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Impacts of modern technology in tourism development of Nepal

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Abstract

The federal democratic republic of Nepal is one of the most beautiful conception of nature. In addition to biological treasures and geographical attractions, Nepal boasts a diverse platter of historically established cultures, shrines, and ethnicity. Put it all together and you get a perfect destination for travelers, explorers, tourists and pilgrims. The speedy evolution of technology has had many impacts, positive and negative, in the development of tourism of Nepal. Technology has helped Nepal become recognized to the world in many facets. However, it has also made domestic tourism a little sparse. Technological advancement has actually changed the face of tourism development in Nepal. In this article, we have tried to throw light into what impacts have been brought into tourism and tourism development of Nepal by the modern technology.

Keywords: tourism, modern technology, impacts

1. Introduction

Nepal is a country of uncountable wonders. A country blessed with geographical disparity and cultural diversity. A land-linked country located between the two super powers India and China in the Asian continent. Nepal, in terms of tourism has been defined by tourists and travelers as a paradise. A land that rises from 70 meters above the sea level to 8,848 meters above the sea level in a matter of just 193 kilometers is the perfect home for flora and fauna of various varieties that need such diverse environment to survive. With eight of the ten highest peaks in the world, Nepal boasts of a constant backdrop of mountains wherever one goes.

Crowned 'Best Value Destination' and ranked 5th in the Top 10 countries in the world to visit in 2017 by Lonely Planet's annual 'Best in Travel List', Nepal's history and culture are even more intriguing. With varieties of castes and ethnicities sharing, as quoted by King Prithivi Narayan Shah, 'the common garden', the festivities and celebrations are endless here. One cannot go without tapping into a new culture and enjoying a platter of completely new flavors, colors, and emotions in every village, town, or district one travels. Nepal is fancied as the crowing jewel in many travelers travel wish lists.

Technology is the game of today and tomorrow. We neither can nor will be living without technology in the days to come. It has been whipping up a storm of change in every sector. From smoothening of business

operation to household automation, technology has made everyone's life easier and everything faster. It goes in tourism sector too. And, Nepal, being so rich in its resources that can be tapped for the purpose of tourism promotion, can make astounding changes in its tourism development with proper application of tourism.

The development of technology, however, has not been very promising in the past years. The fragile political environment and ten years long armed conflict has taken its toll in the overall development of Nepal. Neither the tourism nor the technological sector took off in this period. However, slowly and surely, everything is coming into its tune. The technological sector even more so. One of the fastest growing sectors in Nepal is technology.

Technology in Nepal is growing at a great pace. The extensive development of Internet technology was not only the main reason though. There has been a great effort from the side of Nepalese Government coupled with communication companies of Nepal in making Internet accessible to majority of the population of Nepal.

The internet users in Nepal grew from 48,585 (0.2% of total population) in the year 2000, to 210,827 (0.8% of the total population) in the year 2005. To 2,131,260 (7.9% of the total population) in the year 2010. To an astounding 12,293,132 (46.64% of the total population) in the year 2015, and finally to 16,661,485 (62.89% of the total population) in the year 2017 (Nepal Telecom authority, 2017).

With such rise in internet users in Nepal, the business environment is seeing huge prospect. Every sector is seeing new horizon. Modern technology has literally re-shaped the face of Nepal. The tourism sector is also seeing changes with the development of technology. A shadow is casted when there is light, and to make warmth something is burning. There are positive impacts of technology in development of tourism sector. However, there are negative ones too.

The positive impacts can be harnessed to the fullest while the negative ones will have to be avoided, or minimized at least. If we succeed in coupling the best of both worlds (tourism development and technology), it would be fair enough to say, Nepal will not just become a great destination to tourists and travelers but will also become a country that has prospered through tourism.

2. Literature review

In terms of tourism, Nepal received the following rankings from World Economic Forum's 'Travel and Tourism Competitiveness Report 2017' (WEF, 2017).

Table 1. Rankings depicting Nepal's preparedness in terms of tourism.

Area	Rank
Tourist service infrastructure	124
Price competitiveness	19
Air transport infrastructure	105
Prioritization of travel and tourism	51
International openness	87
Natural resources	27
Business environment	108
Cultural resource and business travel	117
Environmental sustainability	126

Area	Rank
Health and hygiene	85
Safety and security	100
Ground and port infrastructure	135
ICT readiness	124

The above table portrays the readiness of Nepal in terms of ICT (information and communication technology) which is ranked at 124. The ranking shows that Nepal is not well-prepared in terms of ICT for tourism.

