Balanced Scorecard (BSC) Structured Business Model for Tribes-based Community-based Tourism: Cases with Chiang Rai*

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Abstract

No previous studies in the topics relating to community-based tourism (CBT) and its business model development, for sustainability-oriented purpose, have presented a management-oriented approach through the lens of balanced scorecard (BSC). This paper contributes to fill this gap and considers three interrelated research questions: (1) What are the current states-of-play of the focus in each perspective of the BSC structure (i.e. growth-oriented, internal business process, customer, and sustainability), which narrate the efforts of the communities in CBT, (2) what benefits that are already observable when implementing CBT by taking a BSC approach, and (3) how BSC can guide the communities in designing and implementing their CBT business model? This research forms as a part of the overall research efforts of the authors and presents only the questionnaire-based survey aspect of the results. The other methodological instruments, such as participant observations, individual and focus-group interviews, are not presented, but they do provide the necessary triangulated and instrument-design supports, which contribute to the design of the questionnaires, and thus, construct and content validities, and reliability. The convergent and divergent validities of the survey instrument are discussed prior to

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Structural Equation Modeling (SEM) assessments. The implications are discussed in view of the three research questions raised. The data were collected from the communities currently implementing community-based tourism (CBT) in the highlands located in Chiang Rai, Thailand. Coffee and teas cultivation and trading form the central livelihood means of the communities.

Keywords: balanced scorecard; business model; community-based tourism; sustainability; theory of planned behavior.

Introduction

Community-based tourism (CBT) offers an alternative option for tourists and visitors to experience the lifestyle and the unique livelihood-oriented products and services. Agricultural activities offered by the communities, which otherwise would be difficult to experience in urban-bound tourism or city-bound tourism, can offer valuable experiences to tourists. CBT, which makes use of tea- and coffee- cultivation as the core sources of activities, besides heritages, cultures and eco-tour experiences, forms the focal context of this research. CBT is also a preferred theme for corporate social responsibility (CSR) or social innovation programs of many private enterprises, provincial government, and learning institutions. The rationale is that these institutions have, at the core of their philosophies and policies, to offer innovative social responsibility and assistance to the needed, in fulfilling their social contracts and responsibilities. Thus, opportunities to offer the communities resourceful assistance could help the communities improve their qualities of life, and also help them maintain and better preserve the ecological diversity and environmental vitality that are also important to the downstream population. The academicians are also drawn towards the research efforts focusing on CBT.

Though the extant literatures have revealed many important findings relating to the development of a sustainable CBT, such as the cooperative spirit of different stakeholders (Matilainen et al., 2018), community participation (Okazaki, 2008), and locale bounded resource-advantages (a result of, for instance, fertile highlands, cf. Tolkach & King, 2015), still, there is a lack of coverage of a practical management-oriented framework. In particular, a framework that enables the communities to learn and develop their competencies and devote their efforts in systematic manner, in developing their business model, is lacking. The business model concept, which aims to present a logic of competition, would serve as a means to help the communities to develop their CBT concepts and strategies into reality and achieve sustainability-oriented goals. Nevertheless, teaching the communities business model development is not straightforward, for even the simplest version introduced by Osterwalder's (2004) business model canvas (BMC). Observations and discussions with the community members indicate that the management concept needs to be presented in simple terms, and with the logics easily comprehensible. To this end, this research suggests merging the business model (BM) concept with Balanced Scorecard (BSC)

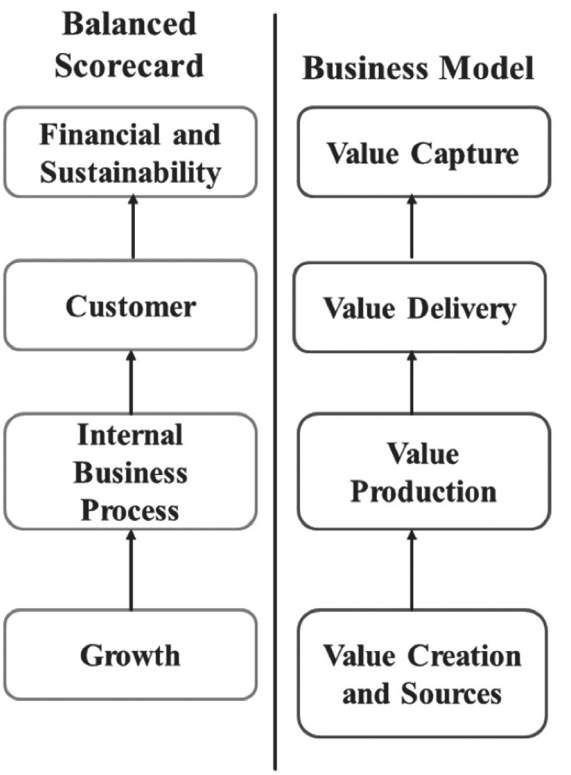

Figure 1: Merging the concept of BSC and Business Model

structure, as BSC can be configured in simple four-perspective linkages made to see the strategy maps (or logics of competition) of the communities. The similarity is shown in Figure 1 (not available in the extant literature). According to Kaplan and Norton (1996), "The Balanced Scorecard has its greatest impact when it is deployed to drive organizational change" (p. 13), which is applicable for community-wide changes as a result of the CBT initiatives.

