



Physics & Productivity

How to use Newton's three laws of motion to become more productive

by [Andrew Cooke](#), [Blue Sky GPS](#)

In our physics classes as children we all learnt Sir Isaac Newton's Three Laws of Motion. Universal in their application they can also be used as an interesting analogy for increasing your productivity, simplifying your work, and improving your life.

Newton's First Law of Productivity

First Law of Motion: *An object either remains at rest or continues to move at a constant velocity, unless acted upon by an external force. (i.e. Objects in motion tend to stay in motion. Objects at rest tend to stay at rest.)*

Underpinning this is the basic fact that if you want to be productive they you need to take action, you never achieve anything by doing nothing! This law has two key aspects when it comes to getting things going or getting started"

Firstly, objects at rest tend to stay at rest. If you do nothing, then nothing will happen.

Secondly, objects in motion tend to stay motion. Once you get things started it is much easier to keep going.

So what are the learnings from this?

Firstly, don't procrastinate – find a way by which to get started. Just start it! (with apologies to Nike). You don't have to do much, just begin it. By beginning you start moving, and by moving you start to gain momentum., and in gaining momentum you become more motivated, and as you become more motivated so it becomes easier to do the work and your speed picks up.

This brings us to the second law.

Newton's Second Law of Productivity

Second Law of Motion: *$F=ma$. The vector sum of the forces on an object is equal to the mass (m) of that object multiplied by the acceleration (a) vector of the object. (i.e. Force equals mass times acceleration.)*

Let's break down this equation, $F=ma$, and how it can apply to productivity.

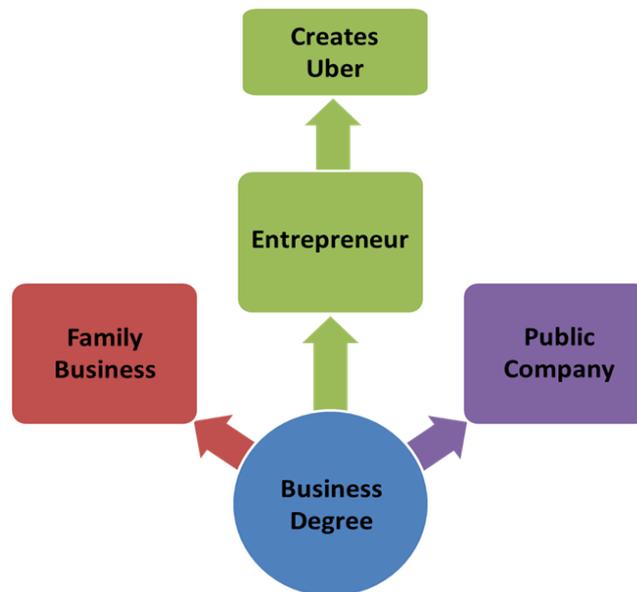
The important thing is that F (force) is a vector that involves both magnitude (how much work you are putting in) and direction (where that work is focused). In other words, if you want to get an object accelerating in a particular direction, then the size of the force you apply and the direction of that force will both make a difference.

It's the same process for getting things done in your life.

If you want to be productive, it's not merely about how hard you work (magnitude); it's also about where that work is applied (direction). This is true of big life decisions and small daily decisions.

For example, you could apply the same skill set in different directions and get very different results. As you can see in the example below you could use the skills, insights and expertise you gain from completing a business degree in several different ways. You can only do so much, so make where and how you focus time, effort and attention count!

Fig 1: Example of How You Could Use Your Skills



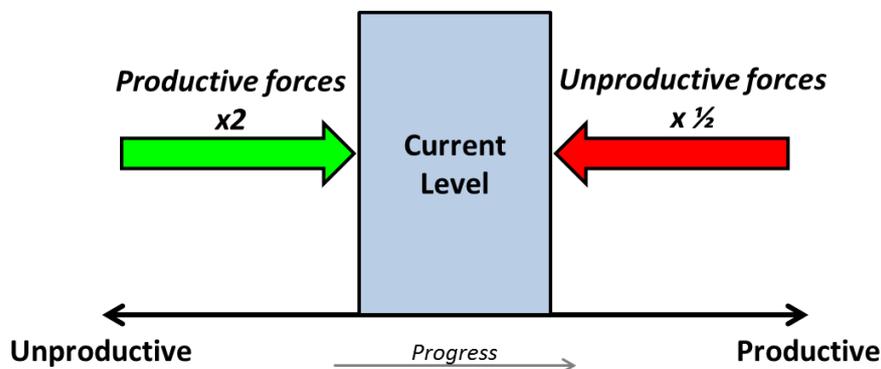
Newton's Third Law of Productivity

Third Law of Motion: When one body exerts a force on a second body, the second body simultaneously exerts a force equal in magnitude and opposite in direction on the first body. (i.e. equal and opposite forces.)

We all work at an average speed in our life. And our average is, well, just average. There are times when your levels of productivity and efficiency are at a peak, and there are times when your levels are low. When we are productive and efficient we use productive forces such as focus, positivity, and motivation. When we are unproductive we experience unproductive forces like stress, lack of sleep or multi-tasking (trying to balance too many tasks at once).

In making progress and becoming more productive and effective there are two things we can do – we can look to double our productive forces (*e.g.* work harder and longer, watch a motivational video, have a cup of coffee) and/or halve the unproductive forces we experience (*e.g.* simplify what you are doing, learn to say no or change your environment (for example, tidy up your office)).

Fig 2: How to Make Progress



If you reduce the unproductive forces in your life, your productivity will improve naturally.

Summary of Newton's Laws of Productivity

1. *Objects in motion tend to stay in motion.* Don't procrastinate, look to start on what needs to be done as possible – this will create forward momentum.
2. *It's not just about working hard, it's also about working on the right things.* You have a limited amount of energy, time and resources to bring to bear, so where you apply it matters.
3. *Your productivity is a balance of opposing forces.* If you want to be more productive, you can either power through the barriers or remove the opposing forces. The second option seems to be less stressful.

Finally, the power of these laws is even greater if you leverage them and use them in conjunction with each other.



About Andrew Cooke and Blue Sky GPS (Growth & Profit Solutions)

Andrew Cooke

An experienced executive coach, business facilitator, and management consultant Andrew has more than 25 years' national and international experience, working across a range of industries and businesses. He is passionate in helping people, teams and companies to unlock their individual and collective potential, enabling them to achieve their personal and business goals and, in turn, to help them unlock the potential of others.

Andrew has extensive experience in dealing with both blue-chip and start-up companies, and has had extensive international experience in the UK, the Middle East and Ireland across a range of industries.

He has post-graduate business qualifications with a Master's in Business Administration (MBA) from the London Business School.

Blue Sky GPS (Growth & Profit Solutions)

Andrew runs [Blue Sky GPS \(Growth & Profit Solutions\)](#), working with individuals, teams, groups and corporate so they can unlock their potential, that of others, and create a life and a job they love and choose to lead.

Through customized development programmes using experiential learning, backed by group workshops, individual one-to-one coaching and on-going support the individual and group development needs are addressed, the skills and capabilities are unlocked and the people can grow and achieve both personal and business outcomes on a sustainable basis. His blog, Growth and Profit, can be found at <http://growthandprofit.me>.

To find out more about this visit the [GPS website](#) or contact Andrew at andrew.cooke@business-gps.com.au or on +61 (0)401 842 673.