A Framework for Information Accuracy (IA) Assurance Practices in Tourism Business (TB)

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***Abstract*—Tourism Business (TB) is the world prominent profitable industry. Development and future of the TB recognized as financial driven to increase and contributes to a country financial performance. The major concerns in current TB, information's are mean to be overwhelming, lack of accurate information and unfiltered information that makes available through web repositories, social networks and tourists/travellers service/agencies or information centres'. Failure of Information Accuracy (IA) Assurance in TB influences, poor decision making capability among the tourists/travellers. Tourism related information's can be improved to obtain good trust, reduce discrepancy and increase IA Assurance. As the quality of the information is vital, IA Assurance is the major research concern to ensure the only trusted and accurate information available for tourists/travellers as a guide to make a decision. This paper will address the issues of IA in TB to propose IA Assurance Practices Framework for TB to ensure a good accuracy level of information being used for decision making.**

***Index Terms*—information accuracy, information search, travelling planning and information quality and standards**

I. Introduction

The quality of information is vital and its accuracy is the most important element in obtaining quality information. Organizational stakeholders are concern of information that is being disseminated both internally and externally. For organizations and businesses, the availability of information is of paramount importance, as it will avail them to analyse the current situation of businesses in order for them to make informed decisions. In many organizations, different types of information and processes are monitored to ensure that the information obtained impact the decision accuracy. Globally regardless of the nature of business, information is being processed as per the organization's Standard Operating Procedures (SOP) and streamlined each organization Quality Management System (QMS) [1]. The rationale for the enforcement of the SOP and QMS is so that, all the information that is presented is as per the organization's needs, not misleading and contains the elements of accuracy. Hence, the process flow and practices of IA is strictly monitored and only meaningful and valuable information is made available for decision making. In this digital age, Information and Communication Technology (ICT) plays a prominent role to ensure that the information generated and disseminated effectively [2]. In TB the implication of ICT towards the growth of the tourism industry is predictable. ICT is and will play a very important role to improve the information generation, dissemination and communication of information [3]. The vast development in ICT acts as building blocks to enhance further the knowledge sharing mechanism of tourism amongst organizations and tourists/travellers. The implication of Web 2.0 in TB has helped facilitate information sharing and social interaction more prominent [3]. The shared Information is meant to provide guidance to prospective tourists/travellers to visit similar palaces in the further. With the launch of business Internet applications in the early 90's, numerous scientists have watched the potential of the World Wide Web (WWW) with hands on deck, and have catapult the tourism business via internet awareness. The vast and varied development of information engineering and the Internet has breathtakingly changed TB, as it is an important apparatus for information sourcing, correspondence and offers other great opportunities. This fast development is evident with the amount of online users and the increase of online information sourcing, which gives clear proof of the ubiquity of the innovation and the effect of the Internet. In the context of TB, although online information search has become a major trend among travellers, the IA level needs to be continuously monitored in order to avoid any misleading information that is available for tourism purpose [4]. With the growth of TB, tourists/travellers today always demand for quality information to be channeled through reliable mediums. Modern TB's are enhancing the existing functions or services in order to remain competitive and responsive to public needs. In tourism services, the current web resources provide functionalities for tourism related information, tour operations and guide, travel cost and shared resources and communication. The impact of these information available directly contributes towards tourists/travellers expenditure, travellers choice, estimated travel time, first impression of places to be visited and much more [5]. With the huge growth of tourism sources, there is still a handful of available repositories to provide reliable information for the tourists/travellers to plan their travel. The internet has grown to be one of the most effective means for

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tourists/travellers to seek information on tourism-related services. Although, the available websites are highly integrated, tourists/travellers are often overwhelmed by the huge amount of information available online and cannot locate what they intended to find [6]. Overwhelming availability of information is subject to be evaluated on the IA. IA Assurance on the available information is the most important aspects for a tourist/travellers to make better travel decisions by giving them assured information with regards to the accessible travel choices.