It is assumed that a simple but structural framework, as demonstrated in Figure 1, could eventually help the residents and relevant stakeholders to systematically learn and improve their offers that are truly valued by tourists and visitors, while also provide a knowledge base for developing CBT that can generate positive sustainability impact. The rationale is noted in Tan (2004) by making use of Halifax Theory Z, stated as follows:

– (Sustainability perspective) The community will keep and get more business on CBT, and develop socio-cultural aspects of the community, including the ecological health, if
– (Customer perspective) Their customers are delighted (with the values offered), if
– (Process perspective) The community does the right things (both the supply-side and the demand-side operations), if
– (Growth-oriented perspective) The community has the right resources and competencies, and has the right socio-psychological bases i.e. attitude and belief.

The learning attribute of a structural framework is important. For instance, Pookaiyaudom (2013)'s research indicates that an integrated learning of CBT can lead the students to form a holistic understanding of community-based tourism at both principle and practical levels. To address these potential benefits and fill the gap of a management-oriented structural framework, a balanced scorecard (BSC) concept is proposed. As such, the purpose of the research objective is: To develop a management-oriented framework convincing enough to guide the communities in developing their CBT initiatives and efforts, by use of balanced scorecard (BSC) structure. To have the "convincing" ability, structural equation model (SEM) fitness should be reasonably robust in order to provide evidential explanation to the community members and the relevant stakeholders.

More specifically, the following questions are raised to address the research objective:

(1) What are the current states-of-play of the focus in each perspective of the BSC structure (i.e. growth-oriented, internal business process, customer, and sustainability), which narrate the efforts of the communities in CBT

(2) What benefits that are already observable when implementing CBT by taking a BSC approach

(3) How BSC can guide the communities in designing and implementing their CBT business model? Clearly, these three questions are interrelated.

Question 1 ensures a balanced coverage to meet the sustainability criteria of the community, which should deliver clear sets of benefits as articulated in question 2. Question 3 addresses the pragmatic core of the BSC that takes an aim in the design and implementation of CBT business model.

Literature Review

In line with the requirement for a management-oriented structural framework to use in CBT development, the literature review would highlight the nature and the significant values of BSC, so as to lay the theoretical groundwork in addressing the research objective and the corresponding research questions.

Balanced Scorecard (BSC) inherits many early fundamental management concepts such as Taylor's (1911) productivity-driven performance measurement to promote learning and performing, Ridway's (1956) balanced approach to performance measurement, and Drucker (1954) MBO (Management by Objective) concept. The BSC structure presents a balanced approach for managing performances, by considering both financial and non-financial performance realities, which is highly applicable for use in business model development and implementation. Nevertheless, this is a neglected concept not yet addressed and available in the extant literature. This research replaces the financial with broader term, namely "sustainability", which consists of economics, social, cultural and ecological impacts. Although BSC is widely used as a performance measurement system (Rajesh et al., 2012), its original role and intention has long been shifted towards a performance management system (Kaplan & Norton, 1996). BSC concept was awarded and recognized as "the best theoretical contribution in 1997" by the American Accounting Association (Norreklit, 2003). The core theme in BSC is the balanced-perspective incorporation of strategically important commitment that, when arranged in cause-and-effect relationship structure, can provide a logic of competition (the core of business model). In short, the interlinked factors of commitment should form a strategy that helps the communities achieve their strategic objectives (Leung, 2015), such as sustainability. Four perspectives are considered in this research, namely the growth-oriented domain, the internal business process, customer perspective, and sustainability impact. The growth-oriented domain is used, which excludes the

learning perspective, for simplicity, as the authors reckon that the entire BSC structure is itself a learning mechanism and system (Tan, 2004).

The relevant growth-oriented factors are predominantly obtained from the first-hand interrogation of the authors to the community, but are theoretically supported by further literature review. To grow collectively among the community members, towards insight generation and gaining the competency for problem-solving, it is important social attitude such as trust and community beliefs are considered (Arrow, 1972). As it is inferred from the theory of planned behavior (Ajzen, 1991), there are numerous growth-supportive antecedents important to cause the development of both the supply-side and demand-side activities (the internal business perspective). Besides considering the attitudes and beliefs that represent the collective synergy and intentional strengths of the community members, human capital development and appropriate resource management and resource availability are important factors that could infer the existence of perceived behavioral control of the community members. Human capital development is positively correlated to innovation, and both can help facilitate the adoption of technology and new ideas to improve both the supply-side and demand-side strategies (Danquah & Amankwah-Amoah, 2017), which can facilitate as the sources of organizational competitive advantage (de Pablos & Lytras, 2008).

