

# The Integration Trend of Tourism Informatization Service

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## Abstract:

Destination marketing system (DMS) is becoming the key platform of informatization service in regional tourism, and has gradually become the first interactive interface between tourism-governing departments, tourism enterprises and tourism consumers. DMS plays a great role in solving many issues appearing in the past tourism informatization construction, such as, weak basic work, inadequate shared information, single construction model and deficient market mechanism [1]. Provincial tourism informatization planning has been showing the integrated trend. This paper intends to prove this in four aspects: integration dynamic, integration presentation, external structure of integration and integration pattern. The aim is to provide references to provincial tourism informatization construction in the future.

**Key words:** tourism informatization, tourism website, integration trend, province

## 1. Dynamic integration trend

Until today, the proportion of online service model related to the whole business of tourism enterprise is still very low in China, and the degree of enterprise business integrated by online trade is low too. If exploring the causes, a definitely reason is the low integration degree of network trade [2]. So the direct dynamic integration trend of tourism informatization planning comes from the demand of information age to the transformation of commercial model of tourism online service.

### 1.1. Solving the problem of resources partition of old model in tourism informatization popularizing

A number of tourism websites in province were in scattered state in the past, and their external interfaces were only the simple webpage link, which is difficult to contain outside network and information. The result is quite a few of resources was difficult to be shared and business couldn't be cooperated. So it is urgent to set up integration website to combine all kinds of soft, hard and tangible, intangible resources in region. Each enterprise in integration website can effectively use the common information resource, network marketing resource, network server, management system and service software, etc [3]. Especially important for small-medium tourism enterprises as they on long required to make effort to set up enterprise

information management system to implement EC (e-commerce) activities. It makes long-awaited "lane together" enter into practice stage.

### 1.2. Solving the problem of low efficiency of old model in tourism informatization popularizing

The benefits made from successful implementation of integration platform in provincial informatization can be summarized as the following four points:

(1) Offering support and auxiliary means for the tourism structure being upgraded in order to avoid resource wasted and construction repeated.

(2) Offering guidance for market development direction of tourism enterprise and improving tourism enterprise to make management revolution.

(3) Offering more overall tourism online service for users to meet personalization and high-level demand.

(4) Ensuring a significantly raised in sale income of tourism products, tourism information consultation income and advertising income [4].

The current examples of DSM already have the abilities of gathering a lot of tourism enterprises and relevant organizations of destination, offering the omni-way tourism information of destination and achieving the totally self-personalization order service of destination. So, it is accepted as a brand-new integration website. Golden Journey Yahtour ([http://corp.yahtour.com/pr/product\\_1.htm](http://corp.yahtour.com/pr/product_1.htm)) and Nanhai Tourism Administration contracted formally in April 2002 to set up the first tourism DMS in China, and in October, the economic advantage was shown. The tourism department of Guangdong province tries its best to set up Guangdong DMS--"vigor Guangdong" website, which walks in the front of provincial tourism informatization integration and produce good effect to the regional tourism organizations of Guangdong, Hongkong and Macao.

### 1.3. Solving the problem of the disordered material flow and information flow in online tourism supply & demand

On the supply side, old tourism website was built up by tourism departments raising fund themselves, and the operation model was single. The integration tourism websites have changed this state and formed multiple flows of supplies on a platform (including fund, technology, intelligence and facility, etc.) [5]. On the demand side, integration tourism websites reflect the market information of tourist source in time,

concentrate on the one-stop service and strengthen the depth cooperation [6]. In the new age, the changes of the direction of integration flow created a kind of environment, in which tourism informatization is arranged rationally and the standard is united. The changes radically finished the state of traditional tourism-governing department adopting one-edition database (FoxPro, Access, etc.) which was difficult to be compatible with other supply departments, and achieved the unification integration of material flow and information flow [7,8].

