Preface

THE SIGNIFICANCE OF E-TOURISM TODAY

Part 1: Introduction

This section is to provide the readers of this book with the reason, the aim, and the critical issues of e-tourism. Later, the section 2 in this chapter introduces the readers to each chapter.

Definition of E-Tourism through Historical Sketch of Tourism Evolution

The concept and the word “e-tourism” are relatively new. Therefore, its meaning must be clarified first. Following the custom in mathematics, a new word is often verbally defined. For example, Melao (2009) verbally defined e-business processes with the aid of figures and tables. But the theory of mathematics (the foundation of mathematics, meta-mathematics or mathematical logic) has logically proved the undefinability of mathematical terms (e.g., Kleene, 1952). As in some mathematical manner, this chapter considered the converging “point” in historical development as the meaning of term. This is not strange in mathematics. For example, π (pai) and e are sometimes defined as the converging points of the Taylor series without referring to circle or logarithms.

Tourism has essentially been a distance enterprise (tele-enterprise) where “tele” means “distant” (originally from Greek: far off). In the ancient time, travels were dangerous and troublesome works (travail). But archaeologists and paleoanthropologists have discovered many human bones and many ruins of humans’ sites in the pre-historic age in many places. The surprisingly distant migration of humans sometimes with animals across continents and seas or even oceans is still mysterious. In the historic age, it was often the governmental or religious expedition by courageous militants or volunteers often with “sacred” missions to conquer the new territories or to explore for the resources. Commercial travels to exchange the necessaries and the valuables are also known as having the very old origin (e.g., Sian, Subramonian, et al., 2009).

Even today, tourism is risky. When people buy food, they closely examine its quality on the hand. But tourists were able to know their destinations and the routes thereto only indirectly through information, and sometimes they are disappointed. Essentially, tourism has been based on remote information. Tourism has become a matter of commercial business. This may be called the information-based tele-business, or the classic i-tourism. The inventions of paper and printing technologies promoted the i-tourism through the mass production of printed books on natural and cultural geologies and guidebooks. The invention of telephone and telegram further promoted the i-tourism. Moreover, the electric mass media (e.g., radio
and TV) radically modernized the i-tourism. Here, the mass media were owned, operated and controlled monopolistically by limited organs and powers. The digitalization in communication technology replaced the mass media with the “mini” private media owned and operated by individuals of the mass. This radically improved the efficiency and the convenience of tourists and tourism business including the managerial innovation in tourism sectors and areas. The tourism utilizing such electro-technological complex may be termed as the radically modernized i-tourism or, simply, e-tourism. E-tourism involves tourists, government, transportation and communication sectors, hotels and restaurants, travel agencies, and others (Wang & Cheung, 2004).

**E-Tourism Study as an Emerging Interdisciplinary Field**

Utilizing the modern technological complexes in the digitalization era, e-tourism is the complex of businesses exploiting electronic communication or information technologies in social contexts. It is related to digital information technology, transportation technology, natural and cultural geography and history, economics, administrative and managerial studies, sociology, and others. E-tourism study is an interdisciplinary collaboration of modern technology, studies of human culture and natural history, environment studies, and others (Go, Lee et al. 2003; Li 2010; Eto 2013).

Tourism is an inter-regional business. Using technology, e-tourism “shortens” the distance between tourists and the destination. This inter-regional character narrows the gap between regions.

**Bridging Role to Be Played by E-Tourism**

The social divide is a serious problem (Dasgupta, Lall, et al., 2005). The divide between the rich and the poor has historically been one of the most serious social problems. Today, industrialized cities with monetary and technological resources are prosperous, while rural areas suffer from the lack of such resources. Such a geographic divide is also serious. However, many rural areas are richer than industrialized cities in tourism resources (fresh air, clean water, green landscape, traditional folklore culture, etc.) and attract tourists from cities.

Another serious divide is between well-trained or well-educated people (mostly in cities) and less-trained or less-educated people (mostly in rural areas). Modern industries have enlarged the gap between these two types of people. In tourism sectors, however, the most important skill is the courtesy, politeness, kindness, and hospitalities in services. In these respects, people in cities are not necessarily better trained or educated than people in rural areas, but people in the latter areas is often better disciplined with the traditional value system in the family and the community. In this respect, rural areas are more advantageous than urban areas in the era of tourism. Further, e-tourism contributes to raising the information-skill level of rural areas to narrow the gap between urban and rural areas.

