The Role of Technology and Organization in Building Trust in Mobile Content Services

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Abstract

The purpose of this paper is to study building and maintaining consumer trust in mobile contents for tourism and travel in perspective of public sector. Mobile contents services are increasing rapidly. Tourism contents in mobile services are non profit business model in an early and immature stage toward the ubiquitous era. Non-profit organization plays a role as service provider through Internet and wireless telecommunication in an information-intensive and network-oriented environment. This article is proposed nonprofit organizations as tourism contents service provider to identify a conceptual framework that can build continuous trusted mobile contents under ubiquitous environment according to developing and maintaining stage. The results based on the focus group interview methodology highlights a conceptual foundation for service providers in nonprofit domain.

Keywords : Trust, Trust Developing Process, Mobile Contents, Mobile Service Provider

1. Introduction

Widespread diffusion of internet and mobile telecommunications usage has triggered rapid changes in diverse social groups and industry domains. Predictions of convergence between information technologies and communication technologies describe a future environment of new mobile devices, content services, business opportunities and usages[31].

This trend is observed not only among tourism market and firms that lead innovation through information technology, but also in public sectors trying to build new channels for ubiquitous environment. Large cities and rural governments try to utilize their diverse tourism resources such as natural scenery, landscape, culture, history etc. to boast up local economy and promote local image.

Local organizations in Korea recently

declared the opening of delivering tourism information at anytime and anyplace through internet and mobile devices (mobile phone, PDA, etc.) for creating inbound market. Nonprofit organizations and mobile telecommunication enterprises have begun a new service for reservation and location-based service for tourism information through mobile system. Public sectors, tourism firms, domestic and international information users, system managers, and communities are all participated in regional tourism information portals.

In initial stage for developing mobile tourism services systems, nonprofit organization is allied with partners in part of technology, telecommunication and contents services domain.

Although expanding Internet or mobile services, organizations are faced on trust toward continuous value creation. In era of a flood of information, user in the internet and telecommunications requires more and more high qualified information and contents for truth, accuracy, and real-time. As accessibility to information technology infrastructure is constantly increasing, the importance of reliability in contents under limited economic resources is also increasing. A mobile Internet service can be defined as an activity or set of activities of intangible nature, which occur when the consumer is mobile, the activity or set of activities are supported by a mobile telecommunication provider who makes use of a combination of mobile and Internet networks, enabling activities between customers, and a provider of a service or a system supporting the service [8][47]. Organization pursue to maintain their business value seamlessly not only short-term technology problem but also long-term is sues that is "trust" [20][32]

The major questions in this research are:

- HWhat is the key role of technology and organization in according to developing and maintaining mobile contents service systems?
- How does organization's task change for trust building in service provider perspective?

This paper explores the role perspective of technology and nonprofit-organization for tourism mobile services. At the issue of seamless mobile contents service perspective is the process of trust building according to initial stage and continuous stage. This paper is complementary to the role of technology as initial stage and organization as continuous stage in public sector.

2. Literature Review

2.1 Trust in ICT Environment

Expanding information and communication technology(ICT) environment boosted up information in the internet and mobile. Although there are some rather holistic models that explain the adoption of Interactive Communication Technologies[23] and Mobile Devices[40], there are still many gaps with regard to the adoption of mobile Internet services in existing literature[8]. Theoretically information and technology adoption research continuously is reviewed on trust perspectives between barriers to adoption of new technologies and the perceived benefits or added value of new technologies. In information systems literature, Bouwman et al.[8] reviewed that the diffusion research theory, the theory of reasoned action and planned behaviour[1] provides a deeper understanding of customer acceptance of emerging mobile technologies and services and the diffusion

of innovation [39], the Technology Acceptance Model (TAM), the extended Technology Acceptance Model, and the Unified Theory of Acceptance and Use of Technology (UTAUT)[12] are used to explain possible adoption and acceptance patterns of new technologies among consumers. He suggested that Concepts like relative advantage, compatibility, complexity, triability and observability, as well as perceived risk, perceived usefulness and perceived ease of use play a key role in these approaches. Gefen, et al.[16] reports that the customers are maintaining their trust in the e-vendor [38] and that trust is at the heart of relationships of all kinds[28][30].