## 2. Presentation of integration

### 2.1. Organizational integration

The integration tendency of organization includes both vertical and horizontal aspects, and the management approach based on IT make organizations expand in two aspects, geography space and operation range. This supports the rationalization of organization [9]. In Fujian province, according to three requests, namely, the “Golden Journey project” of National Tourism Administration, the overall planning of “digital Fujian” of provincial government and “Notice on strengthening the construction of tourism information and digital project in our province” (No.97 [2002] Fujian tourism), tourism administrations at all levels set up leading institution, key tourism cities and regional tourism administrations, also set up special executive institution. More than 10 websites have also been constructed at the same time, including Tourism Window of Fujian website (<http://www.fjta.com/>), tourism public network, and Tourism Bureau Government network, etc, which improved the integration development of tourism informatization. This contributes to the material preparation for future trans-department and trans-industry macro adjustment and synthetic coordination. In Zhejiang province, the construction of tourism informatization in recent years, while it was in the charge of tourism governing departments and tourism groups, shows a great outlook relying on government leading, communities participation & investment, and using market operation. The successful enterprises of other relevant industries have gradually become the protagonist, such as, “Nandu estate”, “Hengdian Group” and “Guangsha Group”, etc. The horizontal integration of different types tourism organizations will definitely accelerate the provincial tourism informatization.

### 2.2. Marketing combination

In October 2002, DMS in Nanhai city was accomplished, which symbolized that the marketing manner of tourism destination will change dramatically in china and made DMS evolve into a new tourism-marketing model. Comparing with traditional websites, DMS shows an integrated marketing characteristic (shown in Tab.1). In the

implementing process of DMS, tourism informatization planning will master the changes of marketing ways in time: 1) gradually transiting from product marketing to brand marketing. DMS carries on a series of activities to the resources and products of tourism attractions/resorts, such as, combining, planning, packing and popularizing, aiming to improve the whole tourism image of tourism resort. Many example are Guangzhou, Fujian, zheJiang, etc.. Therefore brand marketing has been focused on in china. 2) Transiting from single marketing to poly-faceted marketing. In the past, the builders of tourism websites were the main marketing body of tourism resort and also is the main marketing funding source, thus the ability of working alone is relatively weak. Therefore, in many provinces, the united marketing mechanism of government and enterprises was adopted in informatization planning. DMS happens to offer an environment in which tourism-governing departments and all the relevant industries, such as, civil aviation and traffic enterprises that can get benefits from DMS, participated together, which can get the multi-win results. 3) The Scattered marketing transits gradually in a way of regional combination and profound cooperation. The leading marketing of tourism-governing department is that tourism-governing departments are leader, getting in touch with relevant tourism departments to develop regional combination and profound cooperation.

Tab.1:The changes of the characteristics of tourism marketing mode in informatization

Tourism marketing Mode	Traditional tourism website	Tourism website in transition	DMS
Marketing means	Single	Both on-net and off-net	Various
Marketing emphasis	Products	Various products	Brand and whole image
Marketing investment	Single channel & big investment	Wide channel and big investment	Pluralistic, small investment
Marketing scope	Small area	Small area and internal	Internal and international
Characteristic of synthetic marketing	Low level, relatively scattered	Specialized and relatively scattered	High level, integration and combination

### 2.3. Alliance of websites

DMS is a kind of brand-new integration tourism website which adapts to the potential of tourism website alliance and contains tourism governing department, tourism resorts, tourism enterprise and tourists. DMS also provides technological platform for the union of online tourism websites (tourism channel) and provides multi-functional service of integrated office, commercial affairs and tourism information. Through “World online alliance- (china) the first tourism online alliance and development forum” started in the first year of the 21st century, the directors of main tourism websites of china (tourism channel) have investigated several questions, such as, the informatization development of china tourism,

collaboration and horizontal coalition for labour division of tourism websites, and, the approach and pattern of e-commerce of tourism website in earning profit. This means to the alliance purpose of websites and impels the previous scattered websites to seek coalition and integration---alliance one after another. An example is the informatization construction of Guangdong province in recent two years, which has improved six websites to use DMS from 11 independent tourism websites of 21 cities and has gotten the aggressive responses. The statistics showed that during the National Day in 2002, the number of clicking in Nanhai DMS websites were up to 5,110,000 and the registered users were up to 37,000, and the result is remarkable.

