Technology social venture: A new genre of social entrepreneurship?

Kamariah Ismaila, Mir Hossain Sohela, Umee Nor Ayuniza

Abstract

Technology social venture (TSV)’s represent a unique genre of social venture which attempts to satisfy a social need through technological innovation in a financially sustainable manner. This paper attempts to differentiate TSV from social entrepreneurship on the basis of two factors – innovative use of technology and its capacity of replication. Followed by the Archival research method, this exploratory study used the cases of Benetech Inc and Verdant power in this regard. The study concludes that TSV’s are different from traditional social ventures and argues for further research to establish it as a separate academic field.

Keywords: Technology social venture; social venture; societal development; technological innovation.

1. Introduction

Entrepreneurship is essentially creative in nature. It is a matter of exploration, exploitation and initiation of new things, new ways of doing things, new methods of production, new use and new markets for products and services. It is seen as a pathway to the solutions of some major problems facing modern society and innovation is an integral element of it to ensure economic growth and prosperity [1]. Various types of entrepreneurship are emerging, e.g. traditional commercial entrepreneurship which emphasizes on growth, profitability and ultimately wealth creation and social entrepreneurship (SE), on the other hand, emphasizes on innovating ways to solve major societal problems rather than creating individual wealth [18]. Along with these two types of entrepreneurship, a new genre of entrepreneurship is emerging recently named Technology Social Venture (TSV) which falls at the intersection of SE and technology innovation. Despite the fact that technology can’t provide solutions to social problems [2], some of the largest philanthropic organizations like Melinda and Bill Gates foundation, McArthur Foundation etc. are attempting to innovate technology based solutions to solve social problems. The current literature on
technology and innovation is yet to discuss this growing phenomenon [3]. The objective of the study is to differentiate TSV’s from SE and encourage researchers to initiate further research on different aspects of TSV, to establish itself as a new genre of entrepreneurship.

2. Background literature

2.1. Social venture

Social entrepreneurship involves the initiatives aiming at what is deficient or non-functioning in the society, introducing new solutions to create a sustainable society through application of entrepreneurial logic [4]. Social entrepreneurship is somewhat similar to traditional entrepreneurship with some basic differences [5]. It is generally agreed that entrepreneurship involves three elements: opportunities, enterprising individuals and resourcefulness [6,7] which are also the basic elements of Social entrepreneurship. Both the entrepreneurs use the process of continuous innovation, adaptation and learning as their modus operandi [8]. The two basic factors differentiating social ventures from traditional entrepreneurial ventures are –

First, social value creation is at the heart of the social entrepreneurial process [9]. Social entrepreneurial ventures address social problems which are either ignored or inadequately met by the traditional entrepreneurs or government sector. Whereas traditional for-profit ventures are directed towards making economic profit resulting in individual or shareholders gain, although they also benefit society through introduction of new products or services, creating employment opportunities and most importantly, indirect transformative social impacts. These transformative social impacts can be an important motivational force for the traditional entrepreneurs. The fundamental difference is in the mission statement - social entrepreneurship’s premier mission is to create sustainable social value for the public good whereas commercial entrepreneurship’s mission is to create economic profit and may be social value as the byproduct of the process.

Second, the dimensions of social ventures are yet to be identified as they always overlap the boundaries between the ‘for-profit’ ventures and social mission driven ‘non-profit’ ventures. Some definitions limit social entrepreneurship to nonprofit organizations [10], while others describe social entrepreneurship as for-profit companies operated by nonprofit organizations [11], or organizations that create a firm at a financial loss [12]. Still others equate social entrepreneurship to philanthropy [13], while some scholars prefer broader definitions which relate social entrepreneurship to individuals or organizations engaged in entrepreneurial activities with a social goal [14,15]. Irrespective of the forms these ventures use, social ventures serve the society by operating at the nexus of public, economic and social authorities [16].

2.2. Technology social ventures

Technology social venture (TSV)’s represent a unique genre of social ventures which attempts to satisfy a social need through technological innovation in a financially sustainable manner [16]. Basically it is the merger of social and technology entrepreneurship which uses knowledge bridging mechanism [16]
for technological innovation to serve social needs. Like social entrepreneurship, TSV’s also address the double keystones of social value creation [9] and financial return [17], but they do so using advanced technology.

Figure 1: Social venture and Technology social venture [16]

TSV’s differ from social ventures in some unique ways. Traditional social ventures are driven by human-power and rely on volunteers and employed social workers as human resource. The growth of the social venture requires more human resources which demands more funding for the hiring and training of additional human resources to ensure the growth. On the contrary, although TSV’s often requires more initial funding than traditional social ventures but they can be replicated across regions or projects with less expense and at a faster rate [3]. They also argued that this quality of replication helps the TSV’s to maximize the social impact as well as achieving principle of scale and reaching sustainability.

Several philanthropic organizations e.g. The Melinda and Bill Gates Foundation, The MacArthur Foundation etc. have started to address social problems using technological innovation. Recently, academicians have also highlighted the transformative and innovative power of the TSV’s. As for example, Prahalad, in his article ‘The fortune at the bottom of the pyramid’[19], has shown the capability of the technology empowered organizations to cure social ills through several case studies. One of those cases is Voxiva, which innovated a technology solution to track diseases, monitor patients, report crimes, manage programs and respond to natural disasters in many regions of the developing world through the use of internet, phone or text-messaging [16]. The founders of the organization had previous knowledge and experience of information technology, public health, non-profit organization development and human rights law which helped them to bridge multiple knowledge domains to dream, start and develop the specific venture.

