Technological Forecasting & Social Change xxx (xxxx) xxx–xxx

Contents lists available at ScienceDirect

Technological Forecasting & Social Change

journal homepage: www.elsevier.com/locate/techfore

Small business challenges and the triple bottom line, TBL: Needs assessment in a Midwest State, U.S.A.☆

Diane Depken*, Catherine Zeman

Recycling and Reuse Technology Transfer Center, RRTTC, University of Northern Iowa, Cedar Falls, IA, USA

ARTICLE INFO

Keywords:
Corporate environmental responsibility
Triple-bottom line
Green business
Small business
Sustainable business
Needs assessment

ABSTRACT

Few resources or published studies exist identifying the informational needs or motivational factors that would assist small businesses wishing to develop, follow, or institute a business model using sustainable and triple bottom line, TBL practices in the U.S. Further, little was known in this mid-western State about the depth of green business practices or the desire of business owners to learn more. A cross-sectional, convenience sample was surveyed to define the needs and interest of the small business enterprises. Only 10 (n = 31) percent of the 319 companies contacted completed the short survey. However, for that 10%, a strong interest in gaining knowledge in this area was expressed. Findings indicated that many smaller businesses may not have the efficacy base of knowledge, skills, and resources whereby they can operationalize sustainable or green business practices. Coding the responses in the areas of green business motivation, learning, and hoped for benefits according to the TBL of community, profit, and environment illustrated that profit was a motivator overall 2:1 compared to environment and community. For the small business community, much of the literature, technical expertise and sustainability assessment models remain beyond their resources and time reach. The challenge becomes one of finding ways to broaden the appeal of sustainability and TBL practices and establish a means of peer to peer sharing and benchmarking efficacy and progress in sustainable business practices.

1. Introduction

Our Common Future: Report of the World Commission on Environment and Development, commonly referred to as The *Brundtland Report*, was published from the United Nations World Commission on Environment and Development (WCED) in 1987. This report was pathbreaking in many ways. One was in defining the concept of sustainability as, "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Our Common Future, 1987). This is the definition of sustainability that has become widely accepted and which endures.

The ensuing decades saw fundamental challenges to sustainable development and sustainable growth at all levels of systems, from individual to global. The European Commission issued a Green Paper in 2001 entitled *Promoting a European Framework for Corporate Social Responsibility* (European Commission, 2001) which details many of the main concepts and constructs which helped to frame and accelerate concerted research and business efforts around the themes of corporate environmental responsibility (CER) with the context of corporate social responsibility (CSR). This green paper, although emphasizing the social responsibilities of corporate entities, identified the common dilemma faced across the developed world; larger business enterprises have the resources and the potential for greater immediate benefits which drive their adoption of corporate environmental responsibility.

These past few decades have witnessed the fundamental creation and growth of "green business" and sustainable business ideology, and practice in the United States as well (Pernick and Wilder, 2012). Corporate sustainability is regarded as an approach to "combine economic, ecological and social concerns within a coherent business strategy" (Schneider and Meins, 2012). In contrast, The Europe Commission and many of the published works in Europe on CSR and CER identified the need for companies to go beyond simple compliance legislation, regulations and policies. (Sáez-Martínez et al., 2016; Rabadán and Sáez-Martínez, 2017). The corporate interest and research efforts that followed both the *Brundtland Report* and the *Promoting a European Framework for Corporate Social Responsibility* Green Paper from the European Commission helped to create a common language and common set of guidelines for the business and research community. Interestingly, the work in the EU continued to deepen in a progressive, coherent fashion that has been missing in the U.S.

☆ The authors wish to acknowledge the Recycling and Reuse Technology Transfer Center, RRTTC for making this study possible.
* Corresponding author.
E-mail address: diane.depken@uni.edu (D. Depken).

http://dx.doi.org/10.1016/j.techfore.2017.05.032
Received 4 January 2017; Received in revised form 18 May 2017; Accepted 24 May 2017

Environmental Sustainability in theory and practice continues to grow as an important corporate value for most large businesses and multinational corporations (Schneider and Meins, 2012). One common framework or applied model in the United States for this rather vague and systemic concept of business sustainability is the ideology of the "triple bottom line" (TBL). TBL and the popular phrase "people, profit, planet" were first coined by John Elkington from Great Britain, again the EU lead the way on this, polyglot and consultant with a background in environmental philosophy and studies (Elkington, 1997, 1998). He recognized over 20 years ago, that what is measured is what is valued and that in business, societal and environment costs/benefits were at the time often afterthoughts at best. The 'triple-bottom-line' conception became one of the major guiding paradigms for sustainable organizational performance measurement (Hubbard, 2006) and has persisted in the U.S.

After the introduction of the original concept many others contributed to the development of meaningful, practical, assessment methods for the social, environmental, and economic impacts of business and industrial activity. Many large industries and companies have incorporated these concepts in corporate environmental responsibility statements while at the same time embracing benchmarking measures and certification for environmentally responsible management.