A third divide is between people with the industrial background (engineering, economics, etc.) and those with the cultural background (history, art, folklore studies, etc.). The former is relatively rich and heavily concentrated on cities, while the latter is not so much at present. The promotion of cultural tourism in rural areas is expected to work rather favorably for the latter. In this respect, the divide of this type may be narrowed.
E-Technology Adoption Problem

The adoption of technology is usually a difficult problem and its models and methods (TAM) are developed (Haemoon, Jeong, et al. 2013; Pantano & Corvello, 2014). The air transport and railway industries use highly sophisticated technology to avoid accidents in the complicated transportation networks. Meanwhile, local transport industries with relatively simple network use less sophisticated technology. Travel agents use relatively sophisticated reservation systems, but local hotels uses less sophisticated reservation systems.

As mobile communication systems are already diffused to rural areas, technology is no serious obstacle to e-tourism even for small business in many countries today (Kiiski & Pohjola, 2002; Baliamoune-Lutz, 2003; Simon, 2004; Alam, 2009).

Obstacles and Dilemmas of E-Tourism

Everything meets obstacles (Eto, 2004; Eto, 2005). Everything has the backside. Everything is ironical in having the opposite implication. E-tourism may be no exception. The rapid advances of micro-electronics have lowered the prices of information terminals and made it possible for low income people to purchase them, at least in developed and middle-income countries. But it is difficult for elderlies to keep up with the advances. This generates e-poor people, resulting in a divide between generations.

Tourism as a tele-business has essentially been information-dependent. Technically, information is transmittable to remote areas beyond natural geographic barriers like mountains. But information is deeply rooted in human minds, which have been cultivated in urban areas. Urban people have historically been in more favorable conditions for information creativities than rural people. This is a very serious gap in information generation and transfer. This may be called the human-cultural fence and obstructs information creation in rural area and information transfer from rural to urban areas. This is particularly so for management. Management skill has historically been cultivated among commercial societies. This is why urban capitals often control tourism industries in rural areas. Tourism promotes rural areas but often under urban capitals. This historical lesson raises a question whether the transition of traditional tourism to e-tourism can go beyond the human-cultural fence or not.

E-tourism requires highly advanced information skill, in which urban people are often more advantageous than rural people. There is a fear that e-tourism may strengthen the technological advantage of urban people over rural people.

Every word, every phrase or every sentence has a different or an opposite meanings between “culturally” different persons, particularly between persons in different situation or culture. Receivers can misinterpret the information sent from a “different world” in different ways from the senders’ intention. While information exchanges dissolve communication gaps, they often create other communication gaps. History witnesses that the development of mass media has often dissolved international conflicts and often provoked international conflicts.

Irony of E-Tourism

Tourism resources are everywhere. In old days, there were little divide between regions. Agricultural resources were almost everywhere. Therefore, agricultural societies were relatively equal. Indeed, land exists everywhere, although water and good soil are not necessarily abundant everywhere. Fishery re-
sources are almost everywhere. Indeed, ocean, sea, rivers and lakes are nearly everywhere, although fishes are not equally abundant. The industrialization promoted the differentiation between regions. Mineral resources are not everywhere. Transportation solved this inequality but ironically promoted the divide by helping the population migration from less developed areas to more developed areas.

Tourism seems to solve this divide. Indeed, deserts, isolated islands, rain forests with fierce beast as well as old ruins and modern populated cities attract tourists. But an irony starts right here.

When everywhere is equal, a question arises: how can one tourism destination distinguishes itself from the competitors? One solution may be to fully utilize information-communication technologies, which are cheaply available almost everywhere and to everybody today. This might raise another question about the digital divide. Honestly, this book can not answer this difficult question.

Economic Recession as Opportunity for E-Tourism in Rural Area

Economic development attracts workforce from rural to urban areas (Liping & Cai, 2010). The economic depression causes the opposite migration. This is a good opportunity for rural area to gain excellent workforce.

As cars are expensive, the diffusion of car to some people (usually, one car for one family in crowded country) often means the economic prosperity. Meanwhile, as micro-electronic terminals are cheap, their diffusion to many people (except for very young or very old people) does not necessarily cause the prosperity. However, the present economic situation can be reversed in rural areas.