Quelch and Klein[34] note that trust is a critical factor in stimulating purchases over the Internet, especially at the stage of commercial development. As a result of the expansion of e-commerce, the number of participants in various on-line communication and business continue to increase rapidly. Information technology improves accessibility of participants and encourages incessant competition both in quantitative and qualitative improvement in the exchange of information. Research on the concept of trust has been carried out in many different areas including business, psychology, and medical science.

Most buyer-seller relations are characterized by information asymmetry which is well-known that the buyers do not have complete information about sellers' actions[4][27]. Moreover, fears of such opportunistic behaviors could result in the buyers' mistrust in online products and services, jeopardizing electronic markets [4][10][20]. Therefore, trust between one and another party will perform a transaction according to his or her confident expectations in an environment characterized by uncertainty [4][6][15][25][26]. Following Coleman [11] and Williamson[48], trust in business world have shown three sources; familiarity which means repeated interaction that leads to trust or mistrust, calculativeness which means a subjective assessment of the costs and benefits to other party of cheating, and values which means institutional structures that encourage confidence in trustworthy behavior and goodwill.

Trust is a state involving confident positive expectation about another's motives with respect to one in situations entailing risks [7][42]. Ambrose and Johnson[3] suggest three characteristics of the trust. First of all, the relationship between truster and trustee depends on mutual advantage. Secondly, trust includes 'uncertainty' and 'risk'. There is no perfect guarantee but only expectation met between truster and trustee. Thirdly, trust believes trustee's honesty and benevolence also that trustee will not allow the action premised on risk.

According to Fung and Lee[13], customer trust formation in e-commerce can be identified dynamic time-consuming process including initial trust formation and repeating test of transaction until customer royalty toward company is appeared. Ratnasingham and Kumar [37] suggested that there are three important factors to gain customer trust that are competence trust, predictability trust, and goodwill trust.

In these previous researches, Trust is a governance mechanism in exchange relationships that are characterized by uncertainty, vulnerability, and dependence[5]. Siau and Shen[43] explains initial trust formation to construct customer trust in e-commerce, evaluation on satisfaction, repeat transaction, and customer royalty formation in company as a life cycle; initial trust

formation (information gathering and first transaction based on reward attraction), continuous trust development (evaluation on satisfaction and repeat transaction), and firm customer loyalty formed. Steps of this trust get feedback routinely. In era of the information and communication technology, trust building is a core of m-business with contents services quality. Structure of trust building gets feedback mechanism on evaluation about buyers and sellers' experiences.

In organizational trust perspectives, electronic government, or e-government, increases the convenience and accessibility of government services and information to citizens[9]. E-government as a supplier and operator of mobile content trust plays a key role in mobile service; 119 emergence (in korea), weather forecasting, and regional tourism information. E-government is represented organizational trust as a supplier itself.

Gil and Artz[17] defined content itself trust as a trust metric based on the nature of the information to be trusted. They approached content trust as information product in perspective of authored-by, published-by, owned-by, cited-by, affected-by, and regulated-by.

According to Siau and Shen[43], evolution of mobile technology shifted the trust domain from engendering customer trust in technology to engendering trust in vendors and technology trust (network operator) and vendor trust are equally important in securing customer trust.

Customer satisfaction is a core for building long-term relationships and, consequently, is significant in sustaining profitability and consumer-oriented values in perspective of trust life cycle based on technology and organizations.

Adopting trust building in mobile contents service is interactional process and collaboration among technology, information products and service provider, telecom organization, and policy maker. Especially non-profitable mobile contents service for tourism is difficult to sustain and maintain the systems continuously for invisible market and user.

2.2 Information and Contents Services in Mobile Environment

Mobile content and information services (e.g. map, and location-based services, news, personalization and entertainment content downloads, etc.) make information available to mobile users in different modalities; messaging services such as Short Message Service (SMS), Multimedia Messaging Service (MMS) and email enable the exchange of text and multimedia messages; transaction-based services enable transactions such as mobile banking, airline reservations.

