

Measuring the Convergence of Sustainability and Project Management - Where the 'Triple Bottom Line' falls short

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Abstract

Sustainability is rapidly becoming intertwined in all aspects of business. Measuring the degree to which an organization is being sustainable or pursuing sustainable growth can be difficult. In a project centric organization, but it doesn't have to.

During the mid-1990s, John Elkington strove to measure sustainability by encompassing a new framework to measure corporate performance. This accounting framework, called the triple bottom line. It went beyond the traditional measures of profits, return on investment, and shareholder value to include environmental and social dimensions by placing an emphasis on performance, along the interrelated dimensions of people, planet and profit.

While this framework can be adapted to project management practices, in order for long term organizational sustainability goals to have direct tie-ins to individual projects, the addition of two more elements is needed.

With the inclusion of process to the measurement framework, the external socio-economic impact that temporary endeavours, the base definition of a project, ultimately have from a delivery standpoint is measurable on the short and long term. By the same token, the emphasis on product (or service) allows the introspection of the deliverable and the impact it has during each stage of its development and the ability to incorporate within the project scope methods to offset the negative impact during the project and recommendation as part of the hand over for when the product is end of life.

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1. Introduction

Over the past three years the topic of sustainability has become the phrase or word that has appeared on all lips from home makers to politicians, from environmentalists to university professors. Each person has their own view on the subject and many have looked at the topic from different lenses.

From the moment when Mary McKinley explained that the future project managers will have to take responsibility for their actions and their deliveries, sustainability management had been born into the world of the project management community and the search for the solution was afoot.

Don't get me wrong, sustainability management, or many of its guises have been in the public eye for a number of years before the UN conference of 2009, but now the challenge was being set to the whole community that we would be taking responsibility for our projects with a new a highly focused viewpoint on beyond the normal or accepted project lifecycle that whether you were a PMI, APM or PRINCE2 advocate, had been previously used to dealing with.

The first approach that was discussed and then agreed upon was the acceptance that there were three main aspects to the sustainability conundrum and that this would be where the effort should be placed in making the world more aware of what it should be doing against what it is actually doing. So, these three aspects, what was it that made up the newly named 'triple bottom line' and what was it that we mere mortals of project management had to do to improve the planet?

The 'triple bottom line' covered the financial, environmental and social implications of what was being done, what business changes were occurring and what new introductions to the business, domestic and social worlds were going to impact of our yes all of our lives. World leaders, industry specialists and some of the best minds in the world started to devise the theoretical approach that this would take, the considerations and the challenges that this major shift would make and so then what this would mean to the business environment, how people do business in the future and what this then meant in the long term for the everyday person on the ground.

Two steps that were taken in these embryonic stages of development that are worthy of mention at this time are Gilbert Silvius and his team from HU University of Applied Science in Utrecht in the Netherlands and the combined efforts of Rich Maltzman and Dave Shirley in the USA. Gilbert and the team looked at the whole combination of what the beliefs and papers had been from many areas of differing industries and then set about creating a document that summarised the differing viewpoints and also gave his opinion to these different ideas or concepts to try and bring the various theories together.

2. Approach

This document culminated in the production in the first and quite possibly up until now, the best book of its topic for which he has been accredited globally and to which many steps towards the first potential solution to align the two skills of project and sustainability management needs to be achieved. I was so personally impressed with the direction, vision and effort that was being made that I travelled to the Netherlands to hold a personal meeting with Gilbert to gain a clearer understanding of what he was looking to deliver and in so doing then took a greater step towards what I believe will be a large stride towards a permanent alignment of the two skill sets.

Rich Maltzman and Dave Shirley had a slightly different approach and never looked at the sustainability factors in the lens as Gilbert and the Dutch team; they instead focused their attention around one

particular aspect of the 'triple bottom line' in the book Green Project Management. This was the first book of its kind and applied itself to show that with an extra consideration of the 'Greening' a project, what savings could be made, therefore protecting the environment from any further eradication. This book met with mixed reactions at the time but has shown that over time now, much of what they were looking to achieve is possible but it requires the right application from the individuals involved and for the senior members of the business to appreciate it is not just an add on but in actual effect something that can be embedded into an organisation's strategy and can develop long term benefits.

