Tourism Social Entrepreneurship Model with Paretto Analysis Technique at Tourism

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Abstract: Sustainable tourism development opens the door for social entrepreneurial actors to carry out innovations in the local tourism sector. The aim of this research is to address the gap in conceptualizing social entrepreneurship as a more holistic strategy for the development of sustainable community-based tourism. By critically analyzing the literature, this study places social tourism entrepreneurship in community development using a pareto analysis model. In the first stage, a comprehensive literature review is carried out on the factors that influence social entrepreneurial intention which reveals several variables that influence or are responsible for the formation of social entrepreneurial intention. In the second stage, a quality tool namely “Pareto Analysis” is used to identify and propose “vital few” factors, applying the 80:20 rule. Finally, this study proposes a comprehensive model for the formation of social entrepreneurial intention.

Key words: social entrepreneurship, tourism, pareto analysis.

I. Introduction

The growth of tourism in several areas in East Java seems to be massive. That matter marked by the development of various natural and artificial tourist destinations and followed by the growth of various lodging, star hotels, and homestays. Based on BPS data, the contribution of tourism to East Java's GRDP is 117.428 trillion or 5.82% in 2017-2018. However, the development of the tourism sector has not had a significant impact on its side effects, especially small business of tourism sector (Tourism UKM). This is suspected from the tourism development concept which still prioritizes on profit oriented for tourism entrepreneurs, and tends to ignoring social and economic aspects for marginalized communities. Therefore social innovation is needed by involving the community or adopting creative ideas that have a positive impact on the quality of life of the poor (Aquino et al., 2018; Solvoll et al., 2015). The community development model that has been running so far is still symbolic and incidental, without a clear road map. So it is necessary to develop tourism to involve the community in a holistic and sustainable way with a tourism social entrepreneurship model (de Lange & Dodds, 2017; Mottiar & Boluk, 2017). Tourism social entrepreneurship (TSE) is an alternative business model as a social enterprise, aiming at eliminating social problems such as poverty, low education, poor health, unemployment, and other social needs that are not met by the public and private sectors (Mottiar & Boluk, 2017; Altinay et al., 2016; Sheldon et al., 2017; Boukas, & Chourides, 2016). Social entrepreneurship, which adopts a business model designed to create social value while generating the economic benefits of the tourism sector, so that the distribution of social and economic wealth is more evenly (Sheldon et al., 2017; Aquino et al., 2018) and the entire tourism value chain can generated, as well as maintaining environmental regeneration (Boukas, & Chourides, 2016). Jilenga, (2017) stated that the TSE is one of the drivers of economic change in suburban communities, through value-oriented tourism services, that can explore and grow market opportunities. Social entrepreneurship in several developing countries is one of the sectors that provide employment and in turn facilitate the fighting of social problems and poverty (Loku et al., 2018). The aim of
this research is first to develop social entrepreneurship sustainably through the local tourism industry and reduce the negative impact of development of conventional mass tourism which tends to be capitalist. The second objective is to provide alternative solutions as a form of contribution to the village innovation market in improving the economy of its citizens. The third goal is to prevent the exploitation of local resources that can damage the environment and local culture. Method used in the first development process is using Pareto analysis, that is decisions making in the field of statistics are used to select a number of factors that provide a substantial overall effect (Talib et al., 2010). Pareto analysis, using the 80:20 principle developed by Vilfredo Pareto. This means that 80% of the results, will require 20% of the effort or 80% of the difficulty in achieving success lies in 20% of the challenges in TSE implementation. At the stage second, the results of Pareto analysis are represented in the form of a Pareto chart, which presents a variety factors related to a variable arranged according to the magnitude of the impact these factors (Cervone, 2009; Ahuja et al., 2019) in order to create a holistic model concept about the intention to form social entrepreneurship tourism based on plan behavior theory (TPB).

