Topic Four : 3-Dimensional Profit & Loss

“At present, we are stealing the future, selling it in the present, and calling it GDP.” - Paul Hawken

PUMA set a new standard in accounting when they launched their Environmental Profit & Loss and appear set to take this pioneering work further. The fourth topic in our Collaborative Learning Series explored the concept of Three Dimensional Profit and Loss accounting, which includes social and environmental accounting alongside financial. The term “3D accounting” has been coined by sustainability entrepreneur Ben Ramsden (Pi Foundation/Ants to Poverty). It invokes the notion of a holistic and multidimensional world – not one of flat pages, but a 3-Dimensional Profit and Loss. See page 15 for a personal message from Ben Ramsden.

It also appears that economists - not just sustainability experts - are interested in a wider definition of "capital".

According to Accounting for Sustainability (A4S), previously globally accepted ways of measuring success - whether in terms of profit or GDP - are not currently providing governments, businesses and other organizations with the information and signals needed for them to take the right decisions, given the environmental and social challenges that we face in the twenty-first century.

Our current performance measurement systems often lead to the impression that we must choose between promoting economic growth, protecting the environment, or developing human happiness and well-being. This would be shown to be a false choice if environmental sustainability and social well-being were appropriately included in measures of economic success.

“The rules of business urgently need to be changed, so corporations compete on the basis of innovation, resource conservation, and satisfaction of multiple stakeholder demands, rather than on the basis of who is most effective in influencing government regulation, avoiding taxes and obtaining subsidies for harmful activities in order to maximise the return for just one stakeholder - shareholders.” - Pavan Sukhdev, Deutsche Bank economist

1 The content in this summary document is drawn from the information provided by Cary Krosinsky and David Meyers – our two panel experts. Please visit the website http://farmhub.textileexchange.org/learning-zone/collaborative-learning-series and download the webinar recording from this series archives.
First principles

Our current way of accounting for profit and economic wellbeing ignores critical environmental and social elements.

By using the current systems we unwittingly embed a system of values in our decision making – values that may conflict with our personal ones but that have become dominant social paradigms i.e. “money is more important than anything”.

Challenges of integrated reporting

Purely financial reporting

Decisions based on $$$

Negative social & env impacts

Externalities Public Goods Valuation of intangibles etc (David Meyers)

Risks, loss of goodwill & customers

Corporate social responsibility

“As we get serious about ensuring conditions for a flourishing human society on this planet; natural, social, and human capitals are the ones that matter most. Measuring how the company is protecting and enhancing human, social, and natural capitals will help us better assess its "non-financials."”

Integrated Reporting

Integrating environmental and social indicators in business reporting is a critical step to re-inventing business for the next century.

“At the heart of “IR” is the concept of ‘capitals’. A business draws on stocks of capital – financial, manufactured, intellectual, human, social and relationship, and natural – and enhances and diminishes [each of] them as it pursues the objective of creating value over time.”

From Business Leaders: What You Need to Know, Integrated Reporting

Business leading the way

Increasingly companies are recognising not only the enormous contribution that biodiversity and ecosystem services make to our economy, but are now actively collaborating to form multi-stakeholder platforms, such as the TEEB for Business Coalition in order to accelerate business thinking and action on valuing natural capital.

“Businesses are rarely obliged to pay for the full toll their operations take on the world. Because many of these impacts have been hard to gauge with any precision – or to assign to individual businesses with fairness – their costs have remained external to businesses’ accounting.”

Yvon Chouinard, Chairman of Patagonia.

Trucost research shows that, on average, 60 percent of natural capital risks are embedded within supply chains. Businesses that take steps to measure these risks – and partner with their suppliers to reduce them – can reap significant rewards. According to the Carbon Disclosure Project, last year 73 percent of companies reporting supply chain impacts to the CDP achieved significant cost savings by reducing their impacts.
Cary Krosinsky

Cary Krosinsky is a frequent writer on Sustainability & Investing, having co-edited two of the leading contemporary books on the subject: Sustainable Investing: the Art of Long Term Performance (Earthscan, 2008) & Evolutions of Sustainable Investing: Strategies, Funds & Thought Leadership (Wiley, 2011). He has also recently resumed his work with corporates on the nexus of Investor Relations & Sustainability, and is featured frequently on these subjects in the media on NPR Marketplace, the New York Times & elsewhere. Cary has an extensive background in creating and interpreting Institutional Ownership data back to managing the first Global database used by Bloomberg, as well as major Investment Banks and global Investor Relations professionals. His involvement with Sustainability dates back to his being on the Expert Group that helped oversee & create the UN Principles for Responsible Investment, and is a Founder & Director of the Carbon Tracker Initiative, and is former Senior Vice President of Trucost, having helped launched their North American business including development of the well respected Newsweek Green Rankings. He also acts as Executive Director of the global non-profit the Network for Sustainable Financial Markets, and teaches an MBA class on Sustainability & Investing at the University of Maryland’s Robert H. Smith School of Business, and a similar class at Columbia University’s Earth Institute.