As I said earlier, having read and listened to many and taken onboard the key objectives of the UN proposals, I was still left with a feeling that as a project management professional of twenty-six years, perhaps we were still missing a trick.

Around me were the theories and the thoughts of many, but had anyone considered a solution to what was still clearly a growing problem? I decided that further investigation was merited and set about reviewing a solution that might potentially start to show these subjects, could be as simple as possible and by working together help to make project management the leaders in this field.

What had never been confirmed or materialised up until now, was a simple solution to the growing problem, until, quite by accident I came across a contact through an old friend and colleague who put me in touch with him. Over the last nine months I have worked collaboratively with an organisation, Green Project Management Ltd and in particular it's President, Joel Carboni. We have questioned and then challenged our approaches trying to constantly develop a product of learning which would make sustainability more than just a theory but instead a message that can be shared and taught for all and not just restricted for a limited number.

The aim of this learning programme and approach was to make sustainability real for the masses, so that more people could have and share a view or opinion and that everyone would have a clearer understanding and becomes more realistically aware of what is happening to the world but beyond that, what is happening in the world around them, personalising it and asking them to ask themselves what they might be able to do about it.

After further readings and a great more number of personal one to one meetings with area specialists I began to wonder whether the 'triple bottom line' truly explained the subject fully and so I delved slightly deeper into the discipline of sustainability and project management, looking to find the similarities and to separate off the differences and in so doing tried to align the subject into this teaching tool. Very early into the development of this subject I started to realise that sustainability went beyond simply delivering a difference or a change with major impact on the environment, but also how it continued into the full life of the delivery and in actual fact the method in which it was being delivered. This early discovery made me sure I was on the right track to a solution and that the 'triple bottom line' needed to have a greater visibility or atmosphere; we had been viewing sustainability as an astronomer would view planet alignment, when as we all know the best astronomers look into the galaxy, the whole solar system to look to achieve the greatest of understanding; my project of understanding and then solution development had just become a whole lot larger.

3. Creating the Solution

It was from this small acorn or eureka moment that my concept of P⁵ was born and has now been developed to be the fundamental part of the training programme and to the enhancement of many methodologies using what is known now in the USA as PRiSM (Projects Incorporating Sustainable Methodologies) and within the UK and across Europe as the Business and Project SMaRT (Sustainability Management and Responsibilities Training) programme. Instead of focusing all my attention around the 'triple bottom line' I now had two more aspects to be concerned with, but without a key catch that would make people sit up and take notice. Having already had social, environmental and financial sustainability identified by the UN's approach at the conference, I now also had the products and the delivery process to add to it, but where to find the right strap line that would gain the attention of many?

That came about, rather easier than I had expected, but with an additional benefit that has introduced the learning to a group or community that previously I had not considered could understand such a complex topic, children. I am not speaking of children as fifteen or sixteen years of age that should have a clearer understanding of the subject and also have a strong and growing opinion, but instead children under the age of ten, that still have a view but may not have previously been asked.

The birth of the strap line was created through an old training technique I had been shown by so many; make it into a mnemonic or making all the topics the same letter. Having initially played with FESDP nothing seemed to leap out and suggest a new phrase within a phrase, so I looked into the use of one letter for all subjects. Having used a little poetic licence to develop this, the letter P became the one most obvious and so the P⁵ concept had originated. I already had the product to start with and delivery was simply transposed to process, which left me with the three original topics from the UN, finance could easily become profit, social became people and finally the environment the planet and so the concept for P⁵ was complete.

Complete is probably not the right word at this point, complete couldn't have been further from the truth, what I should have said was P⁵ had a title, simply that, no substance, no content and clearly no recognition and so the journey began.

Before closing this introduction to the paper, I need to explain how the young children suddenly took a grasp of how a little something from everyone, makes a huge difference to us all. I was asked to address a small group in a school when I suddenly became concerned that unless you communicated this at the right level, this topic and this opportunity would be wasted, when the idea of the learning experience came to me as I stood in a local shop. I had just treated myself to a rare bar of chocolate and a soft drink and after I had paid, I was passed back my change. The items had come to 85p and so my change from the £1 coin in my pocket was 15p, the retailer apologised to me for not having any ten pence coins and so I would have to have three five pence coins instead. I smiled at her and she said, "They are funny little coins, but when it comes to it all little coins make a difference".