II. Literature Review

The dynamics and processes in developing the intention to become a social entrepreneur are very important, given that social entrepreneurship is getting more and more attention from many parties especially social entrepreneurship in the tourism sector (Ahuja et al., 2019). New model of social entrepreneurial intention is based on a theoretical framework such as the theory of planned behavior (Ajzen, 1991) and entrepreneurial event models (Shapero & Sokol, 1982). Mair and Noboa (2005) state two models that are widely used for intention research in the field entrepreneurship is a theory of planned behavior and an entrepreneurial event model. Krueger and Deborah Brazeal (1994) then attempted to integrate these two models and building models of entrepreneurial potential. Ajzen (1991) proposed expanding the TPB (Ernst, 2011). This expansion can provide additional insight in this area. Several studies have extended and modified the TPB model in various ways. The context for researching social entrepreneurial intention is shown in Figure 1.

One of the earliest studies regarding empirical testing of the TPB model for determining social entrepreneurial intention is carried out by Ernst (2011). Ernst (2011) extends the theory of planned behavior by adapting the three elements of this attitude level in the context of social entrepreneurial intention. Ernst extends this model with include the attitude level construct antecedents namely social entrepreneurial personality, social entrepreneurship human capital, and social entrepreneurship social capital and Prieto et al. (2012) combined the TPB and The Center’s Assess, Challenge, Support (ACS) model for Leadership Development. Combining these two models, Prieto et al. (2012) seeks to create a framework for the development of social entrepreneurship. The researchers evaluate the students’ entrepreneurial intention social scores of African-American and Hispanic
colleges and see that this intention is very low. They suggested that their framework could serve as a guide for increase social entrepreneurial intention.

Bosch (2013) examined the direct effects of personal values such as self-improvement, self-transcendence, conservation, and openness to change to intention to pursue commercial and social entrepreneurship. TPB is used as a theoretical framework in further examining the mediating effect of attitudes on the relationship between value personal and entrepreneurial intentions (Bosch, 2013).

Hayek et al. (2013) suggest that the social psychology literature suggests the inclusion of personal norms in predicting moral intentions. In this paper, by incorporating personal norms and attitudes, we strive to extends the TPB framework to analyze the life story of Juliette Gordon (Daisy) Low, who is the founder of Girls Scouts, the world's largest youth association (Hayek et al., 2013).

Chipeta (2015) conducted research, as part of her master thesis, for researched social entrepreneurial intention among university students in Gauteng Province, Africa South. Subsequent research of Chipeta et al. (2016) and Chipeta and Surujjal (2017) use the TPB as a theoretical framework and examine the role of attitudes towards behavior and perceptions of behavioral control along with attitudes towards education of entrepreneurship, proactive personality, and a tendency to take risks. Interestingly, even though Chipeta (2015) found that gender and age did not play a significant role in social entrepreneurial intention among students, research similar by Chipeta et al. (2016) concluded that there are significant differences in terms of the influence of gender and age on social entrepreneurial intention and attitudes towards entrepreneurship.

Yang et al. (2015) examined the differences in the concept of social entrepreneurship in the two cultures different, namely, the US and China. In this study, Yang et al. (2015) uses planned behavior theory to evaluate the influence of culture on social entrepreneurial intention. The results showed that the subjective norm has a higher effect and attitudes towards behavior have a lower effect on social entrepreneurial intention in China than in the US.

Rapando (2016) tries to study the influence of environmental factors on social entrepreneurial intention through the TPB model. According to Rapando (2016), environmental factors such as high poverty rates, high crime rates, high income levels low rates, lack of access to cheap capital, low access to international markets and local, and a lack of human and intellectual capital hinders the social entrepreneurial intention.