Technology in Nepal is slowly taking off too. With hundreds of thousands of Nepalese engaged in foreign employment in various countries all over the world, the remittance income they have sent has been instrumental in lifting the life standards of their families here. In addition, it has accumulated some capital for investment in new technologies too. Hence, the result is that, an average Nepali household has seen a LED television, a washing machine, an oven, and most importantly a computer and a smart phone.

In addition, the Government of Nepal has been thrusting tourism sector as a priority sector for years now. Recently it has started focusing on technology-backed undertakings. As a result, tourism development is moving towards more technologically driven era in Nepal.

Much of the reviewed literature suggests that technology has been lagging behind in tourism sector in most of the Asian countries let alone Nepal. However, it also suggests that as the world has moved into globalization, and due to exchange of technology and remittance income making room for huge investment, technological advancement is not far-fetched in tourism related fields in Nepal.

3. Objective

The paper is assessing what impacts modern technology brings about in the tourism sector of Nepal. Additionally, it tries to assess whether these impacts bring about positive or negative trend in the tourism sector of Nepal.

4. Methodology

Reports and data from various governmental as well as non-governmental sources were studied for gathering major highlights. While preparing this article some expert opinions were sought regarding the impacts of technology in tourism and tourism development by means of unstructured interviews. Six people from various areas of tourism related fields in Nepal were chosen for the interview.

5. Results and discussion

The point of our discussion starts from exploring the actual impacts that modern technology has brought to tourism development of Nepal. In course of interview for the preparation of the article, opinions regarding how technology is affecting the tourism development in Nepal were taken. In light of the interview, some of the

respondents shared their personal experience of how technology has helped to shape up tourism in Nepal the excerpts of which are as follows:

(a) One of the respondent, who is involved as a hotel owner in Kathmandu, which specializes in catering the needs of Chinese tourists visiting Nepal, opined, "Everything has become easier now. Especially the paperwork, record keeping, and management of overall hotel operation. It (technology) has helped this hotel grow from a small 3 room lodge to a full fledge hotel with 25 rooms. Most importantly monitoring and managing the rooms, guests, and specific needs of the guests have become easier. We no longer need separate staff to keep track of which guest is vegetarian, or who have a flight the next day. We have a central Hotel Management System that takes care of it all. Once a guest profile is created in the system, everything is taken care of immediately."

(b) Another respondent who is involved in an international hotel chain in Kathmandu explained, "The human capital necessary for the operation of tourism industry as a whole is very crucial. And technology has helped in generating and polishing such human capital to be the best for offering hospitality solutions."

(c) Another respondent who is a member of national level association dedicated to mountaineering and trekking in Nepal said, "Now it has become easier for us to lure more tourists into out adventure tracks. Government is far more relaxed regarding the security of the numerous tourists that make their way through the mighty Himalayas every year. Because now there are systems in place and technologies that let them, and the tourists themselves feel far more secured. Just take an example of rescue operations in the Everest Base Camp region. It could take days previously, but now we are getting there in hours. Furthermore, information is now available everywhere, which has led to an intense increase in visitors from around the globe."

(d) In light of the information another respondent who is a travel agency operator in Kathmandu explained, "It (technology) has made it possible for me to remain connected with all my stake holders. Nowadays, all the bookings are over email, telephone or instant messaging. Very few of my customers visit me personally. They just send me an email, text me or call me. I then process their bookings and send them the reservations by email. Payment comes electronically and everything is good. And I share all the information regarding my products in social networking sites. Technology has made my business more competitive and bigger."

(e) One professor involved in the university in IT and Management field as the research and teaching interest expressed "IT has made the tourism sectors very encouraging especially in a country like Nepal where topological differences and remote areas are abundant, has increased their information services easily and effectively. Now the service to the tourists has been enhanced in the course of rescuing them in the difficulties too."

Apart from the above specific examples of the respondents, and by drawing conclusions from the review of literature some of the major impacts of modern technologies in tourism development of Nepal are discussed below:

5.1 Expectation of tourism sector in Nepal

In Nepal, there is immense possibility from tourism sector. The development of tourism is not far-fetched with the abundant assets (natural and man-made) which make Nepal a top priority destination for tourists /

travelers and explorers all around the world.