Dr. David Meyers

Dr. David Meyers is a serial entrepreneur and environmental finance expert with over 25 years of experience in sustainability spanning business strategy and management, environmental economics, international conservation and development, environmental impact, and research in ecology and evolution. He consults to private companies, the United National Development Program, the World Bank, and other organizations. David is supporting True Market Solutions’ innovative Sustainability Circles™ program in the US and Europe. David was the founding CFO/COO of Mission Markets; a financial services company providing online marketplaces for Impact Investing and environmental assets. He founded and ran Madagascar Bamboo, a triple bottom line bamboo flooring manufacturer. David worked for well over a decade in Madagascar and has visited and worked in over 35 countries. He holds a PhD in Biological Anthropology and Anatomy from Duke University and an MBA from the Yale School of Management.
Natural Capital & Ecosystem Services.

We rely on nature (and natural capital) to freely provide the following “services” and support our quality of life (from Millennium Ecosystem Assessment, UNEP).

<table>
<thead>
<tr>
<th>Provisioning Services</th>
<th>Regulating Services</th>
<th>Cultural Services</th>
<th>Supporting Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Food</td>
<td>• Air quality regulation</td>
<td>• Cultural diversity</td>
<td>• Soil Formation</td>
</tr>
<tr>
<td>• Fiber</td>
<td>• Climate regulation</td>
<td>• Spiritual and religious values</td>
<td>• Photosynthesis</td>
</tr>
<tr>
<td>• Fuel</td>
<td>• Water regulation</td>
<td>• Knowledge systems (traditional and formal)</td>
<td>• Primary production</td>
</tr>
<tr>
<td>• Genetic resources</td>
<td>• Erosion regulation</td>
<td>• Educational values</td>
<td>• Nutrient cycling</td>
</tr>
<tr>
<td>• Biochemicals, natural medicines, and pharmaceuticals</td>
<td>• Water regulation</td>
<td>• Inspiration</td>
<td>• Water cycling</td>
</tr>
<tr>
<td>• Ornamental resources</td>
<td>• Water purification and waste treatment</td>
<td>• Aesthetic values</td>
<td></td>
</tr>
<tr>
<td>• Fresh water</td>
<td>• Disease regulation</td>
<td>• Social relations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Pest regulation</td>
<td>• Sense of place</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Pollination</td>
<td>• Cultural heritage values</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Natural hazard regulation</td>
<td>• Recreation and ecotourism</td>
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</tbody>
</table>

“The services and countless benefits to the human economy that come from nature have an estimated value every year of around double the global Gross Domestic Product. We are reaching a critical turning point when humankind has to realise that people and the human economy are both embedded within nature’s systems and benevolence.”

HRH Prince of Wales
**Components of Valuation**

The simplest form of ecosystem valuation that economists hold is to say that an ecosystem has a value equivalent to its ecological yield valued as it would be on commodity markets: for the value of water, wood, fish or game, that is purified or nurseried or generated or harboured in that ecosystem. A price can be put on the natural capital of an ecosystem based on the price of natural resources it yields each year.

More complex arguments in ecosystem valuation take account of environmental ethics and deep ecology. Economists and some ecologists concentrate on ecosystem services and the assignment of values in a service economy to all that Nature does for humans.

Studies compiled by ecologist Robert Costanza in the ’90s argued strongly that even just considering the most basic seventeen of these services, the combined value of the ecosystems of the earth was worth more (US$33T) each year than the whole human exchange economy (US$25T) at that time (1995). Other studies have focused on the marginal value of ecosystem changes, which can be used in cost-benefit analysis of environmental policies.

In Natural Capitalism, 1999, Paul Hawken, Amory Lovins and Hunter Lovins advanced an argument to assign the value of Earth in current currency.

Economists assign several types of values to ecosystems:

**Direct Use Values** are values derived from direct use or interaction with ecosystem resources and services. They involve both commercial, subsistence, leisure, or other activities associated with a resource. Subsistence activities are often crucially important to rural populations.