Politis et al. (2016) provides empirical evidence regarding the feasibility of planned behavior theory in predicting commercial and social entrepreneurial intentions while denying personality trait theory and contextual influence theory (Politis et al., 2016). Cavazos-Arroyo et al. (2017) investigated the role of entrepreneurial attitudes, subjective norms, and self-efficacy in influencing the intention of starting a social entrepreneurship venture among the population of Mexico. This research also shows that orientation to social innovation can be very predicted by social vision and interest in financial returns and maybe not influenced by sustainability values (Cavazos-Arroyo et al., 2017). Cavazos-Arroyo et al. (2017) also agreed on the positive effect of orientation on social innovation on attitudes towards social entrepreneurship. This study uses the TPB as a theoretical framework and examining the influence of subjective attitudes and norms on social entrepreneurialism intention. However, these researchers chose to change the perception of control behavior with self-efficacy in their research model. The results showed that while subjective norms emerge as the strongest predictor of social entrepreneurial intention in Mexico, this also positively influenced by attitudes and entrepreneurial self-efficacy (Cavazos-Arroyo et al., 2017).

A study by Tiwari et al. (2017) aims to investigate social entrepreneurial intention among undergraduate students in India. This research uses planned behavior theory as a research framework. In this study, beside determinants of original intention in the TPB, researchers included new antecedents such as intelligence emotion, creativity, and moral obligation. Tiwari et al. (2017) concluded that while emotional intelligence and creativity are strong antecedents of attitudes towards behavior, subjective norms, perceptions of behavior control, and social entrepreneurial intention, moral obligation shows a rather weak relationship with subjective norms.
Entrepreneurial event model

Entrepreneurial event model developed by Shapero and Sokol (1982) consists of three shift elements, perceived desirability, and perceived feasibility that leads to intention formation. According to the Shapero model, human behavior is guided by inertia until something bothers or displaces it (Krueger & Deborah Brazeal, 1994). Shifts are triggers that lead to behavior change (Shapero & Sokol, 1982). Ayob et al. (2013) explain that this shift can be as negative as lack job satisfaction or it can be positive like rewards. Meanwhile, perceived desirability refers on the attractiveness of starting a business for an individual, perceived feasibility is an individual's perception of his ability to start a business (Shapero & Sokol, 1982). Perceived desirability is influenced by personal attitudes, values, and feelings that come from the social environment of individuals such as family, friends, and colleagues (Shapero & Sokol, 1982). On the other hand, factors such as knowledge, resources human, and finance affect perceived feasibility (Shapero & Sokol, 1982).

Entrepreneurial potential model

The entrepreneurial potential model (Krueger & Deborah Brazeal, 1994) was developed with integrating the concept of planned behavior theory (Ajzen, 1991) and entrepreneurial events model (Shapero & Sokol, 1982). Krueger & Deborah Brazeal (1994) explained that the entrepreneurial potential model streamlines previous theories by matching perceived desirability with social attitudes and norms and perceived feasibility with perceived behavioral control. Krueger & Deborah Brazeal (1994) further stated that the selection of the resulting behavior depends on the relative credibility of the alternatives behavior supported by a propensity to act.

Tendency to act, as conceptualized by Shapero & Sokol (1982), is a stable personality characteristic (as cited in Krueger & Deborah Brazeal, 1994). Thus, the behavior must appear desirable and deserves to appear credible. Potential, as explained by Krueger & Deborah Brazeal (1994), is latent and causally and temporally exists before intention. Shapero & Sokol (1982) defines potential as pre-existing readiness for accepting opportunities, and entrepreneurial events occur when this potential is followed by events that arise or shift (Krueger & Deborah Brazeal, 1994).

Mair and Noboa (2005) are one of the first researchers which suggest that perceived desirability and perceived feasibility affect behavioral intention behind the creation of social enterprises. In this case study on social entrepreneurship, Mair and Noboa (2005) adapts a model of entrepreneurial potential (Krueger & Deborah Brazeal, 1994) and translate it into social entrepreneurship. Mair and Noboa (2005) argue that social entrepreneurship like traditional entrepreneurship also experiences perceived feasibility and willingness and propensity to act. Other than that, social entrepreneurship develops social sentiment, while variables such as willpower, support, and opportunity building were found to be an important antecedents of feasibility perceptions and desirability and propensity to act.

