

Enhancing Tourism through Social Context Marketing Model (SCXM)

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Abstract

As people are able to combine data from several sources on their mobile devices, personalise their profiles via applications and social media, and engage dynamically with their environment, context-based marketing is becoming more and more common. There is a growing need for more contextually relevant data due to the abundance of information available online. Modern Information and Communication Technologies (ICTs) are becoming increasingly important to the tourism industry because they provide tools to better target the context in which their users work. Context-aware marketing makes use of technology that dynamically identify consumers' physical surroundings. This essay combines the ideas of personalisation, social media, context-based marketing, and mobile devices, proposing the Social Context Marketing Model (SCXM) as a novel approach to enhance value for everybody involved in the tourist sector. With the introduction of a new paradigm for travel and tourism, SCXM enables businesses and tourist locations to transform their offers and dynamically co-create goods and services with customers. The tourist industry's new prospects and problems are examined using a notional SCXM model.

Meningkatkan Pariwisata melalui Model Pemasaran Konteks Sosial (SCXM)

Abstrak

Pemasaran berbasis konteks menjadi semakin menonjol karena teknologi canggih memungkinkan pengguna untuk menggabungkan informasi dari berbagai sumber di perangkat seluler mereka, menyesuaikan profil mereka melalui aplikasi dan jejaring sosial, dan berinteraksi secara dinamis dengan lingkungan mereka. Banyaknya informasi yang tersedia secara online telah menyebabkan kebutuhan akan data yang lebih relevan secara kontekstual. Para pemasar pariwisata kini menyadari pentingnya Teknologi Informasi dan Komunikasi (TIK) mutakhir yang menawarkan alat bantu untuk menangani konteks yang lebih tepat bagi para penggunanya. Pemasaran yang sadar konteks memanfaatkan teknologi yang secara dinamis mengenali lingkungan fisik pengguna. Makalah ini mengintegrasikan konsep pemasaran berbasis konteks, media sosial, personalisasi, dan perangkat seluler, mengusulkan Model Pemasaran Konteks Sosial (Social Context Marketing Model/SCXM) sebagai pendekatan baru untuk meningkatkan nilai bagi semua pemangku kepentingan di industri pariwisata. SCXM memperkenalkan paradigma baru untuk perjalanan dan pariwisata, yang memungkinkan organisasi dan destinasi untuk merevolusi penawaran mereka dan menciptakan produk dan layanan secara dinamis dengan konsumen. Sebuah model konseptual SCXM disajikan untuk mengeksplorasi peluang dan tantangan yang muncul di sektor pariwisata Meningkatkan Pariwisata melalui Model Pemasaran Konteks Sosial

JEL Classification: Conceptual Paper

INTRODUCTION

Getting the correct product to customers at the proper time and location is the main goal of marketing (Gilbert, 2008). This argument seems especially applicable to the tourist industry given the distinctive features of the product. Travellers in the twenty-first century, according to Imbal and Fitina (2011), are more cultured, seek to enjoy life more, and are less stressed. Academics and business professionals have paid close attention to context in recent years (Schilit et al., 1994; Prekop and Burnett, 2003; Tsang and Clarke, 2008; Haekkilae et al., 2009; Hoepken et al., 2010; Lamsfus et al., 2010; Bouwman et al., 2012; Mehra, 2012; Lamsfus et al., 2013; Liu and Fan, 2013; Mehan et al., 2013). As a result of their research, the context-based marketing concept was introduced.

A set of best practices called context-based marketing aims to make content seem more valuable to prospective customers (Jørgensen, 2012). The most widely used platforms for obtaining context-related data are social media and location-based services. The Internet, which includes social media, has become one of the most important tools for most prospective travellers to research destinations, evaluate prices, and obtain information, suppliers, availability, product characteristics, and procedures, and search for these things simultaneously (Graeupel, 2006). Customers use social media platforms to communicate detailed information about their requirements and preferences as well as to develop recurring patterns of behaviour towards

providers and locations that meet their demands (Hensel and Deis, 2010). Travellers may contribute their opinions, experiences, and remarks on several social media channels (Xiang and Gretzel, 2010). Companies may utilise social media to better serve the wants and preferences of their customers and respond to market trends by utilising this information (Sigala, 2012). Customers have been using their mobile devices, which are increasingly equipped with sensors that allow them to accurately determine their immediate environment—to engage in social media activities in recent years (Mehan et al., 2013). Smartphones that are always connected and have interactive applications installed have made it possible to gather a wide variety of fresh contextual data on their users.

By combining situation-specific data from the customer's immediate surrounds, marketers may get a comprehensive picture of the user's internal and exterior environment with the preferences and wants that their consumers disclose on social media and customised applications. They will therefore be in a position to offer highly customised information and suggestions, as well as dynamically enhance the consumer experience. Thus, in the near future, successful enterprises will be driven through the fusion of mobile context-aware marketing (M) with social media (S) and CX.

