

# The Analysis of Co-creative Actions for Tourism during the Covid-19 Pandemic

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## Abstract

This paper point out that research on tourism in the context of Covid-19 is in progress and suggest a new approach to tourism based on service theory while discussing human QOL and well-being. The key factor of this research is the Service-Dominant Logic (SDL) advocated by Vargo and Lusch. SDL signifies the exchange of services and is based on the concept that value is created only when one entity provides services and another entity receives them. Applying SDL to the field of tourism, the main entity providing services is the “tourism industry” and “residents” while the entity receiving services is the “customer/consumer” as a “tourist.” SDL thus requires co-creation, giving meaning to the existence of both entities and ultimately bringing the possibility of tourism’s sustainable continuation. Following this discussion and after scrutinizing earlier research on the revitalization of daily life and socioeconomic activities during an emergency, this research examines Twitter data by extracting two pairs of keywords: the first of these “tourist” and “exchange” and the other is “tourist” and “participation.” From this data, this research concludes that tourists retain their own motivations for travel even during the current pandemic. Thus, the concept of SDL can provide a new model for tourism in which co-creative action involving both tourists and residents can generate positive feelings and enhance well-being for both.

**Keywords:** Service Dominant Logic, Tourism, Covid-19, Co-creative Action

## 1. Introduction

Tourism as an industry has become a major socioeconomic force in both developing and developed markets. The effectiveness of tourism policy as a source of economic development has constructed strategic planning efforts indispensable in economic policy in almost every country in the world. On the other hand, there is no other industry where people could cross the world and connect many cultures, making tourism is a source of cross-cultural exchange. Tourism, however, also suffers from economic instability such as recession and stagnation, and social instability in the form of war/terrorism. It also faces changes in information technology and social media, and environmental and sustainability issues. Besides, the features of tourism contain the sharing of well-being and uneconomical values between tourists and residents. Tourism research should be considered from both the supply and demand sides of the tourism industry and should explore how the tourism experience is related to quality of life (QOL) and well-being. A study by Uysal, Sirgy, Woo and Kim (2016) explores a framework of connections between tourists and community. Tourists are consumers of different tourism and hospitality products and services at their destinations, and the community consisting of different providers and stakeholders serves as a host to tourists. Generally, when researchers discuss QOL and well-being, they focus on the specific aspects, such as objective or subjective dimensions. In the aspects of subjective meaning, researchers consider the psychological components, subjective well-being, happiness, life satisfaction, perceived QOL focusing on the positive and negative psychological effects. In this research, we will discuss the positive and negative aspects to evaluate by the subjective well-being aspect.

The coronavirus (Covid-19) that occurred in Wuhan, China in 2019 will spread worldwide in 2020, and in 2021, new variants will occur in several countries and the infection will spread worldwide. This situation has reached

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a scale of a pandemic showing the most influential crisis of the 21st century. Tourism has been most significantly impacted over the world. The world economic activities including tourism have caused human interaction on a global scale due to the rapid spread of infection of Covid-19. The impact on tourism is that borders are closed, cruise ships are docked, commercial aircraft operations around the world are restricted, and hotels, restaurants and attractions in tourist areas continue to be closed. In tourism research, research focusing on Covid-19 is in progress. The Covid-19 pandemic is much larger and more serious than previous virus infections, so we need to evaluate a new theoretical foundation scrutinizing existing theories. In this research, we propose a new approach to tourism based on the service theory while assessing the impact of Covid-19 on tourism.

