

How Sustainable is your SC? Implementing SC Sustainability in the Public Sector

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Sustainable Development

Policy

- Nations, regions, cities
- Incentives (e.g., clean tech, inequalities)
- Regulations (e.g., climate change, pollution, carbon footprint)

Transformation

- Goods/Services (business & pub. sector)
 - Sustainable operations / processes
 - Sustainable supply chains

Consumption

- Individuals (e.g., activism, choice, participation)
- Groups (e.g., NGOs, communities)
- Media



Supply chain as a network of organizations

- The core assumption of the supply-chain-as-a-network-oforganizations idea is that **organizations do not operate/compete in isolation**, but rather work together with their supply chain partners (Spekman et al., 1998; Lummus and Vokurka, 1999; Hall, 2000).
- It is important that all stages of the supply chain operate responsively in a coordinated way so that the whole system can perform sustainably.
- ❖ If one stage of the supply chain presents a low level of responsiveness, or is not sensitive to an emerging environmental or social issue, the entire supply chain will suffer and eventually fail (Hall et al.,2011).



Motivation – Literature & Practice

- Over the past two decades, supply chain management has become an enduring theme affecting business research and practice
- Why and how supply chains incorporate sustainability into their operations has become a key research stream and a high concern for industry and policy (Linton et al, 2007; Seuring & Muller, 2008; Vachon & Klassen, 2008)
- In practice organizations still tend to follow the profit maximization/cost minimization paradigm (Beske et al., 2008; Pagell & Wu, 2009; Silvestre, 2015)



Apple - the suicide factory in China

- Foxconn (Apple's supplier in China) has had a horrible history of suicides at its factories. A suicide wave in 2010 saw 18 workers throw themselves from the tops of the company's buildings, with 14 deaths.
- Employees and universities reported Foxxcom as a "labour camp". An employee said: "The assembly line ran very fast and after just one morning we all had blisters and the skin on our hand was black. The factory was also really choked with dust and no one could bear it".



Apple - the suicide factory in China

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♠ > News

Suicide at Chinese iPhone factory reignites concern over working conditions











BP – Rock-paper-scissors?

2010 Deepwater Horizon Accident

- 11 deaths (bodies were never found)
- 5 million barrels over 5 months
- \$ 37 billion



- ❖BP the oilfield operator (had the license to operate)
- ❖ Hyundai Heavy Industries built the rig
- Cameron International manufactured the blowout preventer
- ❖Transocean owned the rig & blowout preventer (carrying out drilling)
- ❖ Halliburton was responsible for cementing the well (cause: 50%)



BP – Rock-paper-scissors?

 Investigation found that BP's, Halliburton's, and Transocean's cost saving strategies helped to trigger the explosion and ensuing leakage. The report stated that "whether purposeful or not, many of the decisions the companies made increased the risk of the accident clearly saved those companies significant time (and money)."



BP: 'An accident waiting to happen'



In the public sector?



Former hospital manager who took \$10 million bribe to favour SNC Lavalin bid sentenced to 39 months in prison



cmaj News

2nd EU Study on Corruption in the Healthcare Sector released: What you should do to avoid falling into the corruption trap

On October 7, 2017, the EU Commission published its updated study on corruption in the EU healthcare sector. Companies in the healthcare industry should rethink their policies and procedures based on the results of this Europe-wide study.

