Sustainable Social Shopping Systems: Concepts and Implementation

By Claris Yee Seung Chung, Roman Proskuryakov and Dr. David Sundaram

The University of Auckland Business School, Auckland, New Zealand

Introduction

One of the key activities that humans undertake that has an overwhelming influence on their sustainability as an individual as well as a family is shopping. Shopping is a fundamental household activity which is closely interconnected with financial, health, philosophical and environmental values, and is often carried out by individual’s habitual behaviors (Gilg et al. 2005; Young et al. 2000). E-commerce has become one of the normal ways to shop nowadays and social shopping features are essential for E-commerce businesses to be successful (Kim et al., 2013; Olbrich & Holsing, 2011).

Despite the clear opportunities in the overlapping area of these two concepts, that is supporting multi-dimensional individual sustainability through social shopping features of online shopping, no attempts have been made to combine them together in supporting individual sustainability. This paucity became more obvious when key words were searched for in Google Scholar. While many articles have been analyzed in six leading Information Systems journals and across IS Journal Sustainability Sustainable Systems: Concepts and Implementation disciplines, we propose a framework which portrays the habit loop (Figure 4).

Research & Practical Issues

Sustainable shopping and online social shopping concepts certainly show their leveraging strength in supporting both individual sustainability. Contrarily, no studies or practical solutions have been attempted to combine these readily available concepts and mechanisms as a solution for individual sustainability. This paucity became more obvious when key words were analyzed in six leading Information Systems journals and searched for in Google Scholar. While many articles have been found with each key word separately, a distinct lack of research interest has been apparent when combining concepts from these key words in the Information Systems discipline (Table 1).

<table>
<thead>
<tr>
<th>Key Word</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustainable</td>
<td>10</td>
</tr>
<tr>
<td>Social</td>
<td>12</td>
</tr>
<tr>
<td>Shopping</td>
<td>14</td>
</tr>
<tr>
<td>Systems</td>
<td>16</td>
</tr>
</tbody>
</table>

Table 1. Keyword Frequency in leading IS Journals (2000-2014) and in Google Scholar

Sustainable Social Shopping Systems

1. Concepts: Shopping can bring fundamental changes to individual lifestyle (Young et al. 2000), and relationships between various life dimensions need to be understood to support individual sustainability. Therefore, in order to support a significant pathway to individual sustainability, systems should be able to offer: (a) appropriate multi-dimensional information to customer to choose products for improving their sustainability and (b) support their sustainable transformation through social shopping features.

2. Model: SSSS follows the habit model, but each step is incorporated with the details of the buying decision processes (Figure 2).

Customers will experience these three steps through online shopping, and over time they will form a habit relating to shopping online.

3. Framework: SSSS should be developed based on a framework which supports sustainable, social, shopping concepts through multi-dimensional personal decision making processes, shopping process, social engagement modelling, system dynamics, data and information integration modelling (Figure 3).

4. Process: Shopping process can be initiated by various stimuli and they will have a shopping experience based on the shopping process (Figure 4) which has three supporting features portraying the habit loop.

Prototype of Sustainable Social Shopping Systems

Unlike an ordinary online shopping cart system, SSSS will provide at least three life dimensions’ information (i.e. financial, health and environmental aspects) in an integrated manner.

Featured Page

includes new and noteworthy products and packages, which is a result of a process run by a sophisticated recommendation engine.

Product Page

provides multi-dimensional information to help with individuals’ sustainability practices. Information for each life dimension will be guided by either commonly adapted method or government regulations.

Shopping Confirmation Page

shows sustainability information and provide social shopping features.

Future Research Directions

Sustainability is one of the most often discussed topics in our society. Although no one argues that individuals are the main players in changing society and the environment, individuals have always been treated as just actors and decision makers who transform the organizational, societal, national, and/or global sustainability practices.

One of the key activities that humans undertake that has an overwhelming influence on the economic, environmental, and health facets of their life is shopping. To be sustainable, individuals need to integrate and balance information and choose products that support sustainability. Therefore SSSS can be a very attractive system for both consumers and e-commerce businesses, as it not only supports individual sustainability but also has the potential of becoming a promising business model.

This research proposes concepts, models, and processes that have the potential to be the foundation for sustainable social shopping and for the formation of sustainable life transforming habits. Furthermore, we also propose a framework and architectural components for a sustainable social shopping system to realize the aforementioned concepts, models, and processes. We are also in the process of prototyping a sustainable social shopping system in the context of a purely online supermarket.

This system enables customers to understand sustainable purchase choices for their quality of life, and aids them to transform sustainably through shopping experiences. The system has design features based on traditional purchasing decision making model as well as habit-forming models. Shopping aid features support conceptual models and system framework proposed. Links with social media and networks enable customers to transform their lives sustainably by measuring inputs, understanding the relationship among those inputs, and benchmarking outcomes historically, with their friends, and with others in their social groups.

At this stage, the Sustainable Social Shopping System provides information on three life dimensions: health, finance and environment. The data is currently sourced from product suppliers, government regulations and studies from expert organizations. However in order to support a holistic individual sustainability, the system needs to be flexible to incorporate other aspects of life dimensions and connect to a larger variety of data from outside sources.

References