3. Case 1: Benetech incorporates
Benetch Inc. was founded by Jim Frutcherman in 1999 as a non-profit venture which combines technological solutions with social entrepreneurship business models to serve the disadvantaged communities which most big companies don’t serve. It has developed itself as a technology incubator where a company team and a board decides to finance the initial technology and business development plans for different ideas meeting the criteria of social entrepreneurship domains. The firm has already received several social venture industry awards like Skoll Foundation award for social entrepreneurship (2003), Schwab Foundation Award (2003) and Social Capitalist award (the only technology organization to receive the award).

Table 1. Projects developed by Benetch Inc.

<table>
<thead>
<tr>
<th>Project</th>
<th>Description</th>
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<tbody>
<tr>
<td>Bookshare.org</td>
<td>An accessible internet library of scanned books and publications for people with print disabilities.</td>
</tr>
<tr>
<td>Route 66</td>
<td>An internet-based instructional program that provides literacy instruction to adolescent and beginning adult readers.</td>
</tr>
<tr>
<td>Martus</td>
<td>An attempt to improve global human rights and the social justice sector by bringing efficiency and security to the documentation and reporting of abuses.</td>
</tr>
<tr>
<td>HRDAG</td>
<td>The Human Rights Data Analysis Group (HRDAG) develops database software, data collection strategies and statistical techniques to measure the human rights violence.</td>
</tr>
<tr>
<td>Miradi</td>
<td>A software tool designed specifically for the management of complex environmental projects.</td>
</tr>
</tbody>
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Source: Adapted from http://www.benetech.org

In the past few years, Benetech Inc., with the support of its financiers and partners, have expanded Bookshare to serve over 80,000 users who cannot read traditional books. The Human Rights program (HRDAG) contributed to reveal the truth of human rights and offered a chance for reconciliation in conflict zones across Asia, Africa and Latin America. Another new and exciting software application, Miradi, helps the environmental groups plan and managing conservation projects. The Benetech projects are now creating new hope for tens of thousands of people whether its helping war-torn Liberia come to grip with its past or helping a blind child discover the joy of reading.

The vision of Benetech is to innovate technology that is socially useful, affordable and accessible to all [20] (www.benetech.org). It dreams of a world where every person has the access to information needed for education, employment, health and social inclusion. In the coming years, Benetech is trying to inspire others in the field to follow the Technology Social Venture model in building a movement to break down barriers that have excluded the disadvantaged groups from participating in technological revolution.

4. Case – 2: Verdant power

Verdant power is the world leader in the design and application of marine renewable energy solutions. It was founded in 2000 and headquartered in New York, USA. Its mission is to develop new technology systems that augment important human needs e.g. access to clean energy. Clean technology is not only an important requirement for today’s sustainable industrial development but also the sector can play a crucial role in economic growth and job creation [1]. Clean technology significantly affects the various areas of industry like renewable energy, manufacturing and diverse kinds of services. It is not only a business
opportunity but also provides the chance of ‘doing some good’ to the society from a local or global perspective [1].

Verdant power systems employ underwater turbines to generate renewable and reliable clean energy from the natural water currents of oceans, rivers and manmade channels. The company not only design and commercializes its own technology, but also develops projects around the world.

### Table 2. Projects developed by Verdant Power

<table>
<thead>
<tr>
<th>Project</th>
<th>Description</th>
<th>Completion Year</th>
<th>Expected Electricity Generation</th>
</tr>
</thead>
<tbody>
<tr>
<td>RITE</td>
<td>Initiated in 2002, Roosevelt Island Tidal Energy project is being operated in New York city’s east river. Through the Cornwall Ontario River Energy project, clean renewable energy will be generated from the natural currents of the St. Lawrence river near Cornwall, Ontario.</td>
<td>2012</td>
<td>1 MW</td>
</tr>
<tr>
<td>CORE</td>
<td></td>
<td>2013</td>
<td>15 MW</td>
</tr>
</tbody>
</table>

Source: Adapted from http://www.verdantpower.com [21]

Verdant Power is constantly searching feasible water bodies and new opportunities for collaboration around the world. The company is assessing the water resources in the UK, South America, China and India to start new projects. The technology introduced by Verdant Power can create an amount of electrical energy many times greater than what is consumed today around the world. This new technology (electricity generation from river-water currents) can achieve 80-90% capacity factors, approximately twice of the wind and solar power systems. This energy is emission and by-product free, sustainable, predictable and indigenously sourced energy (www.verdant power.com).

### 5. Conclusion

The objective of the study was to establish technology social venture as a new type of social entrepreneurship which falls at the intersection of two fields – SE and technology innovation. The above mentioned cases show that both the organizations used innovative technology to solve societal problems rather than on volunteering and employed human resources. Moreover, the technology innovated and used by both the organizations were easily and rapidly replicated in different projects and different perspectives – which conforms to the unique characteristics of TSV’s. Although TSV is receiving considerable practitioner interest recently but there has been a little research on the various aspects of its venture development process, opportunity recognition, financing process etc. to establish itself as a separate academic field from social entrepreneurship. The researchers hope that, future studies, both conceptual and empirical, in this area might answer the unresolved questions arise in the study. This is a topic for future and more extensive research.
Acknowledgements

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