Nepal boasts 78 identified peaks above the height of 5,000 meters. Among them 8 mountains are above 8,000 meters in height. Consequently, among the top 10 highest mountains in the world, 8 are in Nepal.

Similarly, Nepal has the similar position in terms of biodiversity. There are 208 mammal species, and over 900 bird species in Nepal. Additionally, there are 12 national parks, 1 wildlife reserve, 6 conservation areas, 1 hunting reserve, and 10 Ramsar sites in Nepal.

The added beauty of tremendously preserved culture, history, arts and architectures in the country makes Nepal a great destination for travelers. The greatest shrine for Hindus the temple of 'Pashupatinath' and Buddhist the birthplace of Gautam Buddha 'Lumbini', both are located in Nepal too. In addition numerous shrines and centers of historical and religious importance are scattered throughout the country.

5.2 Role of technology in transforming tourism:

The experience of a tourist/traveler starts when s/he physically arrives at his/her destination. However, that is not the case now. Technology has brought such implications by which a person starts to experience his/her destination. The aspiration they carry now starts with researching about their destination using technology.

Imagine people now being able to do a 360-degree tour of Mount Everest, the Kathmandu Durbar Square or any other natural or historical monument from their bedrooms thousands of kilometers away. These technological breakthroughs have been commendable in development of tourism in Nepal.

Among the various persons, we interviewed during this research, 10 out of 11 accepted that they research a destination before travelling. In addition, this can be used for actually promoting tourism in Nepal.

5.3 Role of government in monitoring/security

There was a time when even the number of inbound tourists were difficult to estimate. Also a time when people stranded in their Himalayan adventures were very less likely to be rescued. Because the first difficulty would be to find them and the second difficulty would be to extract them.

Nepal's geography is both a boon and a curse. This untamed wilderness of nature is a boon in the sense that this is what allures tourists/travelers from all around the world to Nepal. On the other hand, when it comes to infrastructure development, search, rescue, reachability, it has proved to become a curse. Some of the regions are so inaccessible that even rescue helicopters have difficulty in flying in those areas.

However, technology can change all this and is actually changing all this. With the help of technology, the Department of Immigration keeps itself updated for the number, country of origin and other various details of the tourists/travelers currently in Nepal. Similarly, rescue operations for tourists stranded in mountainous regions are simplifying with the use of GPS trackers. Climbers carry a GPS module that transmits their location on real time. In case of an emergency, rescue operators can jump into action and they do not need to spend their valuable time scrambling for the lost person. Instead, they can focus on a very small area from which the GPS signal was last transmitted or is being transmitted.

There is positivity amongst the travelers too. The mental serenity on finding out that you are being constantly looked over by someone, so that in case of an urgency, you are found, is detrimental to making decision of whether or not to travel. In addition, this has positively affected the mentality of travelers to travel to Nepal. Tourism sector has seen prosperity with such advancement in technology.

5.4 Change in tourism business arena

With the arise of modern technology, the tourism business practitioners which include the trekking companies, travel agencies, domestic airlines, and even locals have been able to take the best out of it. Tourists/travelers now using the various technologies at their disposal make decisions about which is the most beneficial airlines to travel to Nepal. Which is the top rated travel agency for visiting Pokhara. And which Home-stay provides the most authentic experience in the Patan Durbar Square area?

The point is now one has the ability to see, judge, and even make reservations easily. In addition, when we talk about Nepal, the use of technology, especially the internet and most importantly social media websites have become prominent platforms for tourism business practitioners to sell their products and tourists to see and evaluate the available products.

5.5 Technology and tourism security

With the increased access of technology, tourism, and especially adventure, tourism has become lesser of a worry-game for the families of tourists visiting Nepal. During the time of armed conflict, visiting Nepal alone would take a great deal of courage. Some of the countries had even alerted their citizens to be extra careful or not to travel to Nepal at all. Because communication measures were not promising and the armed conflict was making it harder for countries to promise security for their citizens here in Nepal.

Now however, the situation has changed. Communication and technology have become very cheap and the thing of general reachability instead of luxury. With low telephone rates and very cheaply and abundantly available internet facility, one can, in actually be in live video chat with their family and friends all the time during their visit in Nepal. What's more, even the top of the world, Mount Everest now has high-speed internet. So the whole thing about staying connected has become pleasantly easy.