## **2. Service-Dominant Logic**

In relation to where the value of service is generated from, it was traditionally thought that the service provider would generate all the value of service and the user receiving the service would only receive the value of service. As a result, the user pays the provider for the value. Traditionally, Goods-Dominant Logic has been advocated as a model of economic activity centered on the exchange of goods containing money. Vargo and Lusch (2004) advocated Service-Dominant Logic (SDL) focusing on the exchange of services. This modeling can be thought of the shift of the viewpoint from value-in-exchange to value-in-use. SDL is the thought that value is created only when there is an entity that provides services and the other entity that receives it. Besides, SDL is the origin of thought of co-creation giving the meaning to the existence of both entities. The concept of SDL used in this service and management is applied to the field of tourism. The main entity of the service is the “company,” but in the case of tourism, the main entity of the service is the “residents” and “tourism industry” promoting tourism independently of the tourist destination. The entity receiving the service is a “customer/consumer” and could be regarded as a “tourist” in the domain of tourism. Residents and tourism industry provide valuable services, and tourists are considered the recipients. The process of using the service of tourists, the experience through the service, and the place of practice of the service are regarded as the site (sightseeing spot) of value creation. Value of service is determined on the implementation process, and finally, the service is realized. The relationship between residents and tourists become a long-term and sustainable relationship leading to a long-term steady state. This state means the continuation of sustainable tourism. Therefore, we suppose that tourism is “co-created” by residents and tourists. In tourism, SDL could highlight that value is created by co-creation by providers (residents) and users (tourists). We suppose that what the residents provide is not the value of the goods themselves (for example, souvenirs), but the value of co-creation “experience” activities.

Lusch and Vargo (2012) created a new concept of value co-creation based on the following eight Fundamental Premises in SDL theory:

- FP1: The application of specialized skills and knowledge is the fundamental unit of exchange
- FP2: Indirect exchange masks the fundamental unit of exchange
- FP3: Goods are distribution mechanisms for service provision
- FP4: Knowledge is the fundamental source of competitive advantage
- FP5: All economies are service economies
- FP6: The customer is always a co-producer
- FP7: The enterprise can only make value propositions
- FP8: A service-centered view is customer-oriented and relational

Each premise is interpreted in the tourism domain as follows:

Interpretation of FP1: Residents will provide the knowledge and abilities with applied co-creation activities such as events. The service will be the basic unit of exchanging feelings between residents and tourists.

Interpretation of FP2: If indirect exchange occurs through some elements such as events rather than exchange by providing direct services, the basic co-creation element may disappear.

Interpretation of FP3: Providing services through goods. At this time, it is possible to create a shared space that provides services to residents and tourists through goods.

Interpretation of FP4: Goods and knowledge are defined separately in FP3 and FP4. Since knowledge is equivalent to how to use goods and what kind of co-creation to create, it is possible to maintain a competitive advantage depending on the content.

Interpretation of FP5: The service generates not only economic merits, but also leads to a sense of well-being by adding “experience.” As a result, the service may lead to economic activity.

Interpretation of FP6: “Experience” is created by co-creation by providers and users, here residents and tourists.

Interpretation of FP7: Companies alone could not create “co-creation,” only generating one proposal. Therefore, the products produced by a company only have the meaning of proposals and could not produce a common “experience.”

Interpretation of FP8: Service-oriented activities are not focused on the producing company, but are customer-oriented. Activities depend on its consumption and is related to the human activities between mutual residents and tourists.

### **3. Reconsideration of Co-creative Actions under Covid-19**

In the medium and eradication of the Covid-19 disaster, the tourism industry is required to change its business method. The need for innovation in the tourism industry has been recognized. Martinez-Roman, Tamayo, Gamero, and Romero (2015) proposed a two-step interaction model based on the company’s innovative capabilities and background. They showed that there is a positive linear relationship between process innovations and business profitability, that is, process innovation improves profitability. Also, Sundbo, Orfila-Sintes and Sørensen, (2007) indicated that important determinants for innovation are not only the large professional tourism companies but also the small ones with entrepreneurial spirit. Hjalager (2002) pointed out that the tourism industry is less focused on innovation than the providing and coordinating sectors and may be seen as the driving force of other sectors. Johannisson and Olaison (2007) investigated how the impact of the hurricane Gudrun, which struck southern Sweden in January 2005, was treated by citizens and private and public organizations and discussed the concept of “emergency entrepreneurship.” They discussed the action guidelines necessary for revitalizing daily life and socioeconomic activities in an emergency term. These concepts led to action guidelines in the current social and economic situation in Covid-19 for tourists and the tourism industry. The importance of social capital cohesion such as social cooperation promoting mutual action and trust in the region is examined. These actions regarded as social bricolage. We suppose that it is possible to build a new relationship of trust by creating a cooperative relationship and a co-creative relationship. The viewpoint at the time of a disaster is an important element to survive the Covid-19 disaster and to develop tourism.