While triple-bottom line has stuck as a moniker for some businesses, especially in the United States, this approach may oversimplify the complexities of any company seeking to embark on or improve their sustainable practices (Wayne and McDonald, 2004). Each business and industry sector has specific stakeholders, barriers, geography, and forces which help shape and define the type of sustainable practices that work best. While large corporate entities can and do employ experts to develop cohesive strategies and ways to implement these best practices, many small to medium sized business entities of < 500 employees have been left without the resources to move forward as rapidly with "green business" approaches to providing products or services. Many small companies do not have the TBL technical expertise, skills, and resources whereby they can operationalize sustainable business practices. This is important for in the United States as 99.7% of employer firms and 42.9% of private sector employment is provided by small business enterprises (Small Business Administration, 2016).

This needs assessment of small businesses in Iowa was designed to gather information regarding the current motivations, perceived benefits, and perceived needs regarding green and sustainable business practices in order to add to the small body of published work on this topic especially as it pertains to the United States. The review of European SME CER related literature on sustainability practices for small businesses as well as the needs assessment data analysis will be used to develop and improve programing and services and will be useful to continued exploration of environmental sustainability need and efforts for small business enterprises.

2. Background

2.1. Business sustainability assessment tools: Small business accessible?

Even beginning the process of building sustainable practices into one's business requires a set of skills, abilities and resources that may be a stretch or be perceived as outright unattainable for many small or medium sized business owners or managers. There has been a broad interest in sustainability assessment for businesses in the published literature which informed this needs assessment effort. While medium and large companies are familiar with and have the resources to fully utilize environmental management tools provided by the International Organization for Standardization (ISO 14000 family of environmental standards tools), many small business do not have the resources to enact ongoing environmental sustainability and/or monitoring protocols (ISO 14000, 2016).

An additional barrier to small business adoption of sustainable environmental policies and practices for small companies in the United States is the limited amount of published literature that is accessible to this population. While there is a deep and growing body of literature on environmental responsibility in both large, small and medium sized enterprises (SMEs) in the EU, the vast majority of this research is not focused on, or generalizable to business entities in the Unites States. Sustainability, green business, and triple-bottom-line are the terms used most often in the U.S. Whereas most other industrialized countries continued to develop and build on the *Brundtland Report* and the *Promoting a European Framework for Corporate Social Responsibility* Green Paper discussed above.

Two Swedish SMEs were examined regarding the drivers of general corporate social responsibility practices, and found that unlike larger businesses, small businesses did not have departments to assign tasks and responsibilities to, and therefor adopted a more informal integration of social responsibility practices into their business model (Lee et al., 2016).

Nybakk and Panwar (2014) highlight the lack of studies examining CSR in smaller companies, and examined 230 very small (< 10 employees) businesses in Norway. Using structural equation modeling, they found a stronger market orientation was associated with higher levels of social and environmental responsibility toward their customers and their community and suggested that pragmatism and instrumentalism was the underlying factor prompting CSR.

Sáez-Martínez et al. (2016) propose a useful theoretical framework for examining the drivers of genuine corporate responsibility among small business entities and the relationship of these drivers to CER and ultimately overall corporate performance. This model is applied to small business European entrepreneurs in the water and waste-water sectors (Rabadán and Sáez-Martínez, 2017). This framework has the potential to be a useful systems analysis tool for all business sizes but is especially practical for SMEs and SME researchers who wish to explore the complex relationships between firm values, collaborative partners, market demand, regulations and incentives.

Regarding specific sustainability assessment tools that may or may not be applicable in small businesses settings in the United States, Hacking and Guthrie (2007) attempted to reconcile the terminology of sustainable development (SD) tools. These include: strategic assessment, sustainability assessment, integrated assessment, and the early and traditional environmental impact assessment, (EIA) as developed under the National Environmental Policy Act (NEPA). The EIA was undoubtedly the first effort at creating assessment tools to understand and characterize human impact on the environment. Most of these tools have been used by environmental consultants and government agencies. These approaches have heavily influenced the broadly utilized ISO 1400 guidelines that business and industry use to develop corporate environmental policy. This set of guidelines and tools are amenable to most large corporations that can afford to hire professionals experienced in the application of these assessment rubrics.

Ness et al. (2006) also discuss multiple means of performing sustainability assessment under three major areas of focus: indicators/indices of sustainability, product related assessments, and integration of sustainability assessment tools. They conclude that the current varied tools need to meet criteria for specificity of assessment while also being accessible to widely divergent users and providing standardization of measures. Thus, there are conflicting needs for the application of these tools. Again, how does the small business leader develop the expertise to know which assessment tools would be of benefit to their organization, do they know if these tools even exit, and what do they consider sustainability practices? And, perhaps most importantly for small businesses with fewer resources to devote to these efforts, what motivational factors will sustain the use of these tools toward real performance and governance changes?

Sustainability measures, rubrics, and assessments will not serve as change agents or systems transitions unless these models are clearly articulated and governance or implementation of these models is