Communities, who are responsible for CBT implementation, are also suggested to be service-oriented and innovation driven, so that they can bring out the authenticity and differentiation. Along this line of thought, Sanchez-Canizares and Castillo-Canalejo (2014) reckon that innovation is needed because communities are often located in “small, out-of-the-way areas, far from large coastal towns”, and thus, the ability to offer attractive products and services is important. Resource exploitation and resource management, based on the assumptions that communities are surrounded by sustainable ecological and socio-cultural resources, should be systematically managed and organized for competitive advantages (Barrutia & Echebarria, 2015), as another important growth-oriented factor. In view of the aforementioned discussions, the following hypotheses are raised:

H1: The growth-oriented factors, constituting of attitude and beliefs toward CBT, human capital development, innovation, tourism resources and tourism resource management, can significantly predict tourism activities and product development (representing the supply-side activity).

H2: The growth-oriented factors, constituting of attitude and beliefs toward CBT, human capital development, innovation, tourism resources and tourism resource management, can significantly predict market demand identification and marketing strategy development (representing the demand-side activity).

Both H1 and H2 provide the causal linkages between the growth-oriented factors, which incorporate not only resource-advantage view, but also socio-psychological variables in terms of attitudes and belief. H1 and H2 configure the first two layers of the BSC structure, as shown in Figure 2.

To operationalize the customer perspective, the concept of customer value proposition (CVP), which bridges the supply-side and the demand-side activities of the business model, is advocated. Without a clear customer value proposition, the business model would lack the central theme and direction for value creation, value production and value delivery. The value propositions, together with the supply-side and the demand-side activities, constitute the core of business model (Aung &Tan, 2016; Tan & Anomasiri, 2017), which depicts the theory of the business (Kannisto, 2017). In view of these understandings, two further hypotheses are assumed, namely:

H3: The growth-oriented factors, constituting of attitude and beliefs toward CBT, human capital development, innovation, tourism resources and tourism resource management, can significantly predict the values offered to tourists.

H4: Both the supply-side and the demand-side activities of CBT can significantly predict the values offered to tourists.

Hypotheses H3 and H4 interconnect the growth perspective and the internal business process perspective to the customer perspective, and form the structural shape of business model. When the business model is systematically developed, by taking a strong root as illustrated in hypotheses H1 to H4, business sustainability can be assumed to be established. As noted in Formentini and Taticchi (2016: 1921), “business sustainability is defined as the ability to conduct business with a long-term goal of maintaining the well-being of the economy, environment and society”, which is a broader management goal than the original financial performance goal advocated

in Kaplan and Norton (1996). The sustainability focus of the BSC-structured business model also connotes a socially responsible image to organizations (Ritala et al., 2018), which aims in designing and developing a sustainable business model. Sustainability is described by the socio-cultural, economics, and environmental impact of the business model and efforts made by the communities. At this juncture, a BSC-oriented management framework is taken shape, filled by the last hypothesis H5 stated as follows:

H5: The values offered to tourists, and the supply-side and the demand-side activities, collectively, can significantly predict the sustainability achievement of the community.

Integrating the five hypotheses leads to a BSC-structured business model configuration shown in Figure 2. In its simplest sense, based on an activity-based view advocated in Taylor (1945) and Barnard (1938), business model explains and delineates the logics of integration of activities to meet the goals of business. In Figure 2, the growth-oriented perspective highlights the sources and key drivers of values, and internal business process perspective presents the value design, value manufacture, and value delivery of CBT, and customer perspective manifests the values offered to tourists and visitors, and the sustainability perspective connotes the values being captured, which are economics, social, culture and ecological aspects of sustainability. Having rooted in learning-enabled framework of BSC, as advocated in Tan (2004) and Olve, Petri and Roy (2003), that is, if the growth perspective is not properly invested (such as without value creation ability), then, value production (both the supply-side and the demand-side) would not be effective and capable to deliver the values appreciable by the tourists and visitors, and thus, no income is captured to further improve the other aspects of the sustainability. In short, the BSC-structured business model shown in Figure 2 is equally a continuous learning platform, besides manifesting the measurement- and management-oriented focus.