Following Nielsen and Hanseth[31], stakeholders in mobile contents service for successful business consist of five actors operators for coordination between operators, open garden, and Market and content provider oriented, content providers for multiple of entrepreneurs, authorities for Support from regulators in coordination and no interference related to ease of use, local culture for entrepreneurship, low risk of fraud, language, and SMS-culture, and Mobile telecom for commitment from telenor and appreciation of assistance. Participants for mobile service are, in detail, application provider, application service provider, content aggregator, content integrator, content provider, infrastructure provider, network provider, service provider, terminal

manufacturer, and end users[2]. And Alahuhta et al.[2] pointed out that the companies, organizations and individuals that will actually provide the content for the services should also have roles in the development process. Mobile technology serves the user who need to aggregate mobile contents by service and content providers. In the technology perspective, web service in mobile, WAP has been dominated by technology push. Technology has been in the mobile business domain both to end users and service providers. And mobile service provides users to know where you are; the location-aware services. The location-aware service leads to create new market and develop new mobile service and users. Regarding mobile services, many service providers have served SMS-based services which are key business model for them.

Shapiro and Varian[41] and Bouwman, et al.[8] report on the study that bundling is a form of versioning of products and services in which two or more distinct products or services, or a combination of products and services, are grouped as a package at a single price. Service bundling of core products and/or services is a well-known phenomenon in the telecommunication industry[8].

Reliability and security is important to construct online trust as much as technology in mobile commerce[14]. There are limit to follow diverse internet contents both in quantity and quality as mobile technology and vendor, the core factors in mobile commerce are technologically dependent in contents formation and the limit in LCD (liquid crystal display) of mobile phone and PDA is raised as an important task in m-commerce growth.

As a traditional concept of city, most crucial factor has been within physical range. However current cities overcame physical limit through development of information technology, enlarged function and scale of new city and evolve it into new conceptual cities that are information cities. Information city fulfills real life into virtual reality through diverse contents development on industry, market, medical, 119 emergency, transportation, culture and tourism.

Most of domestic mobile service providers provide information service focused on transportation and time however mobile tourist portal service lately is more driven to be verified and expanded such as the case of 'mobile service for outbound travel guide book' by SKT or 'mobile tourist information service' by KNTO.

Mobile content's trust in service providers' perspectives is required to retain diverse and reliable information, and there should be no limit on sharing its information. It is necessary to develop continuous management of information quality and the structure which can secure economical efficiency.

It is not too much say that modern movement of e-commerce has evolved from the travel industry. Travel industry overcame physical limit to handle their business in the market, introduced global distribution systems (GDS), the capable reservation system for flight tickets, hotel and rental reservation services. Mainly GDS such as Sabre, Galileo, Amadeus, and Worldspan is leading the travel and tourism industry in sharing information and net working of industry. However GDS is mainly focused on large scale of chains, and it is threaten by rapid growth of internet and it accelerates enlargement of 'region-oriented travel and tourism information

system'.

A scale of participants is critical factor to construct continuous customer trust for the region-oriented information in tourism mobile content and suggests a direction with aspect of mutual interests that contracting parties should pursue. This model is able to aim connectional meaning for tourism mobile content which improves customer trust in m-commerce based on mutual trust between diverse participants. Public sectors which retain many digital contents of local tourism, should secure the digital copyrights. Provider should search for developing digital contents into products, business model of local reservation system by cooperation with small-and-medium sized tourism firm which adapt technology slowly, enlarge range of information public ownership and develop digital information and contents through locals and community. And locals and community should be able to provide guarantee of product quality to mobile customer which concerns tourist characteristic by monitoring of local tourism products.

3. Research Framework and Methodology

3.1 Research Framework

Mobile business models in B2C business have adopted in banks, mobile telecommunication, music, e-book, ticketing, coupon, news, advertisement, stock information, etc[22]. Mobile content shows and consists of numeric, clear and short message and information. Mobile contents on tourism and travel show and deliver descriptive and explanative information about regions, products, and services. Information services of mobile tourism and travel contents are now starting in Korea.

According to Siau and Shen[43], with the aspect of mobile technology, it is important to maintain feasibility at the level of initial trust formation, reliability and consistency during the continuous trust development [42][43]. And at the side of mobile provider, they suggested familiarity, reputation, information quality, recognition by third-party and attractive awards at the initial trust formation and for the continuous trust development, web-site quality, competence, integrity, privacy policy, security controls, community building, open communication, accessibility, external auditing were suggested as a framework.

The suggested framework in views of development process in mobile service is an extended version of participants range and their role. Portal local tourism information system has a structure division of public and private sectors[43]. It organizes different sectors on-offline throughout cooperation between central government, local government, national tourism organization as a public sector, tourism firm, mobile service vendor, IT Company as a private sector, and locals and community as a third party. Particularly it has infrastructural characteristic which constructs corporative structure in m-commerce and provides new online contents constantly with internet. This research is to perceive development in tourism mobile content from the perspective of continuous customer trust development. Continuous trust frame work in mobile content is a model applied with technology, role of provider and time flow. This study attempts to suggest duties of interest parties and technology side applying mobile customer trust development frame work introduced by

Siau and Shen[43] with tourism contents.