Few research have looked more broadly at the relationship between social media and context-aware marketing, despite the fact that some creative firms

are now fusing social media with a context-aware technology. Tussyadiah (2012), for instance, investigated social networks and location-based services for location-based social network (LBSN) marketing. One of the main benefits of mixing different context types is seen in her observation that prizes offered by providers for using location-based social networking apps might lead to sincere actions and fidelity.

Context-based Marketing

For almost 20 years, context in tourism has been a significant area of study. The development of the tourist product and the quantity of information that is becoming available online have led to an overabundance of alternatives for customers, which has resulted in a greater focus on this problem in recent years (Gao et al., 2009). People are finding it more challenging to locate information relevant to their present circumstances due to the abundance of

heterogeneous information (Tanca et al., 2011). Customers now want highly customised items that are relevant to their unique situation (Buhalis and Law, 2008) as well as efficient dynamic communication methods.

There is currently no widely agreed definition of context in the literature, which is a shame given how important it is to offer context-relevant communications and goods. Several writers have attempted to define the word. Abowd and Dey (1999) provided the most often recognised definition, "Any information that can be used to characterise the situation of an entity" is how context is defined. An entity is any person, place, or item that is considered relevant to the interaction between the user and the application, including the applications themselves. Contextual information is defined as the data that defines a given context and can be either internal or external (Prekop and Burnett, 2003).

Table 1.
External and Internal Contextual Information

External Contextual Information	Internal Contextual Information
<ul style="list-style-type: none"> • Location • Season/Time • Air Pressure • Light • Political Situation • Traffic • Emergencies • Delays • Weather • Social Environment 	<ul style="list-style-type: none"> • Tasks (e.g. to look for a job) • Likes • Preferences • Emotional status (sad, happy etc.) • Familiarity with area • Goals • Disabilities • Topics of Interest

While certain contextual parameters, like time or place, may be inferred automatically from the surroundings, other aspects, like themes of interest,

might need the user to specify them (Tanca et al., 2011). Contextual elements including place, time, season, and temperature are quite dynamic

rather than static (Schilit et al. 1994). Therefore, it is necessary to view the contextual information across time and usage episodes (Greenberg, 2001). To sum up, certain contextual factors are objective, but others are subjective and dependent on the individual or situation. Examples may be the smell of the surroundings or the temperature.

Context is defined as "any additional facts, guidelines, or axioms whose consideration makes our commands actionable, our situations understandable, and our communications efficient" in the context of marketing. (Mehra, 2012: 12). Such context-aware data may promote a parsimony of messages and interpretations made feasible by context by including or removing information from communications (Mehra, 2012). This corresponds to the notion of context-based marketing that has been proposed (Jørgensen, 2012) as a compilation of best practices meant to emphasise the importance of information to prospective customers at a certain point in time. One common example of a sort of context-based marketing is a personalised recommender system, which is an application that makes recommendations for products and services based on the interests and needs of the user (Yu and Chang 2009). These technologies provide users with information to aid in decision-making (Tumas and Ricci, 2009; Saraee and Kahn, 2005).

Social Media Marketing Based on Context

Social media marketing is the context marketing domain that has been studied the most. Conversational media is used by groups of people to communicate information, ideas, and opinions. These actions, practices, and what we call these practices social media. Conversational media are web-based technologies that facilitate the development and easy sharing of text, image, audio, and video content (Brake and Safko, 2009: 6).

Customers now have more power than ever thanks to social media, which has a huge impact on their conduct (Strauss and Frost, 2012). Rather than anticipating fully business-staged experiences, it appears that they are increasingly aiming for a compromise between the experience stager and their own authority over their actions (Binkhorst & Den Dekker, 2009). According to Ferrario (2012), 53% of social network users who are active are believed to follow a brand on social media, and 36% distribute material related to the brand. This signifies a change from an internal organization's concept of value creation to one that is centred on the tacit negotiations that take place between the company and each individual customer during the co-creation process (Prahalad and Ramaswamy, 2004). Consequently, social media marketing has caused previous marketing ideas to be re-examined in favour of novel marketing frameworks where the roles of suppliers and customers are radically altered. One of the most well-known concepts among them is "service-dominant logic," which was primarily developed by Vargo and Lusch (2014). According to

Vargo et al. (2008), Customers and manufacturers or service providers are never distinct entities since value is always co-created via the interaction of resources and the application of skills between the providers and the beneficiaries. This implies that, whether or not co-creation is necessary, the client is always viewed as an active and crucial part of the value co-creation process (Horbel, 2013). In the context of developing new products, co-creation is a collection of techniques intended to create an engaged, imaginative, and collaborative approach between manufacturers and customers (users) that is socially aware (Roser et al., 2009). According to Binkhorst and Den Dekker (2009), consumers may personalise goods and services to suit their demands, which adds value and strengthens the destination's perceived authenticity and distinctiveness. According to service-dominant reasoning, the objective is to better meet the requirements of customers by maximising their engagement and acknowledging that they are always co-producers of the product. As a result, concepts are produced that more accurately than ever represent the wants of the clientele (Hoyer et al., 2010). SCXM marketing contributes to it further by adding contextual aspects into the consumers' known personal preferences at each particular moment.