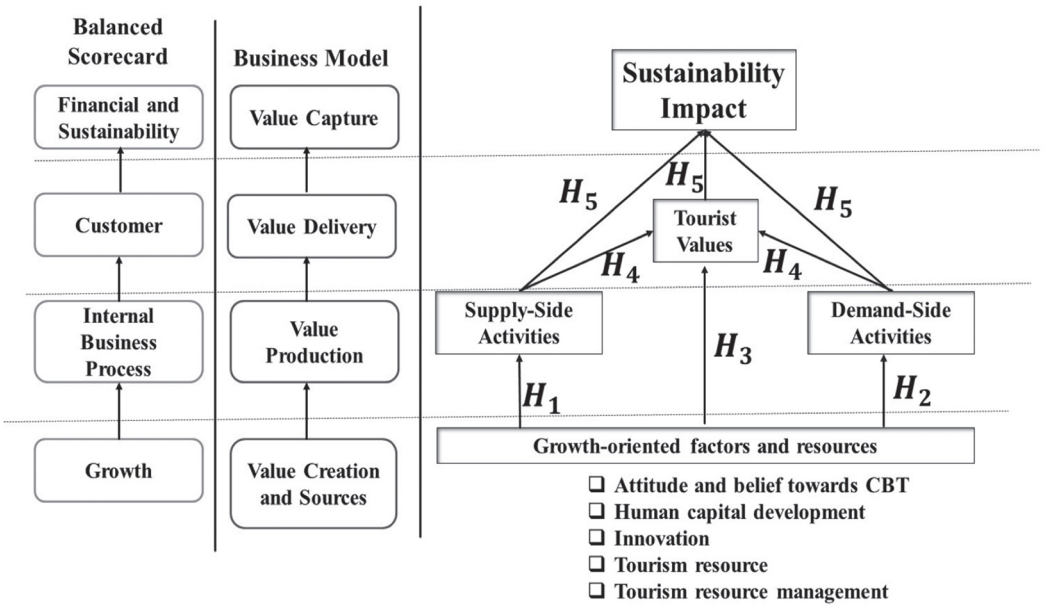

Figure 2: BSC-Structured Business Model Framework

Furthermore, the BSC-structured business model configuration, as shown in Figure 2, can also be reasoned as a platform for community development, which should aim to develop the community-based social capital or social capacity to describe the abilities of the residents to organize and mobilize their resources for the accomplishment of consensual or tribes-defined goals. The outcome is the sustainability and the ability to further strengthen the community or tribe-based norms, support problem solving, manage resources of the community, and foster community improvement, i.e. quality of life. The "tribe-based" qualifier implies that a group of communities share among themselves a common direction for commercial and sustainability development, which relies on commonly acknowledged effective platform of management, for improving bargaining power on the economic term, while benefiting social and ecological sustainability for each participating community. Thus, the management-oriented model, being designed and implemented by means of BSC structured business model, is also a process of creating and increasing solidarity, as manifested in the deep sense of shared identity and a code of conduct and agency in building the capacity to execute business model for collective benefits (Tan, Sitikarn, & Anomasiri, 2018).

Method

In responding to the nature of the research question and the research objective, which investigate a contemporary phenomenon in which there is still a lack of clear knowledge structure presented in comprehending the dynamics of the CBT management, case study or case research method, as advocated in Yin (1993), is suitable. The cases involve a group of highland communities, known as "tribes", who rely on either coffee or tea cultivations as their main sources of livelihoods.

The case communities share some similar ethnicity backgrounds such as Aka tribes, Lahu and Lisu tribes, and ecological resources and landscapes. A valid eighty-eight set of questionnaires was collected from the community members, who are parts of the so-called Tribes ETC (Experience, Tea and Coffee)-participated communities located in Chiang Rai: Doi Chang, Huai Nam Guen village, and Ban Pha Mee village. Apart from seeking the views of the subject experts in CBT, the key insights were obtained from onsite observations and various focus-group discussions. For instance, value propositions were extracted from the focus-group discussions with members of the Tribes communities, which shed light on life-changing, functional and educational values. These values are also observed and suggested to be driven by providing the guests of the communities with functional experiences i.e. cupping, planting of coffee in sustainable manner, and the ability to manage resources. Out of these brainstorming sessions, the constructs were revealed as already indicated in Figure 2. Another significant construct that was repetitively reinforced by the Tribes communities is the attitude and beliefs towards the CBT development. The community members, together with the subject experts in CBT, take notice that community-based consensus is not sufficient for driving CBT initiatives ahead, and instead, attitudinal and belief manifestations should be made obvious, which also relates to identity conformance. The data were collected in 2017-2018 period, during off-raining seasons and hot summers, as the logistical accessibility would be made more challenging in raining period.

Sampling Profile

The participants include 11.4% of those serving in the role as CBT head in one way or another, 10.2% of them involving as members of CBT committee, 3.4% responsible for CBT marketing, 2.3% planner for CBT, 29.5% as homestay provider, 2.3% in transportation services, 11.4% as local guide, 17% with agricultural farming and products, 10.2% responsible for cultural dances, 9.1% responsible for food offered to tourists, 5.7% taking care of medicinal products, 6.8% on heritage arrangement, 4.5% on infrastructural management, 5.7% on flowers farming and products, and 38.6% involving in various other aspects of CBT. Overall, the roles of the participants are overlapping in nature. Majority of them are female, at 61.4%, and 38.6% male. Age wise, 2.4% less than 20, 13.6% for age group 20-30, 19.3% for 30-40 range, 23.9% in between 50-60, and 39.8% above 60.