〈Table 1〉 Suggested Framework for Trust Formation in Mobile Content Service

Related entry	Issues related to initial trust formation	Issues related to continuous trust formation
Public Sector Personal and Community Travel and Tourism Firm Mobile Vender	Familiarity Reputation Information quality Third party recognition Attractive reward	Site quality Competence Integrity Privacy policy Security controls Open communication Community building External auditing
Mobile Technology (Network Operator	Feasibility	Reliability Consistence

3.2 Methodology

This model is an integrated model from existing one that are merged with IT, public sector, tourism firm, personal/community, and mobile technology, this study suggests each role of model by focus group interview. Focus group can be used at the preliminary or exploratory stages of a study or during a study, perhaps to evaluate or develop a particular programme of activities or after a programme has been completed, to assess its impact or to generate further avenues of research[21][35]. A focus group is defined as a group of individuals selected and assembled by researchers to discuss and comment on at the same time, from personal experience, the topic that is the subject of the research[33]. Focus groups are a form of group interviewing but it is important to distinguish between the two. Group interviewing involves interviewing a number of people at the same time, the emphasis being on questions and responses between the researcher and participants. Focus groups however rely on interaction within the group based on topics that are supplied by the researcher[29]. The process of focus group is progress of discussion, data preparation, analysis and reporting utilizing; selection of subject, definition and education of moderator, forming and correcting interview, developing frame, collecting participants, preparation of meeting, interview recording, or systematic recording method and the recommended number of people per group is usually six to ten[24]. Focus group consists of participants already performed regional-oriented tourism information construction business as a demonstration region in 2004 and business experts and specialists who have experienced mobile contents development project. After introducing the model by Siau and Shen[43] for setting up and focusing on the discussion theme and developing service values, participants discussed further about possible components of interest parties in the perspective of initial and continuous level to construct continuous customer trust frame work in service providers' perspectives. That model suggested on the framework for our discussion. The research model for our interviews has shown by domain, process and their role of participants from metrics formation.

Greenbaum[18] suggested the method for the group and scale for research guideline; full group (8 to 10 persons), minigroup (4 to 6 persons), and telephone group (30 minutes to 2 hours), 10-point likert scale. This applied the minigroup of 6 persons and 10-point likert scale [18]. The subject of discussion was about successful

development of tourism mobile content focused on region-oriented tourism and each responsibility of tourism firm, mobile vendor, mobile technology and local from an aspect of policy to construct continuous customer trust development. This research analyzed in perspective of information services provider because consumer do not experience this mobile service on tourism and travel contents yet. Detail items of values are developed by group on each of classification. And developed items were evaluated by the group members.

4. Results

We were suggested discussed policy issues and further direction to reinforce continuous customer trust for successful management in tourism mobile content as below. At the initial and continuous level of mobile technology aspect, necessity of developing initial design, network, LBS (location based service), Initial management and operation budgeting, booking / payment service, language pattern and pictogram regarding tourist decision making process are proved and suggested. A policy issue on technology application with aggressive promotion and marketing activities was strongly recommended particularly, due to uncertain visiting period and amount of expenditure from many and unspecified tourists. However technological investments as well as budgeting for initial management and operation (during opening or normalization period) have risen as a very crucial component for the aspect of policy budget support.

Second, policy regulation regarding tourism firms (tourism firm authentication), visiting the site, compensation system related mobile content was risen as important task to develop initial customer trust, logo of local brand and promote mobile service before service provide. Especially ensuring human resource in local government is raised as difficult task for managing public sector, technology education although it is more important resources before technology and business plan to maintain customer trust development constantly.

Third, for the stage of continuous trust development, function and design oriented mobile service, constant development in locally customized mobile content based on 3 party-experiences, service publicity maintenance, quality monitoring, cooperation and integration with existing policy, developing evaluation standard of performance and performing system have been emphasized as a core issue to maintain mobile service business further. Particularly to justify policy security of the business run by public sector, and to visualize business impact under policy, both qualitative and quantitative development (number of visitors, satisfaction rate) is required. Additionally, each of the stages shows the difference of importance in Figure 2. In detail, mobile technology (MT-Mean 7.11) is more important than participant role (PR_Mean 6.59) in the initial stage. But, after developing the systems, participant role (PR_Mean 6.92) is more important than mobile technology (MT-Mean 6.71) in continuous stage. And more, the initial stage (IS_Mean 6.85) is more important than the continuous stage

(CS_Mean 6.81). But, statistically, this result need more research.