**Indirect Use Values** relate to the indirect support and protection provided to economic activity and property by the tropical forest’s natural functions, or regulatory environmental services. For example, the watershed protection function of a tropical forest may have indirect use value through controlling sedimentation and flood drainage that affects downstream agriculture, fishing, water supplies and other economic activities. The microclimate function of some tropical forests may also have indirect use value through the support of neighbouring agricultural areas. If the environmental functions and services provided by the forest are disturbed, then there will be a corresponding change in the value of production or consumption of the activity and property that is protected or supported by the forest. As indirect values cannot, typically, be directly or indirectly inferred from observed human or market behaviour, they are often difficult to value.
**Option Value** is a type of use value in that it relates to future use, for example, of the tropical forest. Option value arises because individuals may value the option to be able to use a tropical forest some time in the future.

**Non use Values** are derived neither from current direct nor indirect use of the tropical forest. There are individuals who do not use the tropical forest but nevertheless wish to see it preserved in its own right. These intrinsic values are often referred to as existence values. Existence value is derived from the pure pleasure in something’s existence, unrelated to whether the person concerned will ever be able to benefit directly or indirectly from it. Existence values are difficult to measure as they involve subjective valuations by individuals unrelated to either their own or others use, whether current or future. However, several economic studies have shown that the existence value of tropical forests to constitute a significant percentage of total economic value.

**Scale of Environmental Impact**

- Ecosystem Services could be worth as much as $72 trillion = gross world product (UNEP)
- Primary production and primary processing sectors: unpriced natural capital costs us $7.3 trillion per year (see table below, Trucost & TEEB for Business Coalition)
- What if these costs were internalized?

### Economic cost of environmental externalities:

<table>
<thead>
<tr>
<th>Impact</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse Gases</td>
<td>$ 2.7 trillion</td>
</tr>
<tr>
<td>Water Consumption</td>
<td>$ 1.9 trillion</td>
</tr>
<tr>
<td>Land Use</td>
<td>$ 1.8 trillion</td>
</tr>
<tr>
<td>Air Pollution</td>
<td>$ 0.5 trillion</td>
</tr>
<tr>
<td>Land and Water Pollution</td>
<td>$ 0.3 trillion</td>
</tr>
<tr>
<td>Waste</td>
<td>$ 50 billion</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$ 7.3 trillion</strong></td>
</tr>
</tbody>
</table>

**Ecosystem services accounting - the honey bee example**

Worldwide, insects are responsible for the pollination of agricultural crops, including cotton but above all vegetables and fruit. The total economic value of this “ecosystem service” in 2005 was estimated at € 153 billion, or 9.5% of the value of agricultural production for food. (Ecological Economics 86:810-821).
Incorporating Social Capital into PNL is less evolved (i.e. more difficult to quantify) than with Natural Capital. However, identifying and accounting for the (basic) social impacts of business and development has probably been around a lot longer (than accounting for the impact on natural capital and ecosystem services).

Most definitions of social capital focus on social relations that have productive benefits.

The term “capital” is used by analogy with other forms of economic capital, as social capital is argued to have similar (although less measurable) benefits. However, the analogy with capital is misleading to the extent that, unlike traditional forms of capital, social capital is not depleted by use; in fact it is depleted by non-use (“use it or lose it”).

Social Return on Investment (SROI)
One way to assign numbers to social capital is through Social Return on Investment (SROI). SROI aims to increase social equality, environmental sustainability and wellbeing.

The SROI Network website states that current economic approaches contribute to social inequality and environmental degradation.

It will not be enough to create new approaches that sit alongside current practice. We need mainstream approaches to include a wider sense of value and to give a voice to those that are affected. For this to happen we need to show that value is missing from many or even most decisions about policy and practice. And that it is possible to show what is missing and value it, in a way that is clearly viable and reasonable.

There is now a growing body of experience in identifying and valuing material outcomes by applying SROI principles.
The SROI network believes that organisations seeking to address social inequality and environmental degradation (either as part of their purpose or alongside other purposes) will eventually use the SROI accounting for value framework to make internal choices in allocating resources. And social and impact investors will use the same framework to inform their decision making.

The Social E-valuator

The Social E-valuator supports organisations throughout the process of analysing and evaluating social impact. This web-based tool is designed to measure and value social impact investments (donations, charity, subsidies, loans, grants, etc.) and what the organisation's stakeholders consider valuable.

The Social E-valuator makes social impact measurement better accessible, cost-efficient and enables organizations to report about impact in a consistent way.