Questionnaires Instrument

The operationalization of the questionnaires is guided by the definition of the given constructs within the CBT context, in order to ensure validity and reliability (cf. Hinkin, Tracey & Enz, 1997), as follows, and is also subjected to the assessment and discussion with the subject experts in CBT:

- Attitude and belief towards CBT delineate the nature of the attitude and beliefs of the community members, and are operationalized by items such as committing on CBT expansion program without diluting the identity of the community, and by accentuating on the community's uniqueness and its livelihood, and lifestyle.
- Human capital development explains the extent to which the communities make efforts in developing leadership of the community members as a thrust for the CBT initiatives.
- Innovation measures the effort of innovation of the community towards CBT in terms of innovative services and reaching-out innovation.
- Tourism resources present the nature of ecological and man-made resources available to the communities, manifested, for instance, in terms of the lifestyle, abundancy of fertile land, conservation measure, culture and heritages.

– Tourism resources management articulates the extent of efforts of the community in managing the various aspects of resources, and activities measured involve waste management, tourism carrying capacity, monitoring and continuous development, network leveraging of tribe members, and design of rules and regulations for appropriate resource management purposes.
– Tourism activities and product developments are the supply-side activities, which involve developing the experiential activities for the tourists, such as eco-trekking, agricultural practice learning, local culinary tasting, leisure and recreation, homestay experiences, stories and interpretation of local attractions, enjoyment of natural landscapes, local lifestyle understanding, and exhibiting souvenir production.
– Market development identification and marketing strategies are the two market-side or demand-side activities the community focuses upon, in the design and implementation of the business model, i.e. the level of efforts in pricing, promotion strategies, and market development and fulfilment.
– The values offered to the tourists are operationalized by the degree of efforts made in the various domains or features of tourist values, such as functional value, educational value, cultural value, ecological value, and life-changing value, which are vital catalysts for brand loyalty.
– The sustainability impacts have four domains, namely (1) economic impact (i.e. family income increase, job creation, better earning, profit distribution), (2) cultural impact, which touches on cultural awareness increase of the community members, cultural maintenance, and new knowledge and valuable experiences gained as a result of open interactions with the visitors, (3) social impact, which focuses on infrastructure development, medical and educational improvement, and quality of life and sense of belonging of the community members, and (4) environmental sustainability, which includes measurement items such as systematic waste and water management benefits, and sense of love and care for the environment.

Figure 3: Tribes ETC Exhibition Booth (MFU, 2019)

Besides, the empirical results were also feedbacked to the Tribes community members, in numerous focus-group-discussion occasions in year 2019, leading to further development of the communities in CBT as well as tea- and coffee-production and product developments. Figure 3 shows the Tribes ETC's continuing efforts, exhibiting their products at the recent International Symposium 2019 (MFU, 2019), held in Mae Fah Luang University.

Research Result

This section, first, presents the results of the statistical analyses in justifying the discriminant and convergent validity, and reliability of the measurement instruments, before examining the statistical fits of the structural equation modeling (SEM).

With the square root of average variance extracted (AVE) shown exceeding the cross-correlation terms in Table 1, as highlighted by the diagonal value exceeding the off-diagonal in each column, then, as suggested in Fornell and Larker (1981), divergent validity is established. Furthermore, with each factor loading (not shown) of

the measurement items exceeding the 0.70 threshold, and with AVE, over 0.5, and with reliability index beyond 0.70 threshold, the convergent validity is also established. As explained in Neuman (2006), convergent validity means that "multiple measures of the same construct hang together or operate in similar ways", and discriminant validity is the opposite in that "the indicators of one construct hang together or converge, but also are negatively associated with opposing constructs".

Table 1: Discriminant and Convergent Validity, and Reliability Assessments

Latent Construct	1	2	3	4	5	6	7	8	9	10	Cronbach Alpha	AVE
1	**0.854**										0.814	0.729
2	0.354	**0.831**									0.943	0.691
3	0.508	0.691	**0.801**								0.921	0.642
4	0.553	0.519	0.553	**0.812**							0.892	0.659
5	0.519		0.364	0.505	**0.897**						0.757	0.804
6	0.402	0.612	0.657	0.471	0.325	**0.842**					0.794	0.709
7	0.735	0.504	0.612	0.661	0.626	0.565	**0.847**				0.905	0.717
8	0.435	0.658	0.729	0.671	0.461	0.596	0.594	**0.799**			0.823	0.638
9	0.514	0.552	0.603	0.649	0.333	0.377	0.567	0.669	**0.872**		0.895	0.760
10	0.758	0.575	0.763	0.675	0.593	0.611	0.754	0.761	0.719	**0.871**	0.969	0.759
Discriminant Validity:	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK		

Note: All the correlations coefficient presented are significant at the 0.01 level (2-tailed), and the diagonal value represents the square root of AVE for the corresponding construct. **1** = Attitude and belief towards CBT. **2** = Human capital development. **3** = CBT management. **4** = Innovation. **5** = Tourism resources. **6** = Tourism resource management. **7** = Tourism activities and products. **8** = Market demand identification and marketing strategy development. **9** = Values to tourists. **10** = Sustainability impact.