However, even with such advances in technologies and connectivity, some places are truly death-defying adventure. For example, the trek through the majestic route of Annapura circuit. Even in Nepal, people suggest the ones planning their journeys through the circuit to actually take note of their finances, properties, receivables, payables and hand it over to someone trust worthy just in case they do not make it back. This is changing too. An ambitious plan is under way in the Annapura circuit to make all the circuit connected. This is a very challenging task but this will make tourism in that area go through the roof-tops.

Technological advancement, overall, has made tourism in Nepal less fearful without taking away the touch of adventure from it.

5.6 Risk to domestic tourism in Nepal

As with all the things in this world, there is another side to advancement in technology too. With such advancement in technology, larger number of tourist/travelers can now head deeper into Nepal. But it has also opened the outer world to the Nepalese.

Now an average Nepali citizen dreams of travelling to different parts of the globe. Instead of being limited to the destinations inside the country, an average Nepali household can now easily travel abroad for recreational purposes. Malaysia, Singapore, Indonesia are amongst the most popular destinations for Nepali tourists. However, Thailand tops the prefer-list of Nepalese.

With packages starting from $115 to $135 during the peak season (excluding airfare), Thailand has become one of the most popular holiday destination for Nepalese. In fact, a local newspaper reported, in the first seven months of 2016, number of Nepali tourists visiting Thailand was 23,144 (Sangam, 2016). Which is truly

astounding.

Nevertheless, the craze of international tourism amongst Nepalese has casted shadow on the domestic prospective of tourism in Nepal. The locals are neglecting a backyard full of diamonds and being charmed by display of neighbor's gold. Technology kindled the aspirations amongst Nepalese to visit the foreign lands. Which resulted in ignorance about their own country.

5.7 Hyper modern technology used in tourism

In this age of technology driven world, everything is going virtual. Everything is being replaced by the screens of virtual reality. One of the best examples would be the 360-degree photos/videos, which have become very easily accessible. Similarly, cheap VR goggles are making it easier for everyone to live the moments like never before.

With virtual reality, people can experience places from the comfort of their living rooms now. They can see the panorama from Everest without bearing the physical torment of actually being there. They can roam around Kathmandu Durbar Square from their couch. It would not be in distant future when, the sensations of touch, taste, smell could also be present in the virtual reality devices. Moreover, it would not be of much surprise if one day, virtual reality tours replaces actual tourism in real.

However, it can be a very effective promotional tool for people interested in coming into Nepal. VR advertisements or 360-degree videos could create the intense desire for tourists to be there in Nepal.

5.8 Information availability

Anyone all around the world can now plan his or her next vacation easily, thanks to the phenomenon called technology. Access to information about the place including the hotels available, the amenities there, places to visit, and other various information relating to travel is available easily over the internet. Through a few touches on a mobile phone, one can now book tickets, book hotels, arrange city tours and do much more in a matter of seconds.

However, the information highway does also sometimes feel like a dirt road. Internet has also become a way of window dressing. People are given false promises in form of advertisements and promotions. Which hides the actual face of the place you are going to visit.

In Nepal, where cyber laws have just taken roots, it is pretty difficult to track the false promisors and put them to justice. Hence, window dressing of the amenities and facilities available is highly prevalent.

6. Conclusion

Technological advancement has become boon to Nepal in many senses. The hydropower sector is seeing light, the constructional works are becoming much faster. The nation's population is getting greater exposure to internet and hence to education. More and younger Nepalese are turning into entrepreneurs just because what was not possible yesterday has become possible by the use of technology, namely internet, and social media.

Tourism sector has not been left alone by this storm twirled up by modern technology. Modern technology has indeed bestowed many impacts upon tourism development of Nepal. Many of the impacts discussed above have brought positive impacts to the development of tourism in Nepal. Technology has made Nepal known to even greater number of global population. Now Nepal is not just known as the country of Mount Everest. Now it's also known as the country of stunning topographical and ethnic diversity. It is also known for the richness

on nature and architecture. It is also known as a country of uncountable possibilities.

It's said the world has 7 wonders. But in course of our study of Nepal's tourism we found out that Nepal alone has uncountable wonders. And the modern technology is bridging the gap, which barred Nepal from showing off its beautiful gems to the entire world.

Entrepreneurship is thriving. Remote locations have now become weekend spots for tourists, international and domestic. Small ventures have become business offering niche products and services (experiences in this case