I smiled again and she must have thought me a little strange when I said, "Yes, 5p can make a huge difference". Having the 5p coins I was able to demonstrate to the children on their level, that 5p is as such a small coin and indeed on its own such a small amount, but when you bring all the 5p coins together, it makes a big difference. The children all made their own comments on what each of the

different aspects meant to them and what a difference they could make and the lesson was a success; P⁵ itself is very true to this, each small amount of difference that you make, can become a huge amount when we all pull together and much as 5p may not seem like a lot when you hold it in your hand, the effect of the right investment into that coin can and will make a big difference for everyone. My final comment to the class as I left was, “What does it take to make a difference?” The whole class responded as one, “It only takes 5p to make a difference”!

This paper is the culmination of that first journey a clear indication to all, that all five aspects are equally important to sustainability and also that each one should be measured individually but then as an aggregated or cumulative amount to understand the impact of each but then of all. The best way to look at this I feel is to look at each area first of all as individual items, what they stand for, how they affect us and what we can do or how we can measure the success or not of each of the five. Once we all have a clearer understanding of the five all as separate entities, then by aligning them all as one concept and seeing how the relationship of each is dependent upon the others and the impacts they can make, is when we can finally grasp the full power of the P⁵ concept.

4. A Demonstration of Its Shortfall

So let's start with the original 'triple bottom line' subjects and with the one everyone has focused their attention on over the past few years, the green element or the environment; the planet to the P⁵ concept. I have found the best way of explaining this, is to select a product and then ask you, if this was my deliverable, how would I best consider the elements of sustainability?

Let's use a common every day household product to simply explain the P⁵ concept, a washing machine. As I said we would look at this as the five elements and the first of these would be environmental, so what is it we have to consider when developing the new machine? The first of the questions we can ask ourselves is what materials we are using to create this and how many resources this will use up; in addition, of the materials that we choose to use, how many of them are readily available and come from a renewable source? Wait one moment, renewable washing machines, what on earth is this man talking about?

This is where the concept grew and suddenly I was struck by the question that asked what happens when we are finished with the product and then what can we use again for further future endeavours; we shall revisit that a little further along our journey. One common consideration for the environment with the washing machine is the consideration of waste; does the machine produce waste, well clearly that is a yes, but what kind of waste and how is it released back into the environment? As I mentioned earlier, I haven't asked you to stop producing washing machines, or to be innovative in the project delivery, what the P⁵ concept challenges the business and project manager with is the consideration of these factors when designing the deliverable.

The next two aspects in the product design, would be to ask how much energy does it use and what type of wash cycles? There has been a popular move within organisations to wash at lower temperatures these days advertising that the water can therefore be heated less, giving great acclaim to the manufacturing organisation, but take a closer look and discover that the wash cycle now lasts longer. What is the balance between heating the water against having the water at a lower temperature but for a longer cycle? Measuring these dynamics makes the project and the business community start to understand what is better for the environment. Finally, for the environmental aspect of the project or business change, what

packaging and what transport is involved, in both the parts being used, on the delivery of the products and on the waste again generated once this packaging is removed and the item is placed in the home? I did say that the P⁵ concept challenged the way of thinking and we are but 20% of the way through. It was never said that this would not be without challenges, but it is the positive nature with which we view these challenges that will allow us to overcome them.

So let's take a look at the second factor, the social implications or the people part of the P⁵ concept. One of the first parts of the social implications that come about from product production and manufacturing is the labour practices, the working conditions. It seems almost draconian that in this modern ages we are still speaking of poor working conditions and 'slave labour' but still around third world environments not just in the world, as many would have you believe, working staff are exploited and conditions are not given the full attention they truly deserve. So how does this affect our washing machine? Having your own organisation running a work incentive environment where the workers are content and the business team matters sometimes is not enough; where do the parts for the machine come from, do they hold the same importance on sustainability as you do? Understanding your vendors, suppliers or contractors and sharing your message of what is appropriate and right for your company and in your industry sends out with a powerful voice, if you want to do business with us, you must do business the right way. One of the biggest areas for growth over the past few years has also been the social or customer perception of whether you care.