Mair and Noboa (2006) aim to build a concise model of intention formation while basing oneself on the theory of planned behavior (Ajzen, 1991) and models of the establishment of the entrepreneurial incidence of Shapero & Sokol (1982). While the antecedents just as empathy and moral judgment influence desirability, worthiness is facilitated by social support and belief in self-efficacy (Mair & Noboa, 2006).

Models of Shapero and Sokol (1982) and Krueger and Deborah Brazeal (1994), a research by Ayob et al. (2013) aims to examine social entrepreneurial intention by keeping in mind the emerging economy. As stated by Ayob et al. (2013), the conceptual model of social entrepreneurial intention they propose is different from existing research by adding the concepts of empathy and exposure of social entrepreneurship as an antecedent to perceived desirability and feasibility perception, which in turn creates social entrepreneurial intention.

Orazio et al. (2013) examined the determinants factor of commercial entrepreneurship intentions and social factors at the individual level. This research is an attempt to define the characteristics of the prospective entrepreneur and the process of creating a business while at that similarly differentiate social entrepreneurial behavior from traditional entrepreneurship one. This research distinguishes social entrepreneurial intention from entrepreneurial intention in terms of influence that social capital given to them.
III. Methodology

The methodology used for this research includes literature review, the next steps in the methodology is applying a quality tool - "Pareto Analysis" - on this broad list of factors to obtain the vital few factors among them. Details of the application of Pareto analysis in this study are given in the section next. Finally, the literature is explored further to observe the relationship between important factors resulting from Pareto analysis and constructing propositions. This proposition is then used to draw a formation conceptual model of social entrepreneurial intention.

Pareto Analysis

Pareto analysis is a decision making technique in the statistical field that used to select a number of factors that give overall substantial effect (Talib, Rahman, & Qureshi, 2010). Pareto analysis, which is also known as the 80:20 rule, developed by Vilfredo Pareto, an Italian economist. Karuppusami and Gandhinathan (2006) describe the process of conducting a Pareto analysis. First, the data or factors are sorted in order of occurrence frequency. Total frequency then add up to 100%. The factor “vital few (few but important)” occupies 80% of the incident. The remaining factors are equal to 20% of the incidence (Karuppusami & Gandhinathan, 2006). In the second stage, the results of Pareto analysis are described in chart shape, usually known as a Pareto chart. This chart presents factors in the ranking order in the form of a bar graph in which the bars represent the factors in descending order. The chart also includes a line chart which a ride that cuts the cumulative percentage to 80%, in the end shows the vital few factors (Cervone, 2009).

Pareto analysis about the factors that influence social entrepreneurial intention

Karuppusami and Gandhinathan (2006) conducted a Pareto analysis of factors as the determinants of the success of total quality management. Then, Talib et al. (2010) perform Pareto analysis to determine the determinants of the success of total quality management specifically for the service industry. In other studies, the Pareto principle used to identify factors critical to effective implementation HACCP systems (Fotopoulos, Kafetzopoulos, & Gotzamani, 2011). A study Ab Talib, Hamid, and Thoo did similar things in the field of supply chain management in 2015, where they identified critical factors of success of supply chain management using the Pareto analysis technique.

Likewise, Pareto analysis is used in the identification of vital factors responsible for the occurrence of a phenomenon. This research uses Pareto analysis to identify the important factors responsible on the formation of social entrepreneurial intention. This is done with analyze the frequency of each possible factor in the social entrepreneurial literature intention. The complete process that illustrates the use of Pareto analysis in this research is detailed below.

To do a Pareto analysis of the factors that influence social entrepreneurial intention, we refer to the existing literature on this subject. The Pareto analysis is compiled from empirical studies of the factors involved that influencing social entrepreneurial intention which shows “vital factors few” which accounted for 80% of the incidence in the study.