The ability to get rich data from consumers' internal contexts is the biggest benefit of interacting with them through social media marketing tactics. Sentiment analysis and other personal data mining tools are one way to do this. Meh et al. (2013) claim that in order to

determine preference, like, and buying intention, sentiment analysis looks at sentiment expressions. In particular, because social networks enable people with similar interests to exchange information, declare interests, and engage with content through likes and comments, they are a rich source of contextual information about the preferences, relationships, friendships, and personal interests of users (Breach et al., 2010). Acquiring extensive personal data from the internal context of the client facilitates better understanding and meeting the wants of the customer as well as learning about emerging industry trends (Sigala, 2012). Customers divulge detailed information about their travel habits by publishing and sharing their thoughts, ideas, and personal experiences relating to travel (Xiang and Gretzel, 2010). The gathering, analysing, and building of patterns from this data will be aided by big data analysis. Businesses can build more individualised offers by analysing these ratings and suggestions (Euromonitor International, 2012).

Mobile Device-Based Context-Aware Marketing

The greatest potential for producing context-related information is anticipated to come from mobile devices. Our mobile gadgets have evolved into "smart" ones since the release of smartphones with Internet connection and built-in applications in 2010 (Dickinson, 2012). Their features include faster processing speeds, geolocation capabilities, Reduced data roaming costs, alternative mobile payment methods, and competitive

point-and-shoot cameras (Szewzyk, 2013). The most significant development, though, is that a growing number of them have sensors that can gather data on the user, the device's usage, and the external or physical world (Schmidt et al., 1998). Optical, audio, bio, accelerometer, microphone, camera, and digital compass are among the sensor types (Schmidt et al., 1998; Beach et al., 2010). These many sensors have the ability to record historical information on users' usage patterns (Zhu et al., 2012). This improves context awareness by making mobile devices aware of the environment in which they are being used, the tasks the user will do soon, and the location (Haekkilae et al., 2009: 2).

The knowledge of the physical surroundings around a user and his mobile device is known as mobile context-awareness (Schmidt et al., 1998). According to Haekkilae et al. (2009), there is a significant chance that this current, context-specific information will promote social contact and teamwork while the consumer is on the go. Information that is aware of context can also be beneficial to consumers (Schmidt et al., 1998).

Over the past several years, location-based marketing, also known as location-aware marketing (LAM) or location-based marketing (LBM), has become more popular as a context-aware mobile marketing strategy (Beldona et al., 2012). According to Xu et al. (2011), this kind of marketing uses customers' locations to interact, communicate, and anticipate their

needs. It gathers nearby resources, develops solutions, and facilitates communication with businesses in the user's vicinity. According to Beldona et al. (2012), location-based marketing (LBM) is perceived by consumers as an additional advantage that may be improved by location-based services. Targeted mobile ads based on a user's location yield larger returns than standard mobile advertising, claims Malm (2013). Recommender systems, which may filter material relevant to the user nearby, are one application where LBM can be especially helpful (Hoepken et al., 2010). For instance, the city of Bolzano, Italy created the mobile travel advising system Pecitas, which suggests the optimal routes for visitors and locals based on two random points (Tumas and Ricci, 2009). According to a 2007 research by Motsching et al., travellers who utilised recommender systems were able to see four times as many sites in a given amount of time as those who did not. According to Beldona et al. (2012), location-based marketing is effective when it provides travellers with pertinent, location-aware information that improves their trip experience.

Second, the profound influence that the newest generation of gadgets and communication technologies have on consumer behaviour is anticipated to open the door in order to provide context-based services (Lamsfus et al., 2010). According to Ahlers et al. (2008), an increasing number of individuals are incorporating mobile devices into their daily routines. According to Euromonitor International's "Our Mobile Planet Report" from 2012,

eighty percent of smartphone owners claimed that they would never leave the house without their gadget. Mobile devices have emerged as a primary means of Internet access and are increasingly perceived as remote controls for daily life. According to a 2012 report by Euromonitor International, fixed broadband connections could only rise by 68% during the same time, but mobile broadband subscriptions increased by 342% globally between 2007 and 2011. Furthermore, according to Joyst (2013), the number of smartphone owners in the US is predicted to increase from 115 million in 2012 to around 200 million by 2017.

The increasing popularity of social networking activities on mobile devices may be the reason why top social networking services have started to highlight their mobile capabilities (Malm, 2013). Mobile devices provide a plethora of new services, such as social networking, information search, and navigation, which benefit both consumers and providers due to their increased capability claim Wang and Xiang (2012). Combining social networking on mobile devices with location-aware technology is a frequent practice (Marimon et al., 2010). As a result, researchers have created location-based social networks and apps, or LBSNs (Gao and Liu, 2012; Tussyadiah, 2012; Traynor and Curran, 2013).