Table 2 below is a creative combination of both the mean descriptive and the ANOVA or t-test of the constructs in view of two important variables, namely CBT head versus not CBT head, and the agricultural livelihood types: either tea or coffee, or both. Table 2 shows significant differences between the CBT head and non-head. Apparently, there is a perception gap, which highlights that the CBT heads, in general, perceive at a higher level than the non-head across the constructs studied. In addition, although coffee shops seem booming at an accelerated rate much higher than the tea-based beverages in Chiang Rai, the communities who rely on tea as the main livelihood show better perceptions in the overall BSC efforts, when compared to

the communities planting coffees in majority. The perceptual mean that crosses four scale, of the five Likert scale, with 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree, belongs to only two constructs, namely attitude and belief towards CBT, and tourism activities and product development, which highlights a more collective synergy among the members, and also shows relatively homogeneous, higher level of commitment in the production-side. In general, the communities lack the skills, competencies and knowledge in the demand-side and the sustainability domains of goals.

Table 2: Mean Descriptive, T- and ANOVA Test Results

			Agricultural Live lihood Type - Main Income Earner							CBT Role	
			Mean Value			Test of Homegeneity of Variance		ANOVA		Mean Value	
Latent Construct	Mean	Std.Dev.	Tea	Coffee	Both	Levene Statistic	Sig.	F	Sig.	CBT Head (11.4%)	Not CBT Head (88.6%)
1	4.14	0.62	4.40	3.89	4.24	1.494	0.222	4.681	0.001	4.43	4.09
2	3.44	0.72	3.86	3.11	3.42	1.085	0.36	5.976	0.000	3.96	3.37
3	3.66	0.59	3.91	3.35	3.84	0.337	0.799	7.422	0.000	4.12	3.59
4	3.73	0.61	3.90	3.60	3.62	2.47	0.06	2.909	0.039	4.04	3.69
5	3.77	0.52	3.88	3.70	3.77	2.228	0.091	1.522	0.215	3.92	3.74
6	3.45	0.71	4.04	3.00	3.43	0.772	0.513	15.003	0.000	3.81	3.39
7	4.02	0.56	4.37	3.80	3.77	0.604	0.614	6.334	0.001	4.32	3.97
8	3.78	0.55	3.98	3.62	3.80	0.692	0.559	2.38	0.075	4.15	3.72
9	3.91	0.61	3.94	3.78	3.88	0.663	0.577	2.27	0.086	4.10	3.88
10	3.95	0.48	4.20	3.72	3.99	1.019	0.388	6.737	0.000	4.22	3.91

Note: **1** = Attitude and belief towards CBT. **2** = Human capital development. **3** = CBT management. **4** = Innovation. **5** = Tourism resources. **6** = Tourism resource management. **7** = Tourism activities and products. **8** = Market demand identification and marketing strategy development. **9** = Values to tourists. 10 = Sustainability impact.

The five hypotheses, raised in the literature review section, are supported by the SEM results in Figure 4, with the following statistical results: Relative fit indices TLI (Tucker Lewis Index) = 0.880 and IFI (Incremental Fit Index) = 0.953, and non-centrality based indices: CFI = 0.951, and RMSEA (Root Mean Square Error of Approximation) = 0.127.