The Social E-valuator - a framework

The Social E-valuator SROI tool uses the following framework to support an organisation in better understanding its social return on investment:

- Project/Business Description
- Describing a Theory of Change
- Recognizing Stakeholders
- Determining Input
- Determining Activities
- Determining Output
- Determining Outcome, Impact & Attribution
- Determining Indicators
- Using Monetization
- Making Projections

More work to be done in this area

Some of the focus for a framework or tool, and areas for further development include:

- Ensuring quantifying what matters – and the choice of metrics
- Using economic assessment where needed
- Challenge of uniformity / comparability
- Allowing, interpreting, and recording year to year changes...
- Difficulty of making comparisons among companies / industries

“Social capital refers to the institutions, relationships, and norms that shape the quality and quantity of a society’s social interactions. Increasing evidence shows that social cohesion is critical for societies to prosper economically and for development to be sustainable. Social capital is not just the sum of the institutions which underpin a society – it is the glue that holds them together.”

The World Bank
Today, money is the decision-making tool in business.

Tomorrow, ideally, social and environmental aspects will be integrated.

Money is just one measure of capital.

3D Accounting: the notion of a round world.

1. Provisioning
2. Regulating
3. Cultural
4. Supporting Services

Natural capital provides plant services and intellectual property.

We all benefit from these services, recently estimated at up to $2 trillion dollars per year.

And we are not paying the right price.

Dr. David Meyers: social entrepreneur, corporate advisor, Mission Markets' CFO, muslimah, and banker.

Cary Krosinsky: writer, investor relation, international ownership, urban tracker initiative, and "teacher."
DEGME PLANNED BY INDEET TO NATURE YEARLY

USP 7.3 TRILLON/YEAR
13% GLOBAL GOOD PRODUCT

EXAMPLE
SOUTH AMERICA LAND USE
300 BILLION DOLLARS DAMAGE
ONLY 16 BILLION DOLLARS REVENUE

1. MANUFACTURING
2. OUTSOURCING
3. PROCESSING
4. RAW MATERIALS

CONCEPT
LOOK AT THE 4 Tiers OF SUPPLY CHAIN

RENTA
ENVIRONMENTAL IMPACTS REPORT

DISTRIBUTION BY SECTOR:
HEALTHCARE'S FOOTPRINT IS REALLY LARGE IN THE US

CHALLENGES
- MOST INDUSTRIES ARE NOT LOOKING AT SUSTAINABILITY AND EFFORTS YET (GOOGLE, AMZON, ETC)
- TRUST, AUTHENTICITY, MONEY
- STATUS QUO: "TRY TO CHANGE IT"
- MANTRA: "WE WILL UNDERPERFORM IF WE TAKE ENVIRONMENTAL IMPACTS INTO ACCOUNT"
CONSIDERATIONS to do the math

1. DIRECT USE VALUES
   - Direct use/value in human consumption
     - Wood
     - Food
     - Energy
     - Wildlife

2. INDIRECT USE VALUES
   - Supports protection to economic activity
     - E.g., tourism

3. OPTION VALUE
   - Related to future use
     - Potential for expanded uses

4. NON-USE VALUE
   - Derived from individuals that wish to see the value of the tropical forest preserved.
     - Existence value

GOVERNMENTS

1. WILL THE CHANGING GAME COME FROM CIVIL SOCIETY OR COMPANY? 
2. IS THERE A DUAL MINDSET IN RECONCEPTUALIZING THE INSTITUTIONAL INVESTMENT FRAMEWORK?
3. LEADING COMPANIES 'CHAMPIONS' SUPPORTING POLICIES

DIFFERENT PATHS TO SUSTAINABILITY

1. DIFFERENT PATH TO SUSTAINABILITY
2. DIFFERENT PATH TO SUSTAINABILITY
3. DIFFERENT PATH TO SUSTAINABILITY
4. DIFFERENT PATH TO SUSTAINABILITY

LEADING COMPANIES

1. LEADING COMPANIES
2. LEADING COMPANIES
3. LEADING COMPANIES

QUESTIONS

1. HOW CAN WE GET THERE QUICKER WITH ENVIRONMENTAL ACCOUNTING?
2. HOW CAN WE GET THERE QUICKER WITH ENVIRONMENTAL ACCOUNTING?
3. HOW CAN WE GET THERE QUICKER WITH ENVIRONMENTAL ACCOUNTING?
4. HOW CAN WE GET THERE QUICKER WITH ENVIRONMENTAL ACCOUNTING?

IT'S COMPANY SPECIFIC AND IT HAS TO RESULT IN MEANINGFUL CHANGE OR IT HAS NO VALUE

"YOU HAVE TO KNOW WHERE YOU ARE BEFORE YOU FIGURE OUT WHERE TO GO,"
5. How can companies stay competitive?

- It depends!
- In the long term, it can save money (reducing energy, relationship with suppliers, etc.)