Thanks to faster processing speeds and lower roaming costs, people may now stay in touch with friends and family even while they're on the road

(Bouwman et al., 2012). Recent statistics show that 56% of smartphone users regularly visit their social networks (Rocketfuel, 2012). Breach et al. (2010) claim that the exponential growth of social networks and the increasing use of mobile devices has led to a notable increase in mobile social networking in recent years. For instance, Facebook said that its monthly mobile user base increased by 54% or 751 million in 2013 compared to the previous year (Costello, 2013). Customers may share their views, experiences, and discussions through this mobile social activity, which also promotes prompt responses and acknowledgement (Tussyadiah, 2012). This illustrates how smart mobile devices may now overcome the limitations of time and distance that come with stationary computers (Okazaki et al., 2012).

One intriguing element of social networking platforms is the ability to share a user's location with their network (Preotiuc-Pietro and Cohn, 2013). Different users utilise it for different reasons. Some consumers, according to Gao and Liu (2012), to find nearby points of interest (POIs), as well as to find discounts and special offers. For example, customers who use Foursquare to check into Domino's Pizza and spend more than \$23 receive a free garlic pizza bread or potato wedges (Kats, 2011). The study by Traynor and Curran (2013) discovered additional incentives and grouped these motives into five groups: social gaming, feeling of discovery, meeting plans, access to relevant information, and keeping a personal history. These applications'

users establish a unique location-based network that allows them to communicate by engaging in these activities (Preotiuc-Pietro and Cohn, 2013). Their experience using online social networks may be much improved as a result (Fusco et al., 2012). Moreover, checking in at a place encourages the use of real-time services, which allow customers to receive assistance instantly and receive offers of goods and services in addition to rewards for immediately sharing hashtagged material. This might lead to further marketing and administrative processes like yield management and dynamic pricing based on the state of the market.

SLM marketing is a common term used by professionals to explain how LBSNs are used in proximity marketing. The emergence of location-based social network (LBSN) partnerships and the creation of virtual zones surrounding company locations to notify potential clients about services while they are in the vicinity gave rise to SLM marketing. The main objective here is to promote word-of-mouth (WOM) among customers by encouraging check-ins, likes, hauling, and reviews (Marketing, 2012). By encouraging customers to share a business's logo with their friends when they check in, businesses may increase their visibility on search engine results pages (Thompson, 2013). From a commercial standpoint, SLM marketing gives advertisers information about their target audience that extends beyond geographic locations and aids in

characterising their movement (Noulas et al., 2012). They can also read comments and discern feelings, which improves their internet reputation. This is a chance for tailored offers that take into account the trade volume, the location, and the state of the local economy at that specific time. A great deal of information about human behaviour and experience sharing (social) and their desire for local knowledge and capacity to meet "on the go" may be gleaned from the combination of location and social media data (HeBsdigital, 2012).

Already a highly sophisticated kind of context-aware social media marketing, SLM marketing offers companies a plethora of alternatives. But its emphasis on location-based technology seems to miss the reality that context is more important than location alone. According to this study, by fusing the advantages of social media marketing with a broader range of contextual marketing, social media context-based mobile (SCXM) marketing may maximise potentials.

SCXM Marketing

As seen in Figure 1, SCXM marketing integrates mobile, social, location, and proximity elements to create never-before-seen co-creation opportunities through the relationships of content, personal information, and dynamic interaction with the user's context.