### 3. External structure of integration

#### 3.1. Integration of organizations

The implementing route of development plan of the provincial tourism informatization integration is as follows: provincial tourism-governing department sets up websites, then it brings in all types of participants by gradation and point-assign to form multi-faced investment---management system and forms the integrated provincial big tourism online organization system. The route includes the following two parts.

##### 3.1.1. Integration of trader relation of different tourism organizations

In the first network trader conference in June 2004, it was affirmed that the differences in the new application of Internet from the past was that the target of services on the Internet have changed from net general users to network trader. Examining this changing tendency closely, while focusing on participants, provincial tourism informatization construction must structure pluralism to the virtual tourism market including the integrated cooperation of tourism suppliers in each link. Also, the consumer's value is promoted day by day in the whole course of tourism, so the transition of the commercial model is put forward, which regards product quality as center to consumer's satisfaction as center, and it demands to conclude the trusting relationship of traders to form the interactive situation taking integration service as center. According to the spirit of national tourism informatization, provincial tourism informatization focuses on dealing with the interactive relationships of industry and department, government and enterprise, enterprise and user, province and city & county, and management and development. The united planning function of DMS helps finally to form the complete integration trader network, which covers the different kinds of tourism organizations in the whole province.

##### 3.1.2. Integration of vertical relation of

tourism-governing department at different grades

Tourism informatization makes the grade system of information exchange of tourism-governing department turn into "flat" integration, and this "flat" integration shows the unique pattern of "four in one":

(1) Provincial tourism-governing department structures the authoritative provincial tourism information database;

(2) Tourism-governing department of the provincial capital by utilizing the joint advantages of network infrastructure, such as, telecommunication network and computer network, unites commercial group, tourism enterprise and bank to structure the trade platform of tourism EC;

(3) The key tourism cities of province structure tourism DMS.

(4) The key tourism county of province is chosen as a website builder of "green tourism of rural area".

#### 3.2. Integration of tourism websites

Planning the provincial tourism websites that are integrated with tourism affairs, commerce and information has become the key step of tourism informatization, which regards "provincial tourism websites" as a platform and adopts the way of combining marketing operations and administration promoting. The service integration websites are the ideal models of provincial tourism websites in the future, which mainly includes OSA (online service ability) and OAA (online application ability). OSA has the following characteristics: Substantiation, interaction, timely and personalization. While OAA has: practicability, security, opening, flexibility and artistry, etc. The previous scattered tourism websites mainly relied on information issue function, which had weak two-way and interactive ability, and weak ability of dealing with network affairs, and is difficult to popularize the brand of website, comparing with these, integration websites will greatly improve the level of comprehensive informatization.

### 4. The formation of integration trend

The gradation and point-assigned and interactive relation of concrete province and provincial participant is shown in Fig.1: The total integrated system of informatization construction of province is divided into: Grade A (the organization/investor of tourism informatization construction), Grade B (the union side of tourism information construction) and Grade C (numerous participants). Each grade and point finish the platform construction of provincial tourism website integrated by "five networks and one database" together, namely, government affairs network (GA network), official business network (OB network), business management network (BM network), EC network, information network and tourism database (TD). The main work of tourism

