company gaining more market share.

However, we need to consider the physics of string theory which says: the bigger a system the easier it is to boost. However, practically this probably will not apply due to market share, unless the companies diversify.

I can see now that this is actually a computer program...

But we work with a spreadsheet for now.

Actually whilst the math is more beautiful starting at \$15,626,000, practically in our real world, we recently reduced the network from 16 to 8 companies. And we really need to half the POP point. So, we will work on \$ 7,813,000 instead. Or maybe we could revisit the 16-company supersymmetry fold.

For now, we will work on companies with a POP point of \$ 7,813,000.00 (the point where gross profit is used to boost the individual companies), to be invested in making new companies.

And for the sake of being cautious let us also say it takes until 2018 for all companies to reach the POP point.

□¹ = \$ 7,813,000.00

Currently we are giving all companies a specific POP Point of $\square^1 = \$ 7,813,000.00 \div 4 = \$ 1,953,250.00$ or $\div 8 = \$ 976,625.00 \div 16 = \$ 488,312.50$

As such some companies will likely be a little bit in POP in 2017.

For the sake of argument, I will say the Susskind Boost will make an effect on POP of 200% in the first year recorded, in the second (2019), and it will continue to increase by 200% until it reaches 800% diminishing at 25% of market share.

We need a symbol for market share, $\mu = \$66,000,000$ in current Vacation Rental bookings, the same in newly created market share, rounded down to $\$100,000,000$ plus the same again for the Real Estate sales = $\$200,000,000$

As such we start applying δ (The law of diminishing returns) lightly at 20%, curing to ending steeply at 50%.

2017	2018	2019
		\hat{S}
		200%
\square	\square^1	\square^1
1953250	7813000	15626000
		μ
		8%
		POP Overflow
		7813000

Here we see the string of business reaches its POP point in 2018. And due to a 100% increase due to the \hat{S} (the Susskind Boost), an overflow of $\$7,813,000$ is generated in 2019. μ (Market share) is below 12.5% so there is no effect from the law of diminishing returns.

We now need a symbol for POP Overflow = \aleph

Now we need to continue and add a second string created in 2019 from the POP overflow. This string could be one small part of a much larger resort development as described in The Theory of Every Business.

However, if it is, its journey to making a profit is different as it is slowed due to the creating of the development.

So now we see

2017	2018	2019	2020
		Ŷ	Ŷ
		200%	200%
□	□ 1	□ 1	□ 1
	7813000	15626000	31252000
		μ	c
		8%	16%
			99%
			30939480
		⌘	⌘
		7813000	23126480

For now, I am applying μ at 15% and making the maximum 25% under the principle that we will also create another competing string in the same niche and location. At 16% of μ we see the slightest of effects just a 1% decrease to ⌘

At this point, it may make sense to increase □ by 100% back to the original \$15,625,000. When this happens I will write □ 1x2

I have also realised I named the law of diminishing returns twice once as d and once as μ. I will stick with the μ for market share.

Next, I extend to 2021, where you can see μ kicking in to limit both □ + ⌘ to a max of 25% of the market share.

2017	2018	2019	2020	2021	2021	2021	2021
		Ŷ	Ŷ	Ŷ	Ŷ	Ŷ	Ŷ
		1.5	1.5	1.5	1.5	1.5	1.5
□	□ 1	□ 1	□ 1	□ 1x2	□ 1x2	□ 1x2	□ 1x2
	7813000	11719500	17579250	26368875	39553313	59329969	88994953
		μ	μ	μ	μ	μ	μ
		0.0585975	0.0878963	0.1318444	0.1977666	0.2966498	0.4449748
			100%	100%	90%	80%	56%
			17579250	26368875	35597981	47463975	49837174
		⌘	⌘	⌘	⌘	⌘	⌘
		3906500	9766250	10742875	19971981	31837975	34211174

However, I have used Gross Profit, not turnover for market share which is a huge blunder.

We have on 'Size of CT VR Market No Brands' added the Gross Profit for Vacation Rentals as \$10,000,000, we can add 50% for new markets = \$15,000,000 plus double for sales and other income streams = \$45,000,000

So after some adjusting, we have

2017	2018	2019	2020	2021	2022	2023	2024
		Ŷ	Ŷ	Ŷ	Ŷ	Ŷ	Ŷ
		1.25	1.25	1.25	1.25	1.25	1.25
□	□ 1	□ 1	□ 1	□ 1	□ 1	□ 1x2	□ 1x2
	3906500	4883125	6103906	7629883	9537354	11921692	14902115
		μ	μ	μ	μ	μ	μ
		11%	14%	17%	21%	26%	33%
		100%	100%	95%	90%	85%	77%
		4883125	6103906	7248389	8583618	10133438	11474628
		⌘	⌘	⌘	⌘	⌘	⌘
		976,625	2,197,406	3,341,889	4,677,118	2,320,438	3,661,628

For this model, we have lowered the POP Point to \$3,906,500.

(This can only be created within the deal with the prototype Cape Town Villa Secrets string if we have solid backing of the math & physics.)