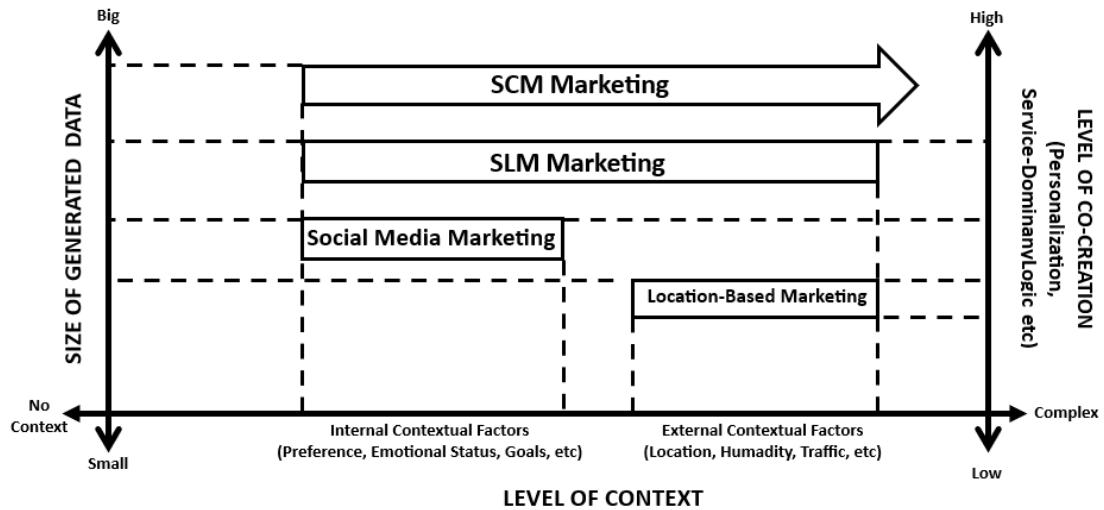


Figure 1.
Interrelation of the topics related to SCXM marketing

Social media is included into SCXM marketing, a sophisticated and rigorous approach to context marketing on smart mobile devices that facilitates value co-creation. Applications can better tailor offers and information to each user by utilising social media and learning algorithms in conjunction with context awareness. This definition is shown by the conceptual model shown in Figure 2, which also shows how SCXM appears in the marketplace. In addition to

information gathered directly from users, the system incorporates data from several product providers and information sources. Additionally, peer-to-peer computing will encourage the creation and sharing of content that will be fed into the system as input. For instance, social media posts on Twitter may be utilised to create context for a festival and show the many events taking place in various places by using check-ins.

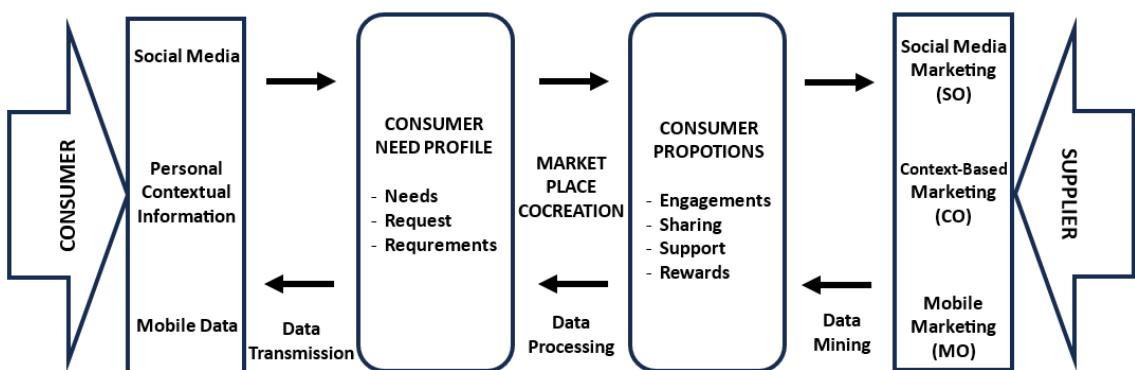


Figure 2.
SCXM marketing framework

The conceptual framework shows that gathering comprehensive data, which is primarily generated by three sources, is the cornerstone of SCXM marketing. The original source of this information was social media. By using a variety of social media channels, including blogs, forums, and social networks, the client provides insightful information about his internal environment. This might involve one's desires, sexual orientations, relationship status, requirements, interests, and cultural backgrounds in addition to personal preferences. Text, images, and videos are examples of content that may show behaviour patterns, activity, location, and emotion. However, the quantity of this information may vary based on the user's privacy settings. The user and his mobile device are surrounded by an external context that generates information from the second source. The location, time, traffic, and weather may all be examples of this. Built-in mobile device sensors may gather these contextual elements, and interactions with real-time location-based information providers can combine

them. Customers' information on social media and the data gleaned from their mobile devices' external surroundings may overlap.

The role of the marketer of the future will increasingly involve data-mining this information to produce a highly relevant marketing message that will satisfy customer needs and spark an engaging discussion about co-creating value. By combining social media (So) and context (Co) marketing on mobile devices (Mo), relevance and customisation may increase in order to address the particular demands of clients at this particular moment and inspire them to take action through a range of strategies for Market Place CoCreation, like customised context-aware recommender systems. A SCXM empowered recommender system, in contrast to conventional recommendation systems, will combine user preferences and contextual information to deliver a significantly improved user experience (Zhu et al., 2012).

Table 2.
Advantages of SCXM marketing for suppliers and consumers

Suppliers	Consumers
<ul style="list-style-type: none"> • Long-term loyalty • Real-time engagement • Online reputation • Targeted advertising • Real-time promotion • Real-time yield management • Personalisation of products and services • Influence consumer decision making • Increased co-creation • Opportunity to compete among larger businesses 	<ul style="list-style-type: none"> • Personalised, situation-specific information • Customer satisfaction • Better cover of needs • Co-creation • Personalisation • Customisation • Special offers • Social interaction • Extra value

By providing individualised customer needs in real-time, SCXM marketing fills the gap between supply and demand. The vast quantity of detailed information that may be acquired presents the providers with the clearest opportunity. This detailed information, when combined with accurate sensors and procedures, multiplies the contextual relevance for the customer, generating enormous data that is more than what marketers can currently handle. Big data refers to the continuously increasing volume, speed, diversity, uncertainty, and intricacy of data that has arisen due to the new marketing landscape brought about by the digital era. As a result, providers may better grasp the unique requirements, offer greater value, and deliver faster, more effective customer service.