informatization construction is divided into: A1(A1') provincial tourism-governing department plans in union and finishes the construction of government affairs network, official business network and business management network; A2 key tourism city in province undertakes DMS construction of this city, and unites each tourism agency B1, hotel B2 and the key tourist county in province A4 to perfect the system of providing and delivering. A1, A2, A3, and A4 serve the construction of information network and database together; A3 provincial capital city unites B3 commercial group and B4 bank group, and structures the EC platform of tourism to realize the tourism online trade. It is obvious that the last integrated system of tourism website was built up by the guiding and developing of multi-level tourism-governing departments and the cooperation of many relevant enterprises and organizations. This integrated website includes D1 the kernel service system ----tourism synthetic information database and information service system, the management system of websites contents, management system of business, network distribution system, etc, D2 the service system of tourism-governing department----information examination of destination, synthetic information management system of destination (news information, subject of promotion, file materials, festival celebration activity and management of attraction commerce and investment) enterprise management of destination, tourism complaint management, system integration of business management, management of tourism website, statistic report and relevant organization, D3 the service system of tourism enterprise and relevant organization----information management of enterprise, information issue of enterprise, order management of products and exchange in the same industry, etc..

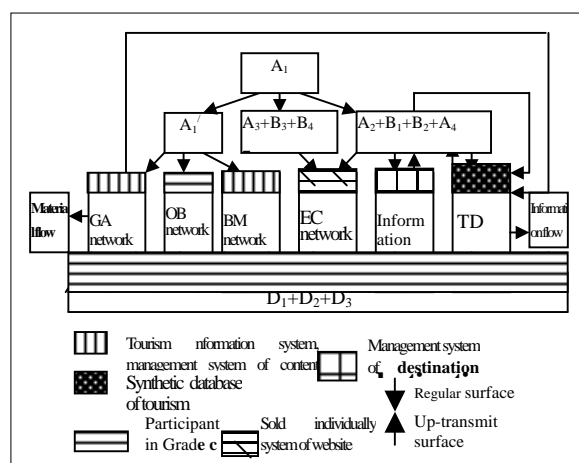


Fig.1: Interactive relation of gradation and point-assign construction of provincial tourism

## 5. Conclusion

The integrated trend of provincial tourism informatization planning corresponds with the aggregation characteristic of tourism industry in cyberspace. The successful implementation of this integrated platform has two results: On one hand, it provides tourism enterprises and relevant organizations with an effective way to circulate the information, which make tourism organization/enterprise that is difficult to integrate in realistic space accomplish the integration in cyberspace and achieve the scope economy of network cyberspace. On the other hand, it provides visitors with a greater range of tourism products and the higher use value of information service; it also decreases the costs of information comparison and subscription choice. At the same time, this integrated tourism website will gather a large number of tourism enterprises and related organizations within the region of the tourism resort, and can achieve the totally self-personality ordering service in tourism resort. Therefore the provincial tourist informatization corresponds with the demand of information age and shows the obvious trend of integration.

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## References

- [1] Lu, J., Lu, Z. Development, distribution and evaluation for online tourism services in China. *Electronic Commerce Research Journal*, pp.221-239, 2004.
- [2] [www.cyic.gov.cn](http://www.cyic.gov.cn)
- [3] Liu, S.H., Lu, Z. A Discussion on the Regional Integrated Function of Tourist Destination Marketing System. *Tourism tribune*, pp. 84-88, 2004.
- [4] [www.tourzj.gov.cn](http://www.tourzj.gov.cn)
- [5] Lu, J., Zhang, G.Q. Cost Benefit Factor Analysis in E-Services. *International Journal of Service Industry Management*, pp.570-595, 2003.
- [6] Lu, J. A model for evaluating E-commerce based on cost/benefit and customer satisfaction. *Journal of Information Systems Frontiers*, pp.265-277, 2003.
- [7] Lu, Z., Lu, J., Zhang, C. Website development and evaluation in the Chinese tourism industry. *Special Issue of Network and Communications on the Internet Development in Asia, NETCOM*, pp. 191-208, 2002.
- [8] Lu, Z., Li, Y.L., Han, B. Supply-demand Difference Analysis for Tourism On-line Service in Beijing. *Chinese MIS*, pp.13-24, 2004.
- [9] Lu, Z., Lu, J. Tourism website development and investment decision in China. *The International Conference of Group Decision and Negotiation*, pp. 172-179, 2002.