And we have reduced the Susskind Boost to 25% a year, basically because we did not need it to be higher. By 2021 we see μ limiting the boost to no more than 25% of market share.

Of course, a 25% increase in gross profit is a lot easier for people to grasp than 200%.

Now I need to calculate the 2nd string which is either a real estate development or another Villa Secrets, Lx or Experience Africa set of 8 companies in a location outside Cape Town. Or a different industry niche within Cape Town.

Starting a new Villa Secrets string in another location is good for a few companies, Real Estate, Architect, International Villas, Safari, Big Brand Villa Hotel, Big Brand Villas. But not ideal for the Villa Rental or Apartments companies as one really wants these companies to be manned by local people in the location.

Maybe local companies can do a 50/50 deal with a local company, in places like Thailand one needs to partner with a Thai national.

The Real Estate Development will take a few years to build. But if we worked with The SIMS rendering the development as S-World and we had competitions to design the development and houses, we could start selling the development off-plan soon as the land is bought and S-World is rendered.

I think the last example is by far the most exciting and lucrative if we can work with The SIMS. So, for now, we will work with the POP Investment into a Resort Development network. But if we don't make a deal with The SIMS, we would create new Villa Secrets strings all in one location.

IMPORTANT NOTE

Much of the half-million words in the 2nd and 3rd parts of [The Spartan Theory](#) and the first American Butterfly book: [The Theory of Every Business](#) are dedicated to showing how we expand the S-World network into many new industries to create companies that supply, build, work from and sell retail from the resort development that we build.

Now we look at the income from the first micro string and the four new micro strings created from the POP Overflow ₪

	2018	2019	2020	2021	2022	2023	2024
		Ŧ	Ŧ	Ŧ	Ŧ	Ŧ	Ŧ
Susskind Boost		1.25	1.25	1.25	1.25	1.25	1.25
POP Limit	□ 1	□ 1	□ 1	□ 1	□ 1	□ 1x2	□ 1x2
Gross Profit	3906500	4883125	6103906	7629883	9537354	11921692	14902115
Market share		₠	₠	₠	₠	₠	₠
%		11%	14%	17%	21%	26%	33%
Adjust by		100%	100%	95%	90%	85%	77%
Adjusted		4883125	6103906	7248389	8583618	10133438	11474628
		₪	₪	₪	₪	₪	₪
POP 1 Per Year		976625	2197406	3341889	4677118	2320438	3661628
POP 1 Total		976625	3174031	6515920	11193038	13513476	17175105
		976625	3174031	2609420	3380038	1793976	1549105
2nd Micro String				□ 1			
Investment				3906500			
Return				0	976625	1953250	3906500
3rd Micro String					□ 1		
Investment					3906500		
Return					0	976625	1953250
4th Micro String						□ 1	
Investment						3906500	
Return						0	976625
5th Micro String							□ 1
Investment							3906500
Return							0
POP 1 > 5 Per Year	0	976,625	2,197,406	3,341,889	5,653,743	5,250,313	10,498,003
POP Total		976,625	3,174,031	6,515,920	12,169,663	16,443,351	24,011,480

The total ₪ is now close to \$25,000,000. This is the beginning of the snowball. As we press on forward with the first of the baby micro strings about to create its own micro string, in another 10 years we will have created a significant economic number.

However, this is very hard to plot on a spreadsheet, its needs a dedicated program.

So let's just consider the equation for now.

$$\hat{S} \times \mu \text{ on } \square \text{ each year} = \text{R}$$

This describes POP in one year. But we need to add the new baby micro strings and in time the baby micro strings of the baby micro strings.

We also need to bring the math back to its cubed framework.

$$\hat{S} \times \mu \text{ on } 5\square \text{ each year} = \text{R}$$

That helps,

The effect of the Susskind Boost (and Amanda Stretch) x restriction due to market share as a percentage of the number of micro strings

$$(\hat{S} \times \mu) \times 5\square = \text{R}$$

It's oversimplified, but it's kind of cool looking.

So in 2018, we have

$$(\hat{S} \times \mu) \times 1\square = \$976,625$$

And in 2024 we have

$$(\hat{S} \times \mu) \times 5\square = \$24,011,480$$

And I would expect to hit close to a billion in 2034

Maybe

$$(\hat{S} \times \mu) \times 1000\square = \$1,000,000,000$$

From just one micro string,

At this point, we consider the poetry of Michal Green’s comment about String Theory. From [How Small is the Universe.](#)

‘So this thing that we think of as the smallest consistence, may in fact be the thing that contains us all.

So the notion, the difference between... the notion that this is the smallest constituent, is paradoxically at odds with the statement that it may also be the whole universe.’

This point has stuck in my head for 4 years, and along with the Amanda Stretch helped Villa Secrets and S-World develop its strings.

From a single individual investing in a franchise to the creation of a string of 8 franchises that over time grows into an improved global economy.

And if so, we would replicate the above model thousands and tens of thousands of time as per The Network of a String and ‘Angel POP.’ This dictates as there is an eventual end of the POP base financial framework, the completion of the network, if we can adapt to all industries is inevitable.