<Table 2> Importance in Initial and Continuous Technology Formation

Classification	Detail	Mean	Std. deviation
Feasibility	Mobile user environment similar to user environment of local government tour website (FS1)	8.50	1.61
	Accessibility of search service by diverse tourist information and itinerary and push massaging service related tourist products(FS2)	8.00	1.73
	Standard Positioning Service(FS3)	4.83	2.91
Reliability	Extra cable apart from administrative cable and resources for the opening of initial service and secure mobile service(RL1)	8.33	1.89
	Confirm message and reservation code by mobile service and reservation /payment notice massage from tourism firm based on GDS(RL2)	5.67	1.80
Consistence	Recognizing limit of Hardware in mobile device and integrating it with appropriate language pattern and tourism information process(CS1)	6.17	2.79
	Defining information system by mobile tourism pictogram(CS2)	6.67	1.89

<Table 3> Importance in Initial Trust Formation

Classification	Detail	Mean	Std. deviation
Familiarity	Local brand development (logo, product, natural scene, human etc.)(FM1)	7.67	2.05
	Promotion and advertisement on diverse M-TTC information services(FM2)	6.50	1.89
Reputation	Information provider (RP1)	7.17	2.27
	Technology provider(RP2)	5.50	2.87
	Tourism firms(RP3)	3.83	2.19
	Small-and-medium sized local tourism firm authentication(RP4)	8.67	1.49
Information Quality	Diverse local news and Tourist information by season (News, Event and festivals) suited for local characteristic and time(IQ1)	6.67	1.70
	Story telling service such as e-book, catalogue(IQ2)	5.67	1.11
Third-Party Recognition	Developing performance evaluation system of M-TTC(TPR1)	7.50	2.22
	Digital intellectual copyrights(TPR2)	6.33	1.97
	Information certificates, payment certificates, participating firm certificates(TPR3)	8.17	1.77
Attractive Rewards	Local tour site certificate services(AR1)	7.50	1.98
	Developing Mobile seal/ signature(AR2)	5.83	1.86
	3+1 credit (bundle of services system) visit 3 local tourist places a day, issue free mobile coupon for F&B or entrance ticket(AR3)	5.67	2.81
	Free festival or event card(AR4)	5.33	2.62