Having the rich experiences in the use of micro-electronic terminals like mobile phones, many educated or trained people returned to rural areas and utilize them to produce favorable conditions for e-tourism there. This book hopes this opportunity for rural areas to recover from the economic recession.

Recommendation

National and local governments in many countries have been engaged in promoting tourism. Tourism is not only for entertainment, recreation, learning cultures or food but also for narrowing the existing gap of economic wealth and scientific resources between urban and rural areas. The tourism promotion policies may be requested to pay deep attentions to narrow the gap.

Conclusion

E-tourism was defined above as the novel form of tourism through the discussion of the evolution history of travels. It was shown to play a role to bridge between urban and rural areas and to narrow their divide. Finally, the obstacle, dilemma and irony of e-tourism were also assessed.

Part 2: The Structure of This Book and the Introduction to the Subsequent Chapters

This part is to provide the readers of this book with the overall view of the structure of this book. For this purpose, each chapter is characterized, and the role of each chapter in the entire book is clarified.
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This is a sort of editorial note in the sense that it provides readers with the design concept of the book. This book is composed of half-independent contributed chapters. But this does not mean that the book is mere the unorganized collection of chapters. The chapters are all relevant to other chapters. This chapter describes the overall structure of this book and outlines the aim and scope of each chapter in harmony with the entire book design.

Section 1: General Views of E-Tourism

This section analyzes the general trend and concepts of e-tourism in e-tourism studies.

The following chapters give the general views of e-tourism.

Chapter 1. Publication Analysis of (E-)Tourism by Tomas Cahlik (Czech Republic) and Elena Kuchina (Czech Republic)

This chapter uses the scientometric (bibliometric or quantitative library scientific) analysis. Specifically, this chapter quantitatively describes the growth trend of e-tourism researches up to the present and analytically predicts their future growth. Moreover, this chapter conceptually discusses the tourism networks. This chapter first presents the general image of e-tourism researches particularly by quantitatively describing the rise and the growth of e-tourism researches up to the present. Then this chapter also quantitatively forecasts their future development. Based on this scientometric analysis, this chapter then sketches the future evolution of international tourism network. Using econometric methods, further, this chapter quantitatively links scientific research activities with real economic activities in tourism.

Chapter 2. Using MIS for Strategic Planning and Management Control in Tourism Industries by George Kofi Amoako (Ghana), Geoffrey Kwasi Adjaion (Ghana), Desmond Kwadjo Kumi (Ghana), and Frederick Kwame Asamoah (Ghana)

This chapter extensively surveys the literatures on managerial innovation and profoundly provides a wide and structural view of management system philosophy in general and in e-tourism in particular. Specifically, this chapter gives a historical perspective of MIS (Management Information System) and the related managerial information system’s concepts like DSS (Decision Support System), ESS (Executive Support System), Business Process Automation (BPA), MCS (Management Control System), GDS (Global Distribution System), TPS (Transaction Processing System), etc. Learning from the case of auto industry like AutoXchange, this chapter seeks for the strategic use of information and communication technology in e-tourism. The sketches of technological history of electronic computer clarify the path from its military use to a principal tool in e-tourism.

This chapter proposes to apply e-CRM (Electronic Customer Relations Management) to tourism and, at the same time, assesses its barriers. Further, this chapter examines a case of e-CRM application in tourism industry. Here MIS includes modern information technology like data mining, wireless devices in the era of “Travel, Tourism and Technology”. The above-mentioned systems are mainly used in big businesses, but this chapter discusses their use in small tourism businesses owned and managed by one person (often a woman).
Chapter 3. Quality Enhancement in Designing E-Tourism Service Systems by Ye Wang (China) and Jie Sun (China)

This chapter is highly computer-scientific and system-theoretic, and designs a wide-viewed system concept for the quality of e-tourism service by presenting a set of software mechanisms for quantitative measures and qualitative metrics. The aim of the proposed system concept is to satisfy tourists through improving the quality of e-tourism service systems. In this respect, this system differs itself from many other systems seeking for efficiency. This chapter is based on the concept of total quality management in service and develops new concepts such as QoTS (Quality of Tourism Service) and QoTSS (Quality of Tourism Service System) in system theoretic frame. Using these concepts, this chapter quantitatively analyses the real problems tourism service quality.