II. Problem Background

TB has always been the most important financial intermediaries virtually in all economies. As changes in the global TB continue to evolve and accelerate in the new millennium, the International tourism system will face monetary pressure to become more efficient, competitive, technology driven and strategically focused [7]. In the current traditional tourism environment, there is always room for questioning the IA of available information. Even where there are formal organizations providing the required information, there is grave possibility that the TB information provided could be information that's misleading or inaccurate. Considering the accuracy of the available information through the traditional and online mediums, the accuracy of information that is being retrieved in TB can be openly questioned [7]. As per studies and references, the need for IA Assurance is vital in TB. IA standards, are able to limit the information deficiencies and increase the trust level of the available information [8]. The TB information gaps highlighted by the "National Tourism Organization" indicated that the TB is hungry and overwhelmed by the existing information. Nevertheless, the source of the information is worrying in the world. The information gaps in TB are of doubtful quality and correct information source is needed. The accessibility and source of information on TB provided by government agencies, tourism commissions, agencies, regulatory bodies and other sources which the quality and accuracy of the available information can be questioned as well [7]. Tourists/travellers are now demanding for a higher level of information by examining existing resources that provide forecast information for travelling purposes. Today, in the digital age, regional and global tourism has grown so fast that the dissemination of information related to tourism is shared via social media, web repositories, travel agencies and international/local authorities and tourism centres' alike [9]. The influence of IA in TB, contributes to the tourist'/tourists/traveller's convenience, to plan their vacation. The present value added service like knowledge sharing system or social networks has allowed tourists/travellers to view, read and comment on other tourists/travellers shared information [10]. There are many concerns about IA in TB. Some of the major concerns are: the inaccuracies of available information, overwhelming information, lack of a structured process or flow of available information in a digital age and unfiltered information on social networks [11]. All these inadequacies can influence a tourist/tourists/travellers when it comes to decision making [11]. Accuracy could be characterized as the capability of the Information framework, to lessen the disparity between assessed travel time and the real ones encountered by the traveller [5]. The majority of the studies sought to identify the models that most accurately predicted future tourism demands and the ways in which accuracy can be improved. It was proposed that inconsistency in the results of the accuracy tests could be attributed to variations, conditions and data type and therefore there might be a set of models that performs better than others in certain identifiable conditions [12]. Hence, tourists/travellers or tourists/travellers need better mechanisms and assurance to plan their trip end-route to making their travel decisions. Tourists/travellers are sensitive to the accuracy of the accessible information as this may clear their hesitation on their travel activities. Tourists/travellers often are specific about risk, ineffectual and reliable information when planning their travel [5]. Jewson and Leskovec had indicated that the social media play a very important role in information dissemination through social networks [13]. The information spread through social networks which enable people to learn new information without recognizing the source of the information, and there is also an indication that people normally preferred latest information for their decision making purpose [13]. Frequently, social network information is inferred from witness reports; past exploration, in any case, has demonstrated that such reports are actually profoundly wrong representations of social association [14]. Web information is developing so quickly, hence, enhancing the productivity and correctness of Web information recovery is a daunting struggle. There are two principal issues with respect to the adequacy of Web information gathering, namely mismatch and over-helm of information that can affect the IA of TB related information [15]. "Information" of the whole tourism worth chain, by implication is that, ICT is the most basic component of a quality producing system in tourism business. Web advancements, for example, Web 2.0 and area based administration are at present driving quality era and change. These will be the platforms for the current modern framework impacting the way in which tourism data are made, traded, assessed and how connections are shaped and kept updated. These data frameworks will guarantee to supply tourism buyers and administration suppliers with additional applicable data, more stupendous choice help, more amazing portability, and eventually more charming tourism encounters. Currently these systems envelop an extensive variety of advances that's important for tourism settings, for example, recommended frameworks, connection mindful frameworks, independent executors looking and mining Web assets, and encompassing insights with credentials. All these factors allow tourists/travellers to retrieve mass of information's for decision making [16]. In this digital age, information inflow over the network is uncontrollable. The wide spread of information flow policy allows the flow of information to be disseminated