〈Table 4〉 Importance in Continuous Trust Formation

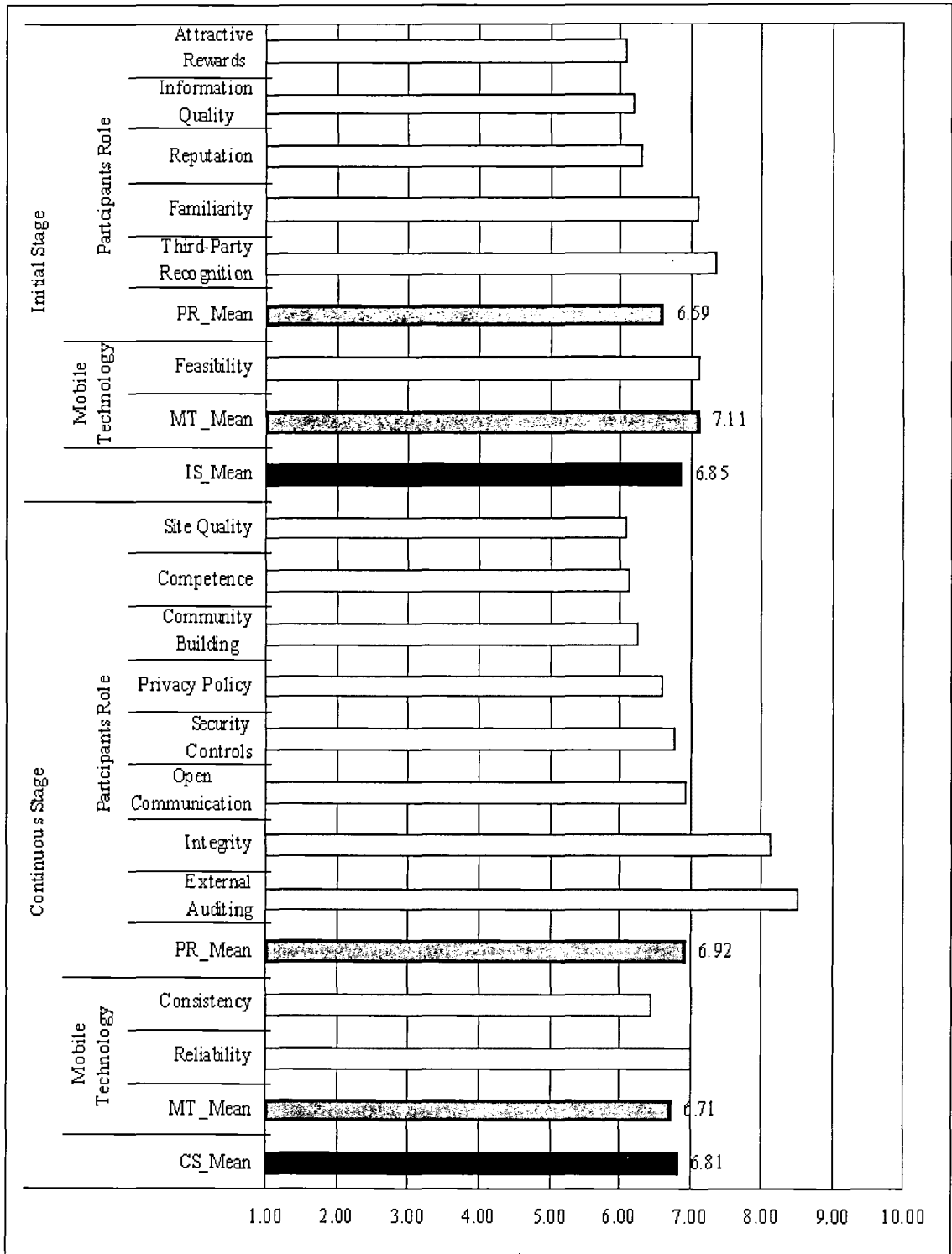| Classification	Detail	Mean	Std. deviation
Site Quality	Transform into a skill valued quality of site (skills of education, experience, culture and historical facts etc)(SQ1)	6.33	1.37
	Local brand and design preferred website(SQ2)	5.83	1.21
Competence	Providing local Top 5 or 10 tourism contents(CP1)	7.17	2.27
	Constant development and new M-TTC service provide(CP2)	7.17	2.27
	Accumulation of experimental information based on story telling(CP3)	5.17	2.41
	Enlargement of referential information such as book, news based on promotion materials(CP4)	5.00	-
Integrity	Value highly the role and image of public service(IT1)	9.17	1.21
	Monitoring system of M-TTC(IT2)	8.17	1.67
	Maximizing participant rate of technology experts at the stage of initial trust formation(IT3)	7.00	3.16
Privacy Policy	E-commerce standard(PP1)	6.67	1.89
	M-TTC intellectual copyrights(PP2)	6.50	2.14
Security Controls	Digital signature, codification, and certificates management(SC1)	6.00	3.61
	Money transaction based on GDS operation (per tourism firm)(SC2)	7.50	2.50

Open Communication	Customized travel information (golf course, fishing, pension holiday house etc)(OC1)	6.67	2.49
	Internet kiosk, 1330 telephone travel information service, mobile service in local tourist information center(OC2)	7.17	2.41
Community Building	Local community of internet mobile(CB1)	4.83	1.77
	Local communities and leader training by technology experts and local governments(CB2)	7.67	1.89
External Auditing	Transparency of Certificate system for excellent tourism firm(EA1)	9.17	0.90
	Internal, External auditing policy transparency(EA2)	8.83	1.46
	Business effect (visitor number per day, system performance evaluation etc)(EA3)	7.50	1.71

5. Conclusions and Future Assignment

Mobile services differ from traditional systems in that mobile services are ubiquitous, portable and can be used to receive and disseminate personalized and localized information[36][44][46].

These attempts to build trust must co-occur with attempts to influence partners to adopt the technology. An important challenge to building trust in a buyer-supplier relationship involves using power to persuade resistant, or even hesitant, partners to adopt EDI[19].