Furthermore, during the literature review many factors were observed to be included in broad constructs, for example, willpower (Mair & Noboa, 2005), empathy (Mair & Noboa, 2006), proactive personality (Prieto, 2010), and the ability to take risks (Chaudary and Fatima, 2014), can be grouped into one broad construct "personality." Hence, several of these factors are presented under a single label (Table 1).
In this study, the total number of factors that influence social entrepreneurial intention is extracted and grouped from 27 studies which then 18 were taken to be studied. The total occurrence frequency of these 28 factors was found 154. After Pareto analysis of these 28 factors, 9 vital few factors contributed 80% (Table 1). The remaining 19 factors account for only 20% of the frequency incidence and reported as “other significant factors” (Table 2).

**Theory Framework and Model Development**

Planned behavior theory (TPB) is a well-established and preferred model of intention in the study of social entrepreneurial intention (SEI). Ernst (2011) stated that TPB also shows its relevance in designing education and training entrepreneurship programs by identifying focus areas. Furthermore, as suggested by Ajzen (1991), the TPB model can be expanded based on the needs and research settings. Therefore, we chose TPB as the theoretical framework for this research. Several vital factors generated from Pareto analysis (Table 1) are considered for the development of a social entrepreneurial intention model. Personality is the most important factor that leads to the formation of intentions to create social enterprises, followed by attitudes towards behavior, subjective norms, social capital, human capital, perceived behavior control, self-efficacy, perceived desirability, and perceived feasibility. As also discussed earlier, Krueger and Deborah Brazeal (1994) explained the equivalence of perceived desirability with attitudes subjective norms and behavior, and perceived feasibility with perceptions behavior control.

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### Table 1. List of vital few factors affecting social entrepreneurial intentions

<table>
<thead>
<tr>
<th>No.</th>
<th>Factor</th>
<th>Frequency of occurrences</th>
<th>Cumulative Frequency</th>
<th>Cumulative Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Personality</td>
<td>35</td>
<td>35</td>
<td>29,11%</td>
</tr>
<tr>
<td>2</td>
<td>Attitude towards behavior</td>
<td>18</td>
<td>48</td>
<td>29,98%</td>
</tr>
<tr>
<td>3</td>
<td>Subjective norm</td>
<td>17</td>
<td>64</td>
<td>41,13%</td>
</tr>
<tr>
<td>4</td>
<td>Social Capital</td>
<td>13</td>
<td>77</td>
<td>47,11%</td>
</tr>
<tr>
<td>5</td>
<td>Human Capital</td>
<td>11</td>
<td>88</td>
<td>58,05%</td>
</tr>
<tr>
<td>6</td>
<td>Perceived behavior control</td>
<td>13</td>
<td>90</td>
<td>64,69%</td>
</tr>
<tr>
<td>7</td>
<td>Self Efficacy</td>
<td>14</td>
<td>113</td>
<td>70,71%</td>
</tr>
<tr>
<td>8</td>
<td>Perceived desirability</td>
<td>8</td>
<td>119</td>
<td>71,16%</td>
</tr>
<tr>
<td>9</td>
<td>Perceived feasibility</td>
<td>9</td>
<td>127</td>
<td>77,62%</td>
</tr>
</tbody>
</table>

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### Table 2. List of significant other factors affecting social entrepreneurial intentions

<table>
<thead>
<tr>
<th>No.</th>
<th>Faktor</th>
<th>Frek. kejadian</th>
<th>Frek. kumulatif</th>
<th>% kumulatif</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Values</td>
<td>4</td>
<td>128</td>
<td>81,17%</td>
</tr>
<tr>
<td>2</td>
<td>Benefit of activity/ social values</td>
<td>4</td>
<td>131</td>
<td>82,08%</td>
</tr>
<tr>
<td>3</td>
<td>Hardship</td>
<td>3</td>
<td>132</td>
<td>83,99%</td>
</tr>
<tr>
<td>4</td>
<td>Created/opportunity identification</td>
<td>3</td>
<td>133</td>
<td>85,90%</td>
</tr>
<tr>
<td>5</td>
<td>External support mechanism</td>
<td>3</td>
<td>140</td>
<td>86,81%</td>
</tr>
</tbody>
</table>
Thus, the selection of the TPB as a framework selected with attitudes towards behavior, perceptions of behavior control, and norms subjective as a construct at the attitude level eliminates perceived desirability and perceived feasibility of a list of vital few factors to avoid duplication of variables. In addition, the concept of self-efficacy overlaps largely with perceptions behavior control (Krueger & Deborah Brazeal, 1994), thereby also eliminating self-efficacy from our final list of factors.