As a result, SCXM marketing may provide marketers using a tool to influence consumers' choices and direct them towards their goods and services. The co-creation process may be improved by incorporating data from the consumer's surrounding environments, such as nearby businesses and services. All parties participating in dynamic value systems may get value by having a dynamic discourse that facilitates the co-creation of value. Since SCXM marketing tools are accessible to all businesses, regardless of size or kind, they may also give smaller companies a competitive edge in raising awareness and competing with bigger establishments.

On the other hand, consumers gain from SCXM marketing as they get extremely

pertinent information and advantages unique to their situation. This would be extremely customised to their requirements, tastes, and circumstances at the time. Customers will find more value in an invitation to engage in an indoor activity during a period of heavy rain or in a recommendation to engage in an activity during the forecasted nice weather. Customers would get more from the combination, be more satisfied with their experience, be encouraged to engage more likely to reveal personal information on social media and to interact with context-aware services more.

Marketing of SCXM in Tourism and Travel

Travellers react most favourably to SCXM marketing techniques that are very context-aware due to their distinct consumer behaviour. It's critical to acknowledge that the majority of tourist items are by definition services in order to comprehend the aspects of customer behaviour that are especially pertinent to SCXM marketing (Swarbrooke and Horner, 2007). Because tourism products are intangible, indivisible, and perishable, they are often associated with a perceived risk that is larger than that of physical objects (Gilbert, 2008) and because there are few means to assess their quality before consumption (Ayeh et al., 2013). Higher amounts of information must be made accessible by providers in order to reduce this risk, as it may negatively affect the usefulness and usability of a good or service (Choi et al., 2011). (Urbany et al., 1989). Travellers, in particular, want tailored

information to make their new and infrequently utilised services easier to use (Hoepken et al., 2010). Throughout the whole travel experience—from planning and booking to vacation and post-trip—this information must be current, available, and pertinent (Steinbauer and Werthner 2007).

Nonetheless, travellers frequently feel overloaded by the abundance of information at their disposal (Imbal and Fitina, 2011). As a result, context-related information is needed by them (Binkhorst and Den Dekker, 2009). According to Lamsfus et al., context in tourism is "any relevant information that characterises the situation of the user". (2009: 609). According to Liu and Fan (2013), there is a degree of effect from this contextual information on the behaviour patterns of tourists. For instance, tailored changes to service offerings can lead to satisfied clients and enduring allegiance (McCabe, 2009). Thus, context makes it easier to negotiate between the information offered by tourism companies and the information that visitors need depending on their circumstances and at what moment.

Peer-to-peer connectivity is expanding swiftly, and hence, SCXM marketing will interact with more customers through content creation, reviews, and the emergence of virtual libraries. In the end, social media is especially good at meeting travellers' information demands (Gruen, 2001). Travellers can put together itineraries that are more likely to match their preferences when they speak with seasoned travellers or read about other travellers'

experiences, which are typically viewed as more authentic (Lange-Faria and Elliot, 2012). Many travel agencies, like Lonely Planet, have integrated peer-to-peer information sharing and are actively *lonely planet* incorporates peer-to-peer data exchange. Interacting with their audience on tourism and travel-related themes (Hays et al., 2012). Due to this, marketers are able to obtain rich data on the internal circumstances of their target audience and tailor their goods to suit their needs. Potential passengers may also benefit greatly from this information source.

By its very nature, tourism is a dynamic business and activity. Travellers go from their home and go to new locations for pleasure or business (Yovcheva et al., 2012). It should come as no surprise that travellers frequently use mobile devices for social media content creation and sharing, navigation, information access, and communication with home. Travellers may get and exchange information at any point throughout their trip with the help of mobile devices, which also offer dependable and unrestricted access to information on the Internet (Wang and Xiang, 2012). (Hoepken et al., 2010). Neuhofer et al. (2012) claim that the mobility feature of smartphones, together with their practical uses, is what has made these services especially pertinent to the travel and tourist sector. Through information search, smartphone owners can find information while at their location that was not anticipated before to travel (Okazaki et al., 2012).

Today's smartphones and mobile devices "unlock the three-stage model

of the travel experience by eliminating or shortening the pre-consumption and post-consumption stage and extending the consumption stage," according to Wang and Fesenmaier (2013: 67). Thus, SCXM marketing can offer a potent means of communication with travellers, particularly for tourism sites (Wang and Xiang, 2012). First, by employing data mining tools to analyse interactions between tourists, travel destination marketers may get information from social media interactions with visitors. Based on their internal context, this data may be utilised to create highly customised tourism marketing messages (Hoepken et al., 2010). By adding more real-time contextual information from outside settings, SCXM marketing can improve internal contextual information. As a result, its marketing messaging may be extremely pertinent and valuable to travellers. Additionally, these signals can assist travellers in effectively and efficiently navigating unforeseen circumstances while at their destination. SCXM could encourage travellers to choose more impulsively regarding travel-related activities while at the location, enhancing their overall experience. They might thus employ SCXM apps in the near future, when it's even possible that the user will locate the information rather than the other way around.