How society or your customer base views you and your products and services, how you sell your approach and why you are the better choice than the rest of your competitors are an area well worth investment. This goes well beyond marketing and sales, these is proving to the customer that when you say you care for their interests, you care for the environment and that their views matter, that you can actually prove this and demonstrate it in a manner than they can understand and see. It is these business and personal ethics that can be demonstrated both within an organisation and then beyond into the general public that helps and aids the message of sustainability and creates additional benefits to organisations. Sustainability is intrinsically linked to communication, you cannot escape it. Sending out the right message to people, they understand and can relate to, is the biggest reward any organisation can ask for.

What matters to an awful lot of organisations and is the fundamental to any successful business is the health of its finance and how it would best build and grow with this finance. Here is where we are introduced to the third of the five elements, profit.

Nobody works for nothing, there is no such thing as a free lunch, that has been known for many years now, however, is there finance in everything we do, simply yes. The P⁵ concept asks the business and the project community to consider, by making this product or service more sustainable, what are the financial implications and why should they want to be more pro-active in the sustainable community. There must be a return on investment, otherwise the organisation would be time limited and would face administration and liquidation rapidly, but that doesn't mean that you cannot re-invest and develop, otherwise progression cannot be made within the company and the first scenario still occurs just in a longer more drawn out painful death.

This is why when setting up the business change and the project of delivery, looking beyond the project and indeed in some cases the product, is essential. Setting a fair price for your washing machine got it to market, now having it considered of low quality or in constant need of upgrade and repair, means that the reputation of 'cheap and cheerful' rather than quality and professional soon tags an organisation and creates a damaging influence on all that it does. Indeed, having a warranty period on your product, or an extended warranty can bring additional income into the organisation, but you do not want the product or

service to have the reputation that, of course you take the warranty; it will be broken within two years to be labelled on your product.

Looking beyond your washing machine for a short moment, why is it that the world is in financial strife, the Euro zone in times of quantitative relief, when did this go wrong, how was it allowed to happen?

One of my favourite pastimes is football, a great game played by many but only a career for a select few, but I watch these days through a new lens, one that for many years was never considered but now has become the forefront of the sport, as clubs, reputable clubs, famous clubs continue to struggle to survive. I know this is a very highly simplistic view, but it works, so why can it not work for other organisations. My revenue is £100,000 per year, my costs and new investments must therefore remain within that, or I must have an option whereby I can repay any capital expenditure given by an external resource. If when I do my accounts, my expenditure is 150% of my income revenue and this is before any capital outlay for expansion, should this not set off an alarm bell in an organisation? Small businesses tend to hold a tight rein on their expenditure and outgoings and so perhaps there is a lesson to be learned, to bring back the outgoings and to do as my father taught me when I was setting out on life and living, "Son, always live within your means and you will be a great success".

After covering the three elements already identified in the UN's conference, this leads me to the final and additional two, the first of which is the product. We seem to have been speaking about the product all the way through the first three, but it still important to recognise that what you make makes a difference. Our washing machine, what is the expected lifespan and what servicing will it need as it progresses through its life?

This is where the product itself has its strength in sustainability. If this was all about projects and we had now delivered what we had been told by the standard constraints of time, cost and quality we would now be closed to being finished and celebrating another brilliant delivery. However, sustainability challenges the organisation and the business to look at what happens next. If we say for the sake of the paper we have decided on a lifespan of five years for our washing machine, have we also built in a maintenance programme for it on parts or perhaps on new upgrades as the machine ages?

Sustainability asks a further question and brings about a new extension to the typical lifecycle, to optimise the product to its fullest. Our machine has now been in service for five years, does this now mean it has to be replaced or can we work at a lower functionality for two more; does the machine need to be redesigned or overhauled after five years and then what is the life on it then? When we are talking washing machines, what of cars and of aircraft, do you just dispose after a number of years or is there something else we can do?