6. What about education and consumer behavior?

- External education
- Curriculum developing in colleges

7. Where the results of reporting have been more useful in a company?

- Intangible values
- Reputation & brand value
- Good for competing with others

More questions

Takeaways

- Start from the Ecosystem Services Review (wri.com) to understand impacts
- Look for quick win-win opportunities
- Build a coalition within your organization to support E&L report development
- Reporting is only a function of the process, focus on action to make change happen.
By way of background for those that don’t know Pants to Poverty has been operating now for 8 years sourcing through Fairtrade and organic value chain communities beginning in India. The goal of the brand has always been to build a business model that work with nature rather than against it and for people as well as profit. Today, after many mistakes and successes, we believe we have a dynamic new model in place which is ready to scale but that we must redefine the underlying assumptions of capitalism so that the model of maximising profit for shareholders can finally make sense in our new world.

The rapid growth of populations, resource scarcity, climate change, social and economic inequality are all symptoms of a problem at the heart of our system: That business is done to maximise short term financial return without recognising the social and environmental impacts. The 3DPNL project is about evolving this through the provision of simple, tangible and effective business tools to maximise profit not loss in all three dimensions of social, environmental and financial profitability. Many of the ingredients are in place (excellent value chains, technology, available finance, capacities and competencies, market demand etc...) but the solution does not yet exist.

It is in this direction that our 3DPNL programme is headed and it is designed for business leaders and academics who agree that in order to run market leading enterprises over the next 20 years and beyond, it is crucial for business to become socially, environmentally and financially profitable. These things matter so they need to be measured. When measured they need to be managed with business tools to maximise profit based on the needs of people and planet and not simply shareholders. This is not about charity or good CSR but about maximising competitive advantage in the new economy.
In order to deliver on this solution, Pi foundation (the charity I also run) is leading on a project where Pants to Poverty is completely opening itself up for external scrutiny with complete transparency (financial, environmental and social) throughout the value chain from seed through to post consumer disposal or upcycling. Pi foundation has assembled an inspirational international network of leading experts across civil, political and commercial society in relevant fields to analyse close to 100% real data through a cloud based and interactive database to develop a framework and methodology to measure, communicate and allocate a value to the 3 dimensions of profit generated by our underwear brand. Upon launch, all of the research, assumptions tools and methodologies will then be made available, open source, for others critique it to further improve upon it and build consensus around true corporate profitability.

This is the next step in our work towards democratic capitalism, where we use market forces and opportunities to maximise the efficiency of our business through the effective engagement of our value chain communities in return for greater distribution of our net 3 dimensional profits. This approach will not suit all but is designed for businesses with their wings beating for the future more than their roots entrenched in the past. One day, we believe that if a company is consistently generating a net 3D loss it will be wound up as bankrupt. We’re a long way from that however, but getting very close to proving that business in 3D is better business and not too far from doing to 1 dimensional business what new media did to old media. The future is in 3D, and so must we be, or face the consequences.

--- Ben
**Links to more information...**

- Impact Reporting & Investment Standards [iris.thegiin.org](http://iris.thegiin.org)
- International Integrated Reporting Council [www.theiirc.org](http://www.theiirc.org)
- Social E-valuator [www.socialevaluator.eu](http://www.socialevaluator.eu)
- Social Return On Investment [www.thesroinetwork.org](http://www.thesroinetwork.org) and SROI tool [www.socialevaluator.eu](http://www.socialevaluator.eu)
- Sustainable Accounting Standards Board [www.sasb.org](http://www.sasb.org)
- TEEB Coalition for Business [www.teebforbusiness.org](http://www.teebforbusiness.org)
• Tony Juniper, What has nature ever done for us? (2013) http://www.tonyjuniper.com/content/what-has-nature-ever-done-us
• Willard, B. Sustainability Advantage http://www.sustainabilityadvantage.com/
• World Resources Institute http://www.wri.org/
Creating a Learning Community at Textile Exchange

Textile Exchange aims to create an inclusive learning community; drawing on the expertise and experiences within this community to share and promote a collaborative learning environment. Our hope is that there will be learning to be gained from within and also from outside our immediate networks. Collaborative Learning breaks down the barrier that can exist between teacher (or expert) and pupil (or learner) to result in a truly two way exchange of information.

In this Series, each of the 6 topics includes:
• A thought starter blog and links to further reading
• A webinar introduced by our topic leaders where the contributions by learning participants will be a vital part of the exchange
• We hope that our Collaborative Learning Series will be an incubator for ideas, and can naturally lead into pre-competitive collaboration where the whole industry benefits. At the same time individuals within participating companies can improve their skills and knowledge, feeding this back into their workplace.

http://farmhub.textileexchange.org/learning-zone/collaborative-learning-series