It is still necessary to view SCXM marketing as a futuristic idea. It appears that no company, at least not in the travel industry, has managed to effectively include every facet of SCXM marketing into a single plan. A number of service providers are progressively

developing; they include voucher cloud, my voucher codes, and similar businesses that integrate social media with location-based services. However, first scenarios to illustrate the new methodologies may be developed through the collection of information on trends and data in the domains of marketing scenarios, mobile, context-based, and social media.

Travel and tourism-related SCXM marketing challenges

Businesses planning to use SCXM marketing must take into account a variety of problems that come along with the increased potential while developing their strategy. The body of research on mobile, context-aware, and social media marketing is largely responsible for the difficulties.

One of the main obstacles is that gathering a variety of contextual data about an individual raises concerns about the potential impact on their privacy. In Gao and Liu's (2012) study, for example, they found that although some users love sharing their location with friends, others saw it as revealing their preferences and movement risks, which they feel might be dangerous. Perez (2010) discovered that 34% of participants believed that by disclosing their present location, they may alert criminals to their whereabouts when they are not at home, and 55% of participants expressed concern about a loss of privacy. Although certain individuals might be open to disclosing their present whereabouts to service providers, they frequently have reservations about disclosing their

location to other parties (Junglas and Watson, 2008). Given that consumers' receptivity to mobile promotions is largely dependent on their perception of mobile marketing, Consumer rights to security and privacy must be given top priority (Shankar and Balasubramanian, 2009). Thus, in order for businesses to thrive, they need to figure out how to gain the trust of additional clients. Giving customers choices over which personal information is accessible to firms and which is not, through an opt-in or opt-out method, is one way to do this (Wireless Telecommunication Bureau, 2012).

Dealing with the technical obstacles that now restrict SCXM marketing prospects presents the second difficulty for companies looking to implement these tactics. Businesses must integrate social media and create mobile interaction using social media networks to integrate mobile marketing with social media (HeBS, 2012). Some restrictions on how data is shown on mobile devices are closely tied to this issue. Rich graphical information is frequently dependent on screen size, Because on various devices, formatted text, font sizes, and images display differently (Dhar and Varshney, 2011). According to Rugel, creating a successful application demands a sustained level of engagement, a high degree of content quality, and an intuitive user interface. The fact that today's smartphones lack the power and batteries necessary to meet the improved features and power needs built into the device is another commonly noted technological obstacle. Warres (2012) pointed out that the GPS feature for location-based

apps frequently rapidly depletes the capacity of these batteries, particularly in chilly settings like ski resorts. Furthermore, switching from an external GPS connection to an inside one necessitates modifying indoor location technologies, for instance, sensor networks, RFID, or LAN (Dhar and Varshney, 2011). In certain cases, this might result in interrupted services. Chan (2012) issued a warning, stating that the availability of several distinct smartphone carriers and particular platforms may make these issues worse. Because of this, it is challenging for developers to create apps that work consistently and flawlessly across all mobile phone models. Liu and Fan (2013) noted that travellers' behaviour patterns are influenced, either directly or indirectly, by the many functionalities of mobile devices. Some of these difficulties are being increasingly eliminated by the widespread use and technological developments of smartphones running Android and iOS.

Thirdly, according to Shankar and Balasubramanian (2009), only those with mobile devices who have granted permission to receive marketing messages may be the target audience for mobile marketing campaigns. This reach may be further restricted in SCXM marketing to consumers who make more regular use of some services than others (Balamurugan, 2012). Therefore, SCXM marketing should be used in conjunction with other marketing tactics to reach a wider spectrum of target customers.

In order to offer context-aware services that are utilised in context-based

marketing, a large amount of data from several sources must be mined. Big data is emerging to quantify the quality of internet information. When a device or service reacts to user-initiated activities, data mining enhances relevance, facilitates proactive messaging, and evaluates trends in user behaviour and the surroundings (Mehra, 2012). Mobile data mining appears to still lack practical uses, despite data mining having been well studied. Specifically, data mining applications in the travel and tourist sector have subpar growth rates (Saraee and Khan, 2005).

Last but not least, the amount of heterogeneous, autonomous data produced by these context-based marketing strategies is constantly increasing, coming from both mobile and desktop gadgets (Wu et al., 2014). Both a possible supply of potent new variables for consumer research and an intriguing foundation for intelligence collection are offered by big data (Traynor and Currant, 2013; Nunan and Di Domenico, 2013). Big Data is being used to extract useful information in a more efficient and nearly real-time manner (Wu et al., 2014), which is enabling SCXM. In the near future, big data research should solve these difficulties in order to provide consumers with new options and enable new capabilities through contextualisation, personalisation, and the dissemination of efficiency-boosting information (Fulgoni, 2013).