Chapter 4. Promoting Place Appeal: New Tools and Strategies by Bruce Henry Lambert (Sweden and USA)

This chapter presents an overview of tourism and economic geography in the mobile era. This is useful because few works present such introductory remarks to general audiences, though many technically specialized works of limited scope have been published. From the perspective of tourism providers and local administrations, this chapter explains how key technological change combines with new mobility opportunities to require creative place appeal strategies. Its central idea is the need to respond to competition. The attractiveness of any destination is not only built upon the natural environment, but also on public & private investment, human resources, and marketing abilities. It is essential to learn from successful efforts and experiences elsewhere, and to develop online settings attractive to virtual visitors. In short, this chapter provides local areas with key strategies for regional development via catalytic activities aimed at community building and tourism promotion.

Section 2: Operations Research and Management
Science Methods for E-Tourism Research

This section presents the modern development of mathematical methods in operations research and management science (OR/MS) and applies them to e-tourism research.

Chapter 5. Interactive Approaches for Sightseeing Route Planning under Uncertain Traffic and Ambiguous Tourist’s Satisfaction by Takashi Hasuike (Japan), Hideki Katagiri (Japan), Hiroe Tsubaki (Japan) and Hiroshi Tsuda (Japan)

This chapter presents their new development of a highly flexible computational method for travel route planning with various complex conditions into consideration. This systemic method takes many complex constraints and requirements into consideration and is expected highly useful, for example, when travel agents design group tour plans under the complex set of uncertain conditions of climate and traffic congestion and fuzzy psychological preferences of tourists. Extending the classic of traveling salesman problem in operations research and management science (OR/MS), this modernization of the classic may be regarded as creatively extending the formal approach tradition of OR/MS to a really useful tool with a variety of rich concepts.
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Chapter 6. Who Won the Winter 2010 Olympics? A Quest into Priorities and Rankings by Thomas L. Saaty (USA)

This chapter presents the application of an analytical method to evaluate the result of Olympics, which is a typical example of event tourism or sports tourism. Olympics attract many tourists, and one of their nationalistic interests is in the question as to which country won or lost. Applying a modern method in operations research and management science (OR/MS) to sports, this paper presents the application of the multi-criteria evaluation method to this problem, where the results of Olympics are evaluated on plural criteria.

Section 3: Medical and Health E-Tourism

This section analyzes and discusses one of the most serious sides of e-tourism in distinction from leisure tourism. As medical resources are located at particular sites, the consumers of medical services often need to travel for medical services. This provides medical resource sites with very important business opportunities.

Chapter 7. Global Medical Tourism: A Review by Sukanya Banerjee (India), Siddhartha Sankar Nath (India), Nilanjan Dey (India) and Hajime Eto (Japan)

This chapter extensively surveys the various problems of medical e-tourism industries of several tens of countries in North and South America, Asia, Europe, Africa and Oceania. After the definitions and explanations of key concepts, this chapter clarifies medical, economic, legal, health insurance system, and other issues and constraints around medical e-tourism, such as the effect of having foreign medical tourists on local situations. This chapter reviews the activities of several medical tourism organizations and moreover assesses the performance and cost of several countries as medical e-tourism destinations. This chapter also assesses the legal, ethical and medical quality risks related to medical e-tourism.

Chapter 8. Empirical Analysis on the Medical Tourism Policy in Taiwan by I-chun Liu (Taiwan) and Chii-ching Chen (Taiwan)

This chapter approaches the problem of e-medical tourism in geography-based policy scientific ways. First, this chapter notes the favorable geographical location of Taiwan in appropriate distance from many Asian countries, and then states the government’s declaration to become the premier choice for cross-country medical care for international visitors. Using the policy network approach, this chapter analyses Taiwan’s medical tourism development. Semi-structured interviews reveal the growth of service in both public and private sectors, some lag behind a couple of competing countries, and the need to promote the coordination between the medical sector, tourism sector, and government.