to all the parties, but is unable to ensure the dissemination of information delivers the accurate information [17]. Lack of Standard Operating Procedures (SOP) for information formation and dissemination via existing platforms is very critical. Today, the possibility of sharing information with the latest technology is without any barriers. This in-turn beckons an issue in the tourism business context i.e. the existing information which contributes to decision making lacks accuracy characteristics [18]. Another concern that needs to be analysed is the trustworthiness of the available information on TB. Information credibility and completeness are the other concerns that affect the IA in disseminating Tourism Business information. Generally, the IA in TB were the lack of trust due to inaccurate information and widely available information from various technological sources had contributed to poor decision making amongst travellers [19]. IA Assurance in TB should contain high interoperability of trusted information. As defined in ISO 9000, the quality information increases the IA Assurance level of information, regardless of the business nature [8]. One of the key issues in implementing sustainable tourism is the quality of the available information. The "World Tourism Organization" indicated the need for evaluating specific information in TB to eliminate poor decisions automatically [18]. By analysing the TB related information in line with the fastest growing social networks, there were significant disadvantages noted. TB information that was available as information lacked trustworthiness, were not in a timely manner and lacked descriptiveness were some of the major concerns [20]. The need for TB in order to ensure good IA Assurance is extremely important and it is vital for only quality and accurate information is being disseminated publicly for decision making. Thus, the IA Assurance is necessary to ensure that the information that is provided can be trusted, is accurate and can be referred to as the main source in decision making.

III. The Information Accuracy (IA) Assurance Practices Framework that Suite the Tourism Business (TB)

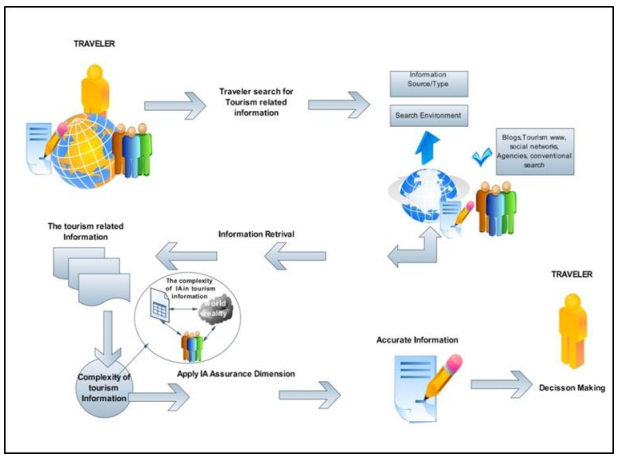

Figure 1. Conceptual view of proposed IA assurance practices framework.

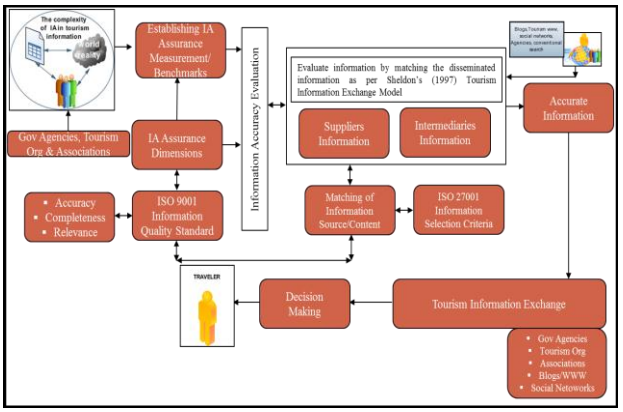

Figure 2. The proposed IA assurance practices framework for TB.

The detail of the Fig. 2 explained below.

The objective of the framework is to address the inaccurate information that contributed by the complexity of tourism information. The conceptual diagram in Fig. 1, illustrates the overall processes of information acquisition by tourists/travellers. The information search activities influenced by the information source/type and environments. In the digital age, the information search environments consists of blogs, websites, social networks, tourism centres/agencies, government agencies, brochures or any other sources which are the channels that responsible for disseminating tourism related information's. The available tourism information's via the source of the environments being very complex, which is inaccurate and overwhelming. To overcome the complexity of the tourism information's and increase the tourism information accuracy, the IA Assurance Practices Framework can be the appropriate solution.

The complexity of tourism information's to be evaluated by establishing IA Assurance measurement/benchmark.