For the expansion of TPB, Ajzen and Fishbein (1980) suggested that the variable addition can influence intention only through the three constructs at the attitude level, that is, while these three variables - attitudes towards behavior, perceptions of control behavior, and subjective norms can be modeled as determinants of intention; this model can be expanded by the addition of potential antecedents of these constructs alone. The remainder of this paper describes the preparation of propositions and the model at the stage level.

### IV. Results and Discussion

This study aims to identify the important factors that are responsible for forming social entrepreneurial intention and then proposing conceptual model based on findings. A thorough literature review was conducted for obtain a list of factors, which are further filtered with the help of Pareto analysis.

**Pareto analysis results**

Figure 1 presents the results of the Pareto analysis in the form of a Pareto chart. Intersection ~ 80% (79.62%) between the two axes occurs for the variable "perceived feasibility". With thus, variables ranging from “personality” to “perceived feasibility” are taken as few vital factors that affect social entrepreneurial intention.
Pareto analysis results further revealed that personality is the least factor important that forms the intention in a person to become a social entrepreneur, followed by attitudes towards behavior, subjective norms, social capital, human capital, perceived behavior control, self-efficacy, perceived desirability, and perceived feasibility.

![Figure 1. Pareto Analysis Result](image)

Selection of TPB as a theoretical framework and the equivalent between perceived desirability with attitude towards behavior and subjective norms and perceived feasibility and self-efficacy with perceived behavioral control, as discussed previously, it caused the elimination of perceived desirability, perceived feasibility, and self-efficacy from a list of the few vital factors from Pareto analysis. Thus, we are leaving six vital factors that influence the formation of social entrepreneurial intention.

**The resulting model for the formation of social entrepreneurial intention**

The resulting model for the formation of social entrepreneurial intention consists of social entrepreneurial intention as the dependent variable. There are six independent variables (construct) in a model in which the next three variables consist of sub-constructs. Finally, as mentioned earlier, three factors are age, gender, and education is the control variable in the model. Table 3 describes the model form.

**V. Conclusion**

Because social entrepreneurial intention research is still in its early stages, this paper adds new insights to the literature by providing holistic conceptual model of factors that influence and/or give rise to intention to become a social entrepreneur. Research is one of the first studies about factors that influence social entrepreneurial intention by using the Pareto analysis technique after a thorough review of the literature which exists. Since the field of social entrepreneurship is on the rise, so a large number of researchers conduct research on factors that influence social entrepreneurial intention, which generates a list containing a large number of variables. There is a need to generalize a set of collective factors form a universal model. In this sense, Pareto analysis facilitates screening the factors that apply the 80:20 rule. The use of Pareto analysis is also validating the claim that the TPB is the most widely used theoretical framework in studies of intention in social entrepreneurship until today.

This study provides a broader framework consisting of factors related to the success of a social entrepreneur. This model provides an understanding of the various factors and their interactions that influence social entrepreneurial intention. The interactions that proclaims will assist actors involved in fostering...
individuals who choose entrepreneurship social as a career choice. One aspect also involves inner assistance in designing training curricula and courses on social entrepreneurship.

Although this paper is expected to improve the existing literature regarding this subject substantially, this is just a conceptual model. There is scope for empirically test this model by translating propositions into hypotheses. Because the independent variables of this model have been identified through a wide literature review area, then there are established and tested scales for all of them as well as for the dependent variable (SEI) in the existing literature. This scale can be used in the same form or can be tailored to the needs of the researchers.

Reference

[1]. BPS. The contribution of tourism to East Java’s GRDP. https://www.bps.go.id/subject/16/pariwisata.html.