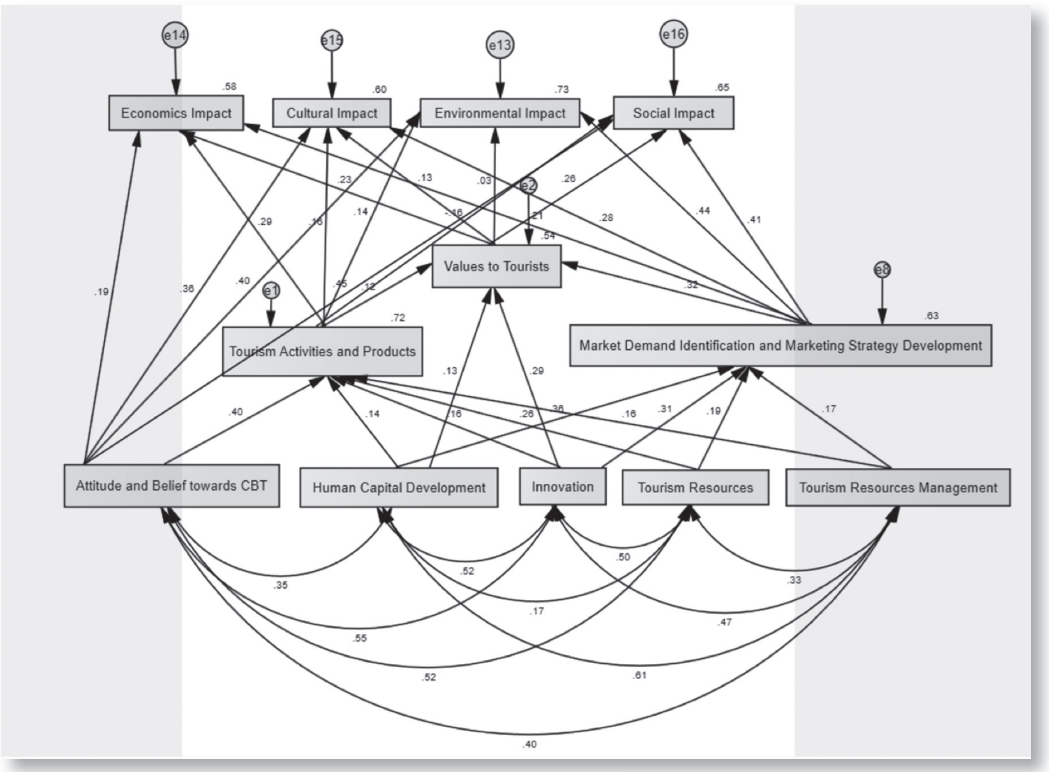

Figure 4: The SEM of the BSC-Structured Business Model

Discussion

The structural equation modeling (SEM) configuration concludes reasonably good incremental and absolute model fits, which support the five hypotheses as follows:

- **H1 and H2:** The structural equation models (SEMs) show the significant linkages between the extent of efforts the communities put into tourism resources and their management, and the developments of both the supply-side and demand-side aspects of the CBT business model. The role of resources is significantly important, being judged from the fact that the communities rely on the available natural, cultural and livelihood resources as potential sources of attractions and tourist organism stimulations. In Ryan (2010), it is noted that the multi-faceted resources, in combination, can provide the sources of stimuli in stimulating the formation of images,

and could also help the tourists formulate the criteria by which they evaluate the success of otherwise of their stay (Chen et al., 2016).

- **H3:** Both human capital development and innovation are shown significantly able to impact positively on the degree of efforts made on tourist value proposition design and development. The tight interrelationship between innovation and customer value design is the central theme in the blue ocean strategy, in which Leavy (2005), stated that "In Blue Ocean Strategy, value and innovation are inseparable. Value innovation places equal emphasis on value and innovation". As to human capital, its role has the knowledge spillover effect, which is often regarded as the engine of sustained growth and development (Chang, Wang, & Liu, 2016), being realized through the contribution of human capital in the various aspects of CBT business model, whether in the tourism activities and products, values offered to tourists, or market demand identification and marketing strategy development.
- **H4:** The values offered to tourists are a result of two types of activities typically understood in a business model concept (Aung and Tan, 2016; Tan and Anomasiri, 2017), namely the supply-side activities (tourism activities and product development) and the demand-side activities (market demand identification and marketing strategy development), with R^2 = 0.54.
- **H5:** Ranges of 0.58-0.73, which are the variances of the various facets of sustainability, are shown to be significantly explained by the supply- and demand-side activities, as well as the values offered to tourists (CVP).

The supports for **H1-H5** thus conform to the definition of CBT stated in Manyara and Jones (2007): "CBT is a sustainable, community-owned and community-based tourism initiative that enhances conservation and in which the local community is fully involved throughout its development and management are the main beneficiaries through community development". The commitment and efforts of the communities in managing their natural and cultural resources (i.e. resource management) ensure that resources are maintained to the best productive levels possible to favor the production activities. In line with also the guidelines advocated in UNEP & UNWTO (2005), "sustainable tourism should make optimal use of

environmental resources that constitute a key element in tourism activities, maintaining essential ecological processes and helping to conserve natural heritage and biodiversity".

Three research questions were raised and the SEM statistics were used in the responding. The four interlinked perspectives of the BSC-structured business model framework address the first research question: (1) growth-oriented factors constituting of attitude and beliefs toward CBT, human capital development, innovation, tourism resources and their management; (2) the internal CBT development process perspective, consisted of the supply-side activities (tourism activities and product development) and the demand-side activities (market demand identification and marketing strategy development); (3) the values offered to tourists (customer value propositions, CVP) as the customer perspective; and (4) the sustainability perspective, which indicates the ability of the communities to conduct business with a long-term goal of maintaining the well-being of the economy, environment and society, and connotes a socially responsible image. The combined growth-oriented resources and capabilities, the internal process and CVP perspectives, form the essential logic of the CBT operations known as business model.

The second research question illuminates the following benefits: The valid BSC framework can provide the community with a simple management structure to guide them in: learning, growing, planning, designing, execution, organization, and in contributing to sustainability. In other words, BSC structure serves as a platform for observation and reflection to assist the community members to reflect on their initiatives, so they can better improve their business models. Community learning is embedded in and enabled through the BSC structure – causal linkage and forms as a base for continuous improvement.