Chapter 9. Medical Tourism Service Quality: An Indian Perspective by Bikash Ranjan Debata (China and India), S.S. Mahapatra (India) and Bhaswati Patnaik (India)

This chapter is characteristic in having two faces: classic and psychometric. This chapter characterizes the medical and health tourism in India as unique in offering holistic medical services including yoga, meditation, Ayurveda, allopathy and others as well as in deeply committing to modern medical science. Meanwhile, this chapter discusses various challenges such as an image of poverty and poor hygienic
conditions of India, which might hinder foreigners from travelling to India. This paper considers the medical service quality as a critical factor for attracting foreign medical tourists to India and develops several concepts to assess it from the viewpoint of users (i.e., patients). The main part of this chapter is the questionnaire-based research conducted at seven Indian hospitals and the results of psychometric analyses using various statistical methods.

Chapter 10. A Comparative Study of Japanese and Taiwanese Perceptions of Hot Springs by I-chun Liu (Taiwan) and Chii-ching Chen (Taiwan)

Taiwan and Japan are neighbors and share the geophysical similarities. Both have many volcanoes and hot springs. Like the ancient Roman culture, taking bath is extremely important in lives and health-seeking efforts in Japan. Most of tourism destinations in Japan have hot springs, or having hot-springs is almost “the must” in Japanese tourism destinations. Taiwanese also enjoy hot springs but in different ways from Japanese. If Taiwan develops hot spring tourism with the target of Japanese visitors, Taiwan is expected to attract many tourists from Japan. But this will threat the tourism industry in Japan. Using the consumer research method, this chapter comparatively analyses the similarity and the dissimilarities in culture and business climate in both countries. This chapter thus empirically presents some interesting findings and useful advices for tourism policy and management of both countries.

Chapter 11. From Amusement and Entertainment Tourism to Balneotherapy and Health Promotion Tourism with the Aid of Medical Electronics and Communication Networks in Hot Spring Sites by Hajime Eto (Japan)

This chapter first describes the balneotherapy tourism. This is extremely popular in Japan, while rarely practiced outside Japan. Here, balneotherapy denotes a way of disease treatment by bathing in mineral (usually hot) springs. As balneotherapy is practiced almost only in Japan, this chapter first discusses and analyses the cultural tradition (including myths and folk legends regarding hot springs) of Japan since the prehistoric era. Because many hot spring sites are located in countryside, its promotion is discussed as being deeply related with the regional development. This chapter quantitatively examines how the scientifically confirmed evidence of medical efficacy of hot spring bathing is lacking. This chapter describes the medical scientific studies for proving the medical efficacy of balneotherapy and then proposes to use medical electronic apparatuses, medical communication networks and medical informatics to prove the medical efficacy and to improve the medical efficacy.

Section 4: Cultural E-Tourism

This section analyzes various aspects of cultural heritage e-tourism. This is useful to the development and diffusion of knowledge in the destination areas as well as on the consumers side.

Chapter 12. Smart Destination as Key Element: Looking for Improving the Experience of Consumer by Elisa Alén González (Spain), Trinidad Domínguez Vila (Spain) and Pablo de Carlos Villamarin (Spain)

This chapter analyses the smart pilgrim tourism through the Way of St. James, which is one of the most relevant national tourist attractions and with growing impact at international level. This study is focused on the Smartcamino plan, which is developing the strategy lines to apply the technology to the Way of St.
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James. A content analysis is applied to identify the smart technologies used, and two in-depth interviews were made with the directors of the Smartcamino plan in order to find out the future public strategies. The results show the differences of smart technology developed via the collaboration between public and private organizations, mainly with the webs, the applications, the mass media and the topics according to their strategies. Table 1 of this chapter lists the new technologies relevant to tourism.

Chapter 13. From the Museums of Objects to the Virtual Museums: An Opportunity for Local Tourism Development by Sonia Ferrari (Italy) and Monica Gilli (Italy)

This chapter first remarks that the wider role of cultural heritage and the recent demands to innovate museums from traditional object-based museums to modern museums of new ideas, which use modern technologies, especially multimedia information and communication technologies. Then this chapter notes the need today to focus on the capability to get closer to the public and to create richer and striking experiences for visitors in the effort to increase their satisfaction thanks to a wider range of benefits, not only in strictly functional terms but also in emotional terms. This chapter argues that these phenomena generate the paradox that the museums have no more need of artifacts and works of art to be exhibited. This chapter observes the trend that, in this decade, museums increased in number and they are well equipped with multimedia technologies not only to educate but also to entertain tourists. This chapter finally presents two interesting cases of Italian audience-driven museums.