November 14, 2017 Author: Dr. Nicolai Behr • 4505

Experts blame feds for pharma corruption

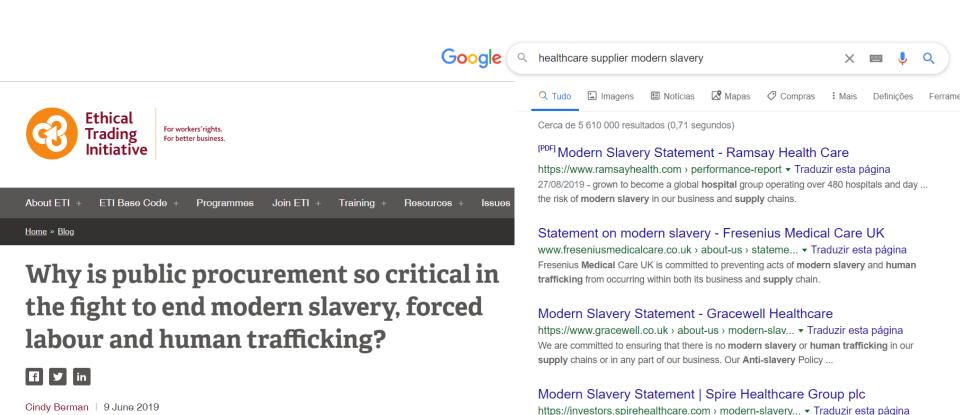
Health Canada, not drug companies, should be the first target of anti-corruption reforms

Lauren Vogel | CMAJ | Feb. 6, 2017

H ealth Canada, not drug companies, should be held primarily responsible for misconduct in Canada's pharmaceutical industry, said policy experts at an anti-corruption symposium in Toronto.

There are <u>many shades of pharma corruption</u>, according to the World Health Organization, from exaggerating or hiding safety and effectiveness data to seeking shortcuts in regulation and bribing prescribers.

Modern Slavery?



IN THE DARK

supplier does not satisfy us of their position on modern slavery, we will ...

Spire Healthcare is a leading independent provider of healthcare services ... Where a key

Bringing Transparency to Canadian Supply Chains



Child Labour?

NHS admits doctors may be using tools made by children in Pakistan

Closer scrutiny demanded as NHS supplier concedes surgical instruments in routine use could be product of child labour



▲ A child in a surgical instrument workshop in Sialkot, Pakistan, shows a spoon-shaped curette he has just finished polishing. Photograph: Haroon Janjua

Children as young as 12 are making surgical instruments in hazardous conditions in Pakistan, prompting fears that the tools could be used in the NHS, the Guardian has discovered.



Goods made by child labourers flooding into Canada: report

BY THE CANADIAN PRESS

Posted June 12, 2017 3:25 am

 Tue, Mar 17: Online producer Yuliya Talmazan talks about a new report from World Vision that talks about the products that Canadians buy without realizing child labour may be involved















A new report says Canadians could be unwittingly purchasing billions in dollars of goods made by child labourers in other parts of the world.



A CALL TO ACTION: ENDING THE **USE OF ALL FORMS OF CHILD** LABOUR IN SUPPLY CHAINS

Report of the Standing Committee on Foreign Affairs and International Development Michael Levitt, Chair

Subcommittee on International Human Rights Anita Vandenbeld, Chair

Sustainability

- The triple bottom line approach focuses not just on costs/profits, but also considers the environmental and social aspects of SC activities
- The 'triple bottom line' is a framework used for managing corporate and SC performance against economic, social and environmental dimensions.
- A triple bottom line approach stresses:
 - the impact of SC's activities on each dimension
 - the interdependence of these three dimensions



SC Social Performance

High

Social/Humanitarian SCs

Social/Humanitarian supply chains are related to approaches where decisions are made based on social concerns (often besides financial concerns)

Sustainable SCs

Sustainable supply chains are related to the new business paradigm where decisions are made based on a balance between financial, environmental and social concerns

Efficient SCs

Efficient supply chains are related to the traditional business paradigm where decisions are made based on exclusively financial concerns

Green SCs

Green supply chains are related to approaches where decisions are made based on environmental concerns (often besides the financial performance)

Low

Low SC Environmental Performance

High



Sustainable Supply Chains

- ❖ Sustainable supply chain management involves additional dimensions of complexity 'triple bottom line' (Elkington, 1998; WCED, 1987):
 - Financial dimension
 - Environmental dimension
 - Social dimension