In view of the third research question, the BSC structure serves also as a management system for community development and CBT capacity planning – essentially an emphasis of functionalist theory and structuration theory. The BSC structure, clearly, is a visually effective guide for business model design and implementation – considering resources, partnership and socio-psychological variables, and human capitalization and innovation, as important resources and capabilities, to contribute to sustainability, by strengthening the capacities of both the supply-side and the demand-side activities, as well as the values offered to potential visitors and tourists, as shown in Figure 5.

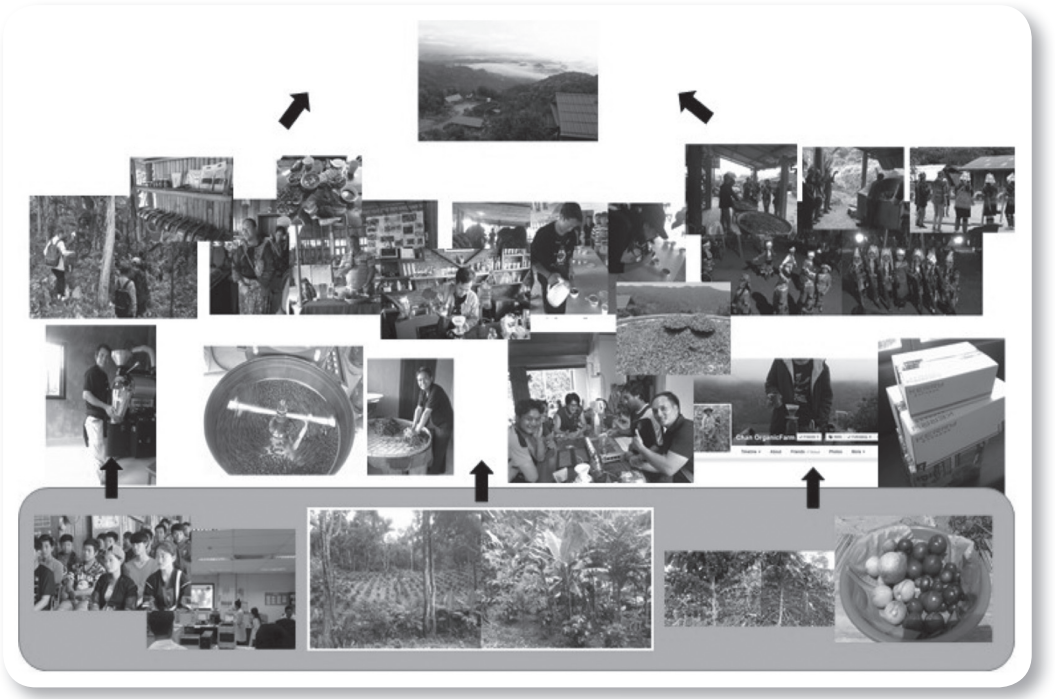

Figure 5: Illuminating the BSC-Structured Business Model of the Cases

Conclusion

In summary, the BSC-structured business model provides a structural perspective to the Tribes-based communities to develop and manage their tourism initiatives, essentially overcoming the transactions-based paradigm, and shifted towards a more holistic approach to nurturing the advantages of various nature and facets of resources, i.e. social and ecological capitals. The BSC-structured business model framework provides also a measurement-based platform. Towards this end, the self-discrepancy theory is useful to serve the argument, which stresses on the role of dissonance, manifested in, for instances, deviation from the sustainability goal and internal consistency. In short, through the continuous learning and growth, the communities would gradually adjust and improve their Gestalt fits and pictures of overall balanced and sustainable agriculture and tourism developments (Tan, 2018). Self-discrepancy theory is also alternatively known as the cognitive dissonance theory (Festinger, 1957), which postulates that people experience psychological discomfort when there is inconsistency between cognitions (attitudes, beliefs, values, opinions,

knowledge) about themselves, about their behaviors (as shown in the business model design and implementation efforts), and about their surroundings, and thus, facilitates a desire for continuous improvement.

Sustainability performances, which consist of socio-culture, economics and environmental maintenance, are important aspects of the "values" that both the communities and their guests should be delighted to have. The communities surveyed are generally strong in the supply-side of the CBT development and have strong preferences for synergistic attitudes (which contribute to socio-psychological capitals), but they are weaker in the domains of demand-side activities, tourist value design and innovation- and resources-managed and growth-oriented commitment. Also, there exists some significant perceptual gaps between CBT head and other community members, as revealed in the t-test, and thus, efforts for better alignment among the community members are needed. Having equipped with the various facets and nature of evidences reported in this research, the communities should be alerted to make more systemic, monitoring-, learning-and-growth-oriented, and goal-based (i.e. sustainability, and tourist value-centric) efforts.

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