IA Assurance measurement/benchmark inherited from IA Assurance Dimension which consists of ISO 9001 [21] Information Quality Standard (Accuracy, Completeness, Relevance). To see the practicality of the IA Assurance Framework, the evaluation of information accuracy begins by matching the disseminated information as per Sheldon's (1997) Tourism Information Exchange Model. The matching or comparison of the existing tourism related information will be compared with actual source and types of information obtained from Tourism Information Suppliers and Intermediaries. Only information that matches IA Assurance Dimensions characteristics will be considered as accurate information. The IA Assurance Practices Framework to be introduced as the main part of the Tourism Information Exchange Model generally and to be incorporated via existing Tourism Information Exchange Model. For example, Fig. 4.3 illustrates the incorporation of the IA Assurance Practices Framework with Sheldon's (1997) Tourism Information Exchange Model [22]. The IA Assurance Practices Framework will be treated as a central repository between Intermediaries and Travellers in the Sheldon's (1997) Tourism Information Exchange Model to ensure the accuracy of the information.

The IA Assurance Practices Framework via the Sheldon's (1997) Tourism Information Exchange Model which able to eliminate any mismatch or inaccurate information between Suppliers and Intermediaries before information make available for tourists/travellers. At the end of the process of integration between IA Assurance Practices Framework and any Tourism Information Exchange Model, only accurate information will be available to public through government agencies, tourism organization and as the vital view via blogs or web site and social network for travellers for information gathering and decision making.

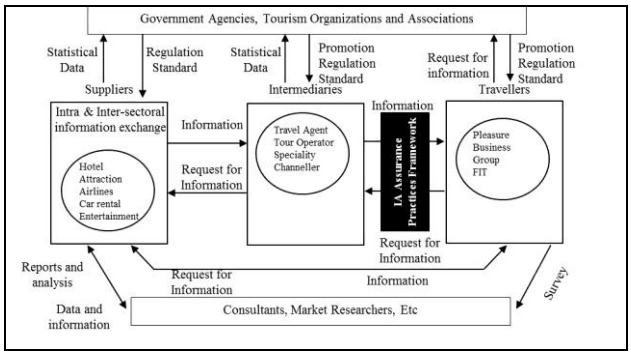

Figure 3. IA Assurance Practices Framework with Sheldon's (1997) Tourism Information Exchange Model.

IV. Implementation of IA Assurance Practices Framework in TB

The Fig. 3 explained the integration of the IA Assurance Framework with Sheldon's Tourism Information

Exchange Model. Since the accurate information is vital in tourism, the IA Assurance Practices Framework can be integrated with existing information exchange or dissemination models or practices to disseminate accurate information tourists/travellers. The IA Assurance Practices Framework able to eliminate inaccurate information by applying the IA Assurance measurement or benchmark as per ISO 9001 Information Quality Standard. The evaluation of information source and content compared with actual information that disseminated by tourism suppliers and intermediaries able to reduce information complexity. The IA Assurance Practices Framework is feasible to be integrated with tourism information centres that responsible to disseminate accurate information to travellers for decision making. The IA Assurance Practices Framework is being proposed in a flexible manner and easily can be adopted by tourism information providers that concern about the accurate information dissemination to tourists/travellers.

V. Conclusions

In the context of world economy where the global economy is not stable and fuelled with rising levels of living costs, the tourism market has taken a backlash and has seen a declined in travels. Economic consumers, especially those in the tourism industry have to carefully plan and make wise decisions for their travel or vacations. Thus, the need for a better and realistic guide for travelling is vital and paramount. The dissemination of tourism information through various sources has always been questioned in terms of its accuracy. Acceptance of web based repositories to disseminate and share tourism information to reflect valuable information source, moderately equips information seekers with trusted information. There is a need for transparency and trusted information to be made available to tourists/travellers, so that they can make comparisons before making an informed decision. This paper contributes to the IA Assurance Practices Framework and addresses the poor practices that lead to poor decision making in TB. The IA Assurance Practices Framework will able to serve the purpose to eliminate inaccurate information and improve tourist/travellers decision making capability.

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