After deciding upon a redesign or replacement upgrade, it may be that it is not appropriate, so therefore can the product be re-used in a different environment, for an alternative function? Products have been made more and more over the past few years as part of a throwaway society, but can we re-use our product and try to prolong the life of the item, even if it is in a completely new field. In many cases this will not be possible, but for so many others, it just takes a little ingenuity and original thinking and our washing machine could be used to store or to grow something new. Try to never say never when considering a re-use of an old product in a new environment. It might seem difficult, but it sometimes just takes a little more thinking through.

Having settled on the fact that the product either cannot be re-used or perhaps it has now come to the end of the life of the re-usability, the next consideration must be recycling. How much of the product part and componential elements are recyclable?

Recycling has become a major business over the past number of years and understanding the configuration of your product, what its scrap value is truly worth is valuable to a business. I recently spoke to a colleague in the USA, who informed me that he had been paid a delivery fee of \$1.5m but in actual fact with the agreements that he made with the waste management teams in the state he was working in, had actually generated an income of nearer \$8m; as an old phrase in the UK tells us all, "There is money in muck", reminding us that sometimes something that looks dishevelled and worthless can in actual fact be a pearl in an oyster.

So, as we step closer to the end of the P⁵ journey, we arrive at the fifth element, the process. This is nothing new at all to the project community but can be a great learning curve to many 'business as usual' activities. Having a stable and secure methodology within an organisation with structured governance has been proven to increase project delivery success, so when working towards a more sustainable future, knowing the process of how to best build, test and deliver our washing machine will help us all with a more cost effective, (finance) wash cycle effective (environmental) and popular (social) product that leads to greater success, an improved reputation and a growth even in the tightest of financial conditions.

5. Final Thoughts

Let's take one step back at this point, yes we have five elements and all sounds well, but not all businesses work the same way and so why this should matter in some communities and when would anyone do all five all of the time? This is where the strength of the P⁵ concept exists, you don't have to do all of it all of the time, otherwise we would be telling you how to do your business and that would never be right or appropriate, so the concept has a scoring card matrix, whereby each company or organisation can base their needs and the needs of the concept alongside each other.

The scoring matrix would be based on an individual basis company by company on the priorities of the business, also meaning that as a strategy changes, so can the priorities on sustainability. This give the business and its strategic approach the greatest flexibility by understanding when the environment is top of the agenda against when finance becomes paramount. The use of the scoring matrix aligns itself therefore to the corporate governance and regulations which all other parts of the organisation do including the project governance. These scoring parameters can then be transferred into the Environmental Management System so that you can start to impact on the depth of impact you are going to make, select business change and projects on whether they meet that set criteria within the current business climate and also to allow you to better select and monitor during the business' procurement process.

Having the matrix built into the charter or business plan of either a Long or Short Term plan or a specific project allows the members of the team, the extended family including the stakeholders and the public as a whole to see what sustainability means to you and what you are doing about sustainability. No different than any other aspect of business or project management, the matrix alongside the aims of the project will have to be reviewed, understanding whether these new criteria you have set can be achieved and what you must do to ensure a successful delivery of your project or business change. Many people have spoken for a long time now of the long term benefits for the planet if we can all become more sustainability friendly, but now there is starting to appear over the horizon, a reason for organisations to embrace the new change, the new approach to project management and the new way of doing business.

So is the P⁵ concept a new dawn on project and business management or just another false dawn?

I believe what we have all achieved by reaching this stage in the journey towards and improvement for the future generations is this, we have a new lens and a new vision. Perhaps this is the sun creeping over the edge of a distance mountain top, with small glints of light showing a new path to follow. Will the journey be tough and challenging, I believe so; can the journey be undertaken alone, I believe not, so what are the next steps for sustainability?

The greatest challenge still is to send the message out, across all four corners of the globe; to want a team of mixed backgrounds and mixed disciplines to develop the solution beyond where we current have come with the training programmes of today.

This paper was to set out the evidence that the five elements need their own full recognition and that each should be able to be measured individually and as one, to demonstrate that business can use sustainability for their own and for the benefit of others. So is P⁵ the start of the final solution, the start of a new age of project management whereby extra consideration has to be given when we plan and deliver the future products and services for an ever expanding and more attainable world.

I see it as a start, a child's first steps and much as a proud parent looks over their child as they tentatively step forward, they ask themselves what will they become, I ask the question where does sustainability go next, what does it do and achieve next and who will be the next sustainability champion?