The most common cause of Covid-19 infection is to violate the social distancing rules. “Co-creative” activities could enhance the sense of well-being for residents and tourists. Coexistence of social distancing and co-creative

actions, however, seems to be a difficult circumstance. Therefore, in the situation of anxiety about Covid-19 infection, the following points of the content of “service” should be considered.

1) Indirect service perspective

It seems necessary to realize spatial sharing and temporal sharing by using virtual cyberspaces and to commercialize services based on indirect co-creation relationships.

The co-creative activities are needed to share a place and time to enhance emotional happiness and well-being.

We analyze the factors leading to the happiness and well-being with social distancing.

2) Perspective on the target person (tourists) of the service

The main factor in the spread of Covid-19 infection is the people such as businesspersons and tourists from overseas,

so the number of tourists from overseas will decrease and the number of domestic tourists will increase. The services reliant on the traditional cultures may not bring as much sympathy as before. We should be conscious of domestic tourists and change the services according to the local cultures.

3) Perspective on service content

Depending on the social distancing, a direct service from residents and the tourism industry to tourists should be changed to an indirect service. New services that can be touched and felt in some way should be considered.

Besides, it is difficult to hear direct opinions about the evaluation, so some mechanism to evaluate new approach should be required.

#### 4. Experiments and Results

We implemented the crawling system from Twitter data. This system can filter duplicated posting at the first stage. Morphological analysis is performed by natural language analysis using MeCab, and nouns, verbs, adjectives, and adverbs are extracted as parts of speech. We selected two keywords “Exchange” and “Participation” from the ten co-created keywords. Lee (2020) showed that these two keywords are classified in the category of “positive keywords are dominant” over the ten keywords relating the concept of “co-creation”. We extracted two datasets; one is extracted using the co-occurrence of two keywords “tourist” and “exchange” called Ex-data and the other is extracted using co-occurrence of two keywords “tourist” and “participation” called Pa-data. Both datasets were gathered from January 9th to November 20th in 2020 and divided into two parts. The first part was gathered from January 9th to April 19th called Ex-data(first) and Pa-data(first) and second part was gathered from April 20th to November 20st in 2020 called Ex-data(second) and Pa-data(second). Pa-data consists of 2440 tweets (Pa-data(first) = 1102 + Pa-data(second) = 1338) and Ex-data consists of 1194 tweets (Ex-data(first) = 522 + Ex-data(second) = 672). We attempt the positive keywords filtering to evaluate how tweets include positive keywords (consisting of 100 keywords). In relation to Covid-19, a few peoples are affected in the term of first part. The second part is the term of infection of Covid-19 over Japan. As the results of experiments, we could capture the following results.

1) The number of total tweets decreased dramatically in both two datasets (Pa-data and Ex-data). The total number of total tweets per day decreased from 10.80 to 7.73 in Pa-data and from 5.12 to 3.88 in Ex-data.

This result shows that the number of tweets including the keyword “tourist” decreased during Covid-19 infection.

2) The percentage of positive tweets from total tweets increased from the first term to the second term in both two datasets.

The percentage of positive tweets from total tweets changed from 31.1% to 34.2% in Pa-data and from 35.15 to

46.3% in Ex-data.

Even if the term is in the middle of Covid-19 infection, the percentage of positive tweets increased. These tweets, including the keywords with the meaning of co-creation, could enhance the positive feeling even if people in the middle of Covid-19 infection term.

3) The frequency of typical keywords increased in the middle of the Covid-19 infection term. The frequency of the keywords “expectation” in Pa-data and “capable” in Ex-data increased in the middle of the Covid-19 infection term.

Even if people are in the middle of Covid-19 infection term, people encourage and express the keywords of “expectation” in tweets.

## 5. Conclusion

In this research, we proposed a new model of service in tourism based on SDL and indicated that co-creative action with both tourists and residents could generate positive feelings for both and enhance well-being. As the results of experiments using two keywords “exchange” and “participation” represented co-creation, the percentage of positive tweets increased. This means that co-creative actions could enhance positive feelings. Also, people want to encourage and express the keywords of “expectation” in tweets even if the term is in the middle of the Covid-19 infection. In the future, I would like to consider and construct positive actions analyzing the positive tweets relating to co-creative actions even at such a time.

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