Trust building in tourism mobile content in service providers' perspectives needs

[Figure 1] Factor Importance of Trust Building in Mobile Content

step by step views in policy of public sector; time stage (initiative and continuous stage) and role stage between technology and maintenance. Information and contents on tourism and travel are evaluated by the experienced; tourists and users as trust signs. Third party recognition on mobile content plays a role of informediaries on electronic commerce as construct and sources on trust building and feedback mechanism [4][45]. And the public government informs the confidence as a public service sector. Integrity and external auditing is target for this business' success in the public sector. Mobile contents as information provider is expected accuracy

and no error as the honest for the local government.

Shown in figure 2, the importance of role between human and technology shifted according to the time line of developing the mobile tourism information services.

This result has shown the importance of *maintenance and contents service after* developing the initial stage.

Tourism mobile content for trust building should provide harmonized participation and chance to public sector, personals and local communities, business vendor (technology, tourism) and IT. Immature policy for contents management produces uncertainty of tourist information, economical inefficiency as well as low customer satisfaction of tourist and local although local government retains abundant amount of tourism contents of culture, history, event and personal. Tourism mobile content is continuously monitored by actual user and mobile content's consumer for *overcoming this limitation.*

As following the results, we suggest

technology and organization role for trust building as mobile service provider as below;

- Development organization's trust:
  Government (local)
- Content itself trust as developer:
  Government (local), travel and tourism firm
- Content itself trust as user:
  Personal and community
- Bundling service's trust : Mobile vendor
- Service delivery's trust :
  Network operator (Technology)

Therefore customer trust formation between technology and organization is an important policy indicator to expand aggressive participation of local tourism and promotion from personal to local. However aggressive

evaluation about open site of policy in public sector is still insufficient. That is why it is time to develop an integrated tourism mobile service applying with existing tourist facility and support continuous customer trust development. And the target of continuous customer trust should be virtual citizen and actual tourist who live in attraction of virtual space. And tourism policy should be dealt with actual visitors who visit local area. Targeting on them, developing local tourism contents of game and competition is on demand to *create new customer and its trust.*

Henceforward this is needed to continuous customer trust development of tourism mobile service for users, effect of investigation, logical structure of policy affairs, performance barometer such as language pattern, diverse contents, 3D geographical information service of study. Further research needs to research and study *the dynamic influencing factors in*

views of process-based framework, test the conceptual model amongst different types of service providers or adopters and refine measurements of the core factors, and thus, deepen the understanding of mobile service for trust building.

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모바일 콘텐츠 서비스의 신뢰구축을 위한 기술과 조직의 역할

조남재 · 전효재

요 약

본 연구는 모바일 콘텐츠 서비스에 대한 신뢰성 구축을 위하여 기술과 조직(공급자)의 역할에 대한 프래임웍을 고찰하는데 목적이 있다. 관광은 지역관광객 유치를 통하여 지역의 경제활성화에 중요한 정책대상으로 빠르게 시장이 성장하고 있다. 또한 인턴넷 확산에 따른 다양한 관광콘텐츠 서비스가 개발되고 있고 최근 유비쿼터스 환경에 적합한 관광콘텐츠 서비스가 개발되고 있다. 본 연구에서는 지방정부가 지역의 다양한 관광자원과 관광숙박시설, 음식점 등을 모바일 디바이스를 통해 서비스 추진시 지속적인 신뢰성을 확보하기 위하여 초기와 지속화 단계별로 기술과 운영조직간의 역할을 표적집단면접법(focus group interview)을 통해 변수를 도출하고 중요도를 분석하였다. 연구결과에서 모바일 콘텐츠 서비스의 지속적 신뢰성 구축을 위하여 초기단계에서는 기술 신뢰성에 대한 중요성이 높게 나타났으며, 지속적 신뢰를 위해서는 관광부문에 참여하고 있는 다양한 공급자들의 역할이 중요한 것으로 분석되었고, 이에 따른 모바일콘텐츠 서비스 신뢰성 유지를 위한 기술과 조직간에 역할의 변화가 필요한 것으로 볼 수 있다. 본 연구는 모바일 서비스 신뢰성 구축을 위하여 유비쿼터스 환경에 적합한 콘텐츠 서비스 개발시 기술개발과 운영조직간의 역할 변화를 제시하였다.

주제어 : 신뢰(trust), FGI, 모바일콘텐츠 서비스, 관광서비스