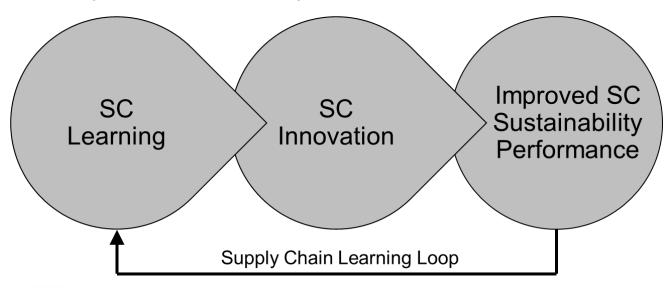
An Evolutionary Approach

• SCs are similar to organizations: they are initially immature, but they learn and accumulate knowledge and capabilities overtime that allow them to perform new activities and innovate (Nelson and Winter, 1982; Hall et al., 2012a, Silvestre, 2015).



An Evolutionary Approach

The learning includes how SC members can effectively work together to integrate activities, and to collaboratively operate by understanding the needs of each partner, the specificities of each relationship and the impact of their action as a whole.





Environmental Turbulence

- The external environment has an impact on the organizational learning (Hedberg, 1981; Levinthal and March, 1993).
- If the "environment is too complex and dynamic for the organization to handle, an overload may occur, and learning will not take place" (Fiol and Lyles, 1985:805).
- The amount of environmental turbulence is closely associated with the degree of complexity and uncertainty a SC faces.
- A highly turbulent business environment can cause organizational inertia (Leonard-Barton, 1992), which makes it more difficult for organizations to learn (March and Olsen,1975), which in turn hampers innovation and sustainability.



Institutional Voids

- Institutions (DiMaggio & Powell,1983; North,1995) impact the firm's innovation and economic performance (Zhu et al., 2012; Chadee & Roxas, 2013).
- Although institutions are formed to reduce uncertainty in human exchange (e.g., North, 1995), weak, failed or absent institutions generate institutional voids.
- Institutional voids are vacuums that allow opportunistic behaviours from economic agents (Mair & Marti, 2009; Puffer et al., 2010; Khanna & Palepu, 1997)
 - Structural & Contingent
- They increase the degree of complexity and uncertainty within the business environment (Webb et al., 2010; Chadee and Roxas, 2013; Mair et al., 2012).

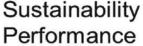


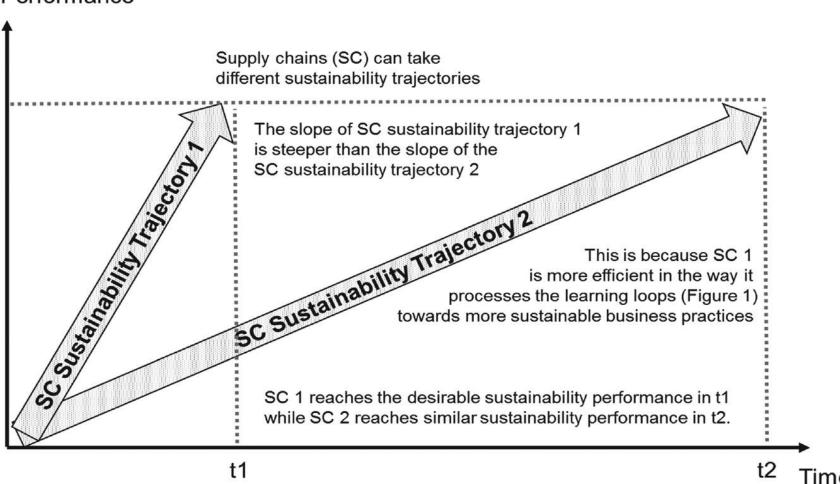
The concept of SC Sustainability Trajectories

- SC sustainability trajectory is the path a SC takes when learning, innovating and improving towards the desired sustainability performance.
- Environmental turbulence prevent SCs from evolving at an appropriate/desired pace on their sustainability trajectory.
- The slope of a SC sustainability trajectory is associated with how efficiently the SC learns and changes towards more sustainable business practices (i.e., how efficiently they process the SC learning loops).
- Since sustainability is intrinsically connected with **time** (Bansal and DesJardine, 2014), the pace at which SCs strategically change towards more sustainable practices matters for their current and future performance.