The difficulties listed above are by no means all-inclusive; rather, they highlight the main problems that will dictate SCXM marketing's capacity to

realise reach its maximum potential and optimise value generation for all stakeholders. Several technologies are required to supply the infostructure that will support SCXM. These include ambient intelligence, 4G and 5G, WiMax, and wide area WiFi coverage to achieve network connectivity; the Internet of Things and machine-to-machine connectivity to ensure interconnectivity and interoperability between various devices and systems; and augmented reality to add visual representation on the field of vision. To provide relevant context modelling and establish a connection between all these devices, companies, users, and data, future research must also concentrate on artificial intelligence (AI). Additionally, smart destinations and smart cities are emerging to support these advancements and foster tight collaboration among stakeholders.

Subsequent studies have to examine the management ramifications and prerequisites for accomplishing several benefits proposed by SCXM marketing. The tourism sector will unavoidably need to reengineer as a result of these difficulties, and in order for travel agencies and destinations to be able to reorganise themselves to take advantage, dynamic organisational structures are needed. Additionally, more research is required to determine the variety of possible impacts that SCXM marketing might have on traveler behaviour and how this affects the profitability of businesses involved in the tourist industry. The introduction of a fresh form of dynamic and interactive consumption via SCXM is maybe most significant that is built on peer-to-peer

contact as well as co-creation between producers and consumers. This type of engagement is only feasible in the digital age, when everyone is both a creator and a consumer of information.

In Summary, SCXM Transforms Tourist Marketing.

Messages that are appropriate for the situation are becoming a more and more important concern for marketers. A increasing number of mobile devices have been made possible by the tremendous advancements in ICTs. These devices enable marketers to provide highly personalised content that is tailored to the specific needs of each individual customer. This conceptual study looked into the possibilities of integrating mobile context-aware technology with social media marketing. It outlines the difficulties and suggests a social media context-based mobile (SCXM) marketing strategy. It also shows how travel agencies and destinations may benefit from the new prospects. SCXM marketing is likely to be highly important soon since more people are using smart mobile devices and its integration into customers' daily life. Particularly, apps that offer really beneficial services appear to take use of a number of advancements on smartphones (Wang and Xiang, 2012). The travel and tourism sector has been cited as a perfect testing ground where SCXM might reveal its biggest successes due to the unique characteristics of visitor behaviour and mobility. Tourists depend on tacit knowledge far less than locals who are familiar with the place, especially on their first visit. Frequently,

they lack the ability to read and speak the local language, and they are clueless about where to begin looking for assistance. As a result, while navigating new surroundings, cuisines, languages, and languages, individuals have a stronger need for context-relevant knowledge.

Through the integration of pre-established preferences, social media interactions, and behaviour patterns, SCXM enables destinations and local service providers to develop customised solutions that adapt to the individual needs of passengers on-the-fly. Thanks to the increasing use of mobile devices as remote controllers for life, the tourism industry can now develop highly responsive SCXM marketing strategies and dynamically co-create tourism products and services, resulting in more enjoyable travel experiences and co-creating value for all stakeholders.

SCXM marketing is evolving quickly, and the anticipated rise of increasingly more sophisticated context-aware services is a sign of its success. As more and more gadgets function as contextual information sensors, this will be improved with a great deal more information that is provided with or without the user's agreement. Technologies that can identify and comprehend the meaning of material will be made possible by the semantic web, utilising social media marketing's potential. Widespread deployment will lead to more opportunities of Wifi and the rising introduction of 4G and 5G, which will enable users to access wireless broadband Internet to whole

places and do away with costly data roaming fees (Buhalis and Law, 2008). Numerous of these new technologies might aid in getting over some of the restrictions that SCXM marketing presently faces. Because SCXM marketing gives passengers access to real-time, context-relevant information during their whole journey, it may thus signify the beginning of an entirely new era in mobile-based, agile tourist marketing, revolutionising the travel industry.

Destination marketing is being revolutionised by the SCXM paradigm and advancements. The ability to comprehend and value the new opportunities and difficulties is essential for destination managers. Dynamic communication is required with each individual customer before to, during, and following their trip. In today's interconnected world, creating brochures and marketing campaigns is just not enough, when customers are actively involved in co-creating their trip experiences through dynamic communication. In order to create better experiences, destination marketing agencies must collaborate with all relevant parties, including various unofficial information sources as well as formal partners and organisations. Numerous destination marketing firms are aware of these shifts and are utilising the influence of Instagrammers, Bloggers, and Photographers to manage and co-create their online image. Destination management and marketing have revolutionised from public sector practices to cutting edge dynamic interactions that require innovation,

agility, and constant stakeholder participation in order to optimise the value provided for all stakeholders. As a result, the tourist sector as a whole will be completely reengineered, moving from a mechanism focused on processes to a dynamic ecosystem where consumers and all other stakeholders co-create value. Destinations and tourism organisations who comprehend SCXM marketing and get ready for its deployment today will be able to profit handsomely from new opportunities later on.

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