Therefore due to $(\hat{S} \times \mu) \times \rho = \mathcal{K}$ investment in any location will eventually be a success. And so, we can create Network growth in the poorer nations like Malawi as their eventual success is theoretically sound, and not forgetting the Amanda Stretch. We can generate success across the globe. And with it the many great and philanthropic promises made in The Theory of Every Business.

Important note, when considering the \mathcal{M} I did not allow for the operational and direct marketing costs. Here is a corrected version.

	2018	2019	2020	2021	2022	2023	2024
		Ŷ	Ŷ	Ŷ	Ŷ	Ŷ	Ŷ
Suskind Boost		1.25	1.25	1.25	1.25	1	1
POP Limit	□ 1	□ 1	□ 1	□ 1	□ 1	□ 1	□ 1x2
Gross Profit	3906500	4883125	6103906	7629883	9537354	9537354	9537354
Market Share		ℳ	ℳ	ℳ	ℳ	ℳ	ℳ
%		20%	24%	31%	38%	38%	38%
Adjust by		95%	90%	80%	75%	75%	75%

POP #y+z

By Nick Ray Ball 18th May 2016

Our model for General Relativity has been on quite a journey and was created via 2 Chaos Theory consciousness experiments in 2011.

1. The way to measure the effect of the flap of a butterfly's wing may be to put a cube around it and create a cubed framework from the flap to Tornado.
2. The processing power of our financial software would be less affected by rounding errors if the framework was created in doubles or cubes. As it was harder to create a recurring number.

So, we considered this. And after some thought conceived the 'buckets idea,' each string of companies would be set a gross profit point 'y' (currently \$4,194,304.00). Once the string made 'y' gross profit, the additional profit 'z' made in that year would be invested in the creating of a new string and a new bucket.

This was not immediately significant. Until we created a graphic that plotted the growth which showed that the more strings and buckets there are, the faster the creation of new strings. After the 'z' from buckets 1 to 4 was all flowing into creating bucket 5, the speed it takes to get the 5th string to 'y' is quicker. And when one gets to 'z' 1 to 8 the ninth and tenth string get made within a year. The more strings creating 'z' the faster the string coupling, the faster the network grows. And at the same time, each string creates a perfectly predictable 'y' (\$4,194,304) wherever the closed string is located.

We are working on an equation but really it needs an expert's assistance. What we have is the principle for an algorithm that we will use to create the software.

We call it the Hawking-Green in part because it was first considered while composing a communication to Hawking and Green from DAMPT. This was the original.

$$\# \square \times (\hat{S} \times \%M) = \mathfrak{K}$$

#□ = Number of companies

\hat{S} = Boost

%M = Apply the law of diminishing returns due to market share

\mathfrak{K} = POP funding for new companies and strings of companies

This was adapted to count strings not individual companies $g_s \times (\hat{S} \times \%M) = \mathfrak{K}$ and later we added the P for momentum, to account for goodwill. $P \times g_s \times (\hat{S} \times \%M) = \mathfrak{K}$

We know it's not correct, but it does highlight important points for the software.

Indeed, in writing this very letter it has occurred that the actual equation for POP is simply

#y + 'z'

The number of strings that have reached their POP limit and the value of the overflow.

This is a good point to get back to point 2 from Chaos Theory, the creation of a financial framework that was less disturbed by rounding errors.

The first closed string of 8 companies is counted alongside 7 other strings in different industries in the same location. Creating a 'standard string' of 64 companies, that will eventually create 64 x 'y.' The process repeats again to create a cube of 512 x y, across the county or state.

Then we continue to create a country cube that now contains 4,096 x y. Then a multi-country cube of 32,768 x y, a continental cube of 262,144 x y and finally a global cube of 2,097,152 companies creating the global cube.

This is the framework for the creation of a global cube of 262,144 strings of business. Of course, in actuality at this time the cube is being planned with just the travel and real estate industries so the global cube would be made from 32,768 strings. And to add a monetary value, the first company in the first string is likely to sell as a part of the network paying 25% of profit-share for \$150,000. With a POP point 'y' of about \$400,000 so we can say the potential of this specific industry type string is 32,768 x \$150,000, which is a lot.

The way we wish to present the global cube down to individual companies within highlights all strings on theory way to and over POP is via a hologram. We could likely do a good job with a simulated hologram, but an actual hologram would be better.

This is not the same figure as the macroeconomic plan, as we have not accounted for big business or the creation of the many resort development universities and hospitals as described in the Theory of Every Business. However, it does illustrate how we intend to use POP to create the financial foundation for the network as even cubes of y across the globe, looking a lot like cubes of Newtonian space as presented in Brain Greene's 'What is Space.'

To improve the model and to move from Newtonian Space and to make our strings look more like solar systems, we are currently working on the idea of changing one of the 8 small to medium-sized businesses with a big brand like Virgin. Whose total mass (if mass equals profit) is the equivalent size of our sum to our planets.

We have not specifically plotted the $A^{st} \leftrightarrow B^{st}$ for this. However, a big brand can have very positive effects on a micro-network, with the smaller companies gravitating towards it to gain the