Section 5: Visual Information-Induced Tourism

This section discusses two cultural aspects of visual medias that motivate and promote tourism. This topic is important not only today in the image-information technology era, but also it was already important in the pre-modern era as exemplified by ukiyo-e by Katsushika Hokusai and Ando-Utagawa Hiroshige in the feudal era of Japan..

Chapter 14. Film-Induced Tourism: Hunting of Potential Tourist Spots by Frame Mosaicing by Nilanjan Dey (India), Suvijit Acharjee (India) and Sayan Chakraborty (India)

Films and TV programs are known to affect tourists’ behaviors. This chapter first reviews the past discussions on this topic and the past cases of its effect on real behaviors of tourists. Then this chapter proposes a technical method named the frame mosaicing method, which is expected to help tourists in choosing the travel destinations. This chapter provides the readers with the updated knowledge about the modern technologies of picture or image processing and their use in e-tourism management.

Chapter 15. Recreating the Place: Video-Sharing Websites and the Promotion of Domestic Tourism in the Concurrent Trend of Popular Media-Induced Tourism and Local Mascots in Japan by Tzung-De Lin (Taiwan)

This chapter is very different from the other chapters in using a face-to-face interview method and in studying the real case of a local city. The city is chosen for a case study because it utilizes an animation-cultural and robotic-like idea and techniques to attract tourists. After a sociological analysis of recent post-modern trend of new media and its social impacts, this chapter focuses on a unique tourism strategy of a city famous for squid fishing. As squids are very important in Japanese food culture and their fishing
accounts for a significant portion in the local economy, they play an important play to attract tourists. Fully utilizing the popular spread of video-sharing websites, the city developed a local character mascot with an amateur-citizen participation system. This paper assesses the success of its strategy for tourism.

Section 6: Remaining Problems: Ethics in Tourism

This section deals with various topics that are left unanalyzed in this book. The topics are seemingly miscellaneous but not randomly picked up. All the topics here are centered about the humanities in tourism, ethics, ethos, social values, moral, morale of tourism workers, and others: Namely, about sapience: wisdom itself.


The tourism industries have long aimed at rich and healthy people as the main market. For the sustainable and sound development of tourism, however, the tourism industries are requested to welcome low-income, handicapped or aged people as important guests. This chapter raises this problem and discusses why and how to respond to this social voice. As it is very difficult to solve this big problem, this chapter refrains from giving a general theory and rather confines itself to case studies for the operational and readily implementable suggestions and proposals. This way of approach is useful to breaking down the huge problem into more practicable tasks for real implementations.

Chapter 17. Future Research Directions in E-Tourism Studies: Blind Spots and Complaint Analysis using Data Science Method by Hajime Eto (Japan)

This chapter lists up several issues not analyzed in the foregoing chapters, and discusses to what directions and by what methods to analyze these issues. The issues are the hospitality; poverty of waiting-line discipline; and administration of management of female and foreign workforce in public and private sectors; risk information and tourists’ safety. All of them are related to service quality in e-tourism.

REFERENCES


ADDITIONAL READING


APPENDIX: DEFINITIONS

Nomenclature: Tour and the synonyms.

This book uses the word “tourism” but makes no clear distinction among tour, travel, trip, journey, etc. According to many dictionaries, “Travel” originally means “labor”; then, “journey of long distance or long period”. “Tour” came from “a turn”; then it means a short trip; a journey for pleasure or for performance by performers or athletes. “Tourism” often means “travel for recreation” (Webster, etc.) and this word is often used for commercial organization and operation, but this book uses this word with a wider sense. “Trip” often means “Step”, “Walk” or, more generally, “Travel” of short distance or short period.

Journey: a day’s travel; travel somewhere: [So, “journey” includes “tour”].

Therefore, this book considers these words as practically synonymous; that is, synonymous in “pragmatics” in the terminology of language theory (see Key Terms for “pragmatics”). The use of “tourism” in this book is accordant with its wide use in scientific communities (tourism study, tourism research, etc.), universities (department of tourism), and government offices (bureau of tourism, tourism policy, tourism white paper, etc.), while private business often use “travel” as travel agents.

Pragmatics: Originally linguistic terminology and now often used in information science in dealing with language in real use and the context really used such as text organization, presupposition and implication.