The concept of SC Sustainability Trajectories





Sustainability trajectories are non-linear and multi-directional.



Why SCs Invest in Sustainability?

Studies

Hall et al. (2012); Beske and Seuring (2014);

Meixell and Luoma (2015); Silvestre (2015a)

Description

Decision-makers' ethics and/or organizational values are

the primary motivations for organizations to enhance

their SC sustainability

Drivers

Ethics and Values

2		l stadies
Extrinsic Motivated (i.e., direct or indirect financial rewards) Initiatives		
Competition	Competitors undertaking sustainable initiatives is the primary motivation for organizations to enhance their SC sustainability	Sarkis et al., (2010); Grosvold et al. (2014); I
Market	Pressure from customers willing to buy sustainable goods and services is the primary motivation for organizations to enhance their SC sustainability	Lee and Kim (2009); Awaysheh and Klassen ((2012); Klassen and Vereecke (2012); Varsei et al. (2015); Meixell and Luoma (2015); Dubey e al. (2016)
Regulations	Law and regulations from Governments, agencies, associations and financial institutions is the primary motivation for organizations to enhance their SC sustainability	Linton et al. (2007); Lee and Kim (2009); Ha Marshall et al. (2015); Dubey et al. (2016); S
Reputation and competitive advantage	Enhanced reputation through marketing campaigns and the search for competitive advantage is the primary motivation for organizations to enhance their SC sustainability	Awaysheh and Klassen (2010); Linton et al. (20 Klassen and Vereecke (2012); Grosvold et al. (2015); Silvestre (2015b)
Secondary Stakeholders	Pressure from media and NGO activism is the primary motivation for organizations to enhance their SC sustainability	Awaysheh and Klassen (2010); Hall and Matos Vereecke (2012); Matos and Silvestre (2013) (2015); Yawar and Seuring (2015); Sanc

Intrinsic Motivated (i.e., ethical considerations and values) Initiatives

Concluding Remarks

- Sustainable SCM is a continuous process whereby capabilities, collaboration and coordination provide SC members the ability to respond to complexly changing economic, social, environment concerns
- Shaped by economic, social, environmental dimensions, SCs emerge, evolve, create new problems that need to be addressed (Nelson & Winter, 1982)
- Becoming a sustainable supply chain is not a destination, but a journey, where trajectory and time matter. Given the evolutionary nature of supply chain sustainability trajectories, supply chains learn and evolve just as organizations do.



Concluding Remarks

- Focal companies play a leadership role; trust is the base for development (Vachon & Klassen, 2006; Lamming, 1993). Knowledge flows among SC members and other stakeholders are crucial (Carter & Rogers, 2008).
- ❖ Focusing on **single objective** (e.g., min. cost/ max. profits myopic view) aligned with the profit maximization/cost minimization paradigm is unlikely to find satisfactory solution to SC sustainability. Multi-objective functions are likely to be satisfactory through global search in distant parts of the system (i.e., innovation)
- **❖** Double Bottom Line????



Double Bottom Line

- Sustainable Innovation 2.0: Enhancing socio-ecological value creation even when this does not maximize financial value capture
- SI 1.0 refers to innovations that enhance financial gains via addressing social or ecological negative externalities, and is consistent with the **triple bottom line**.
- SI 2.0 refers to innovations that enhance socio-ecological value creation while maintaining financial viability, and is consistent with a **double bottom line**.
- The double bottom line approach has a primary focus on enhancing socio-ecological well-being while maintaining the financial viability, where the meaning of the latter is determined on a case-by-case basis and may differ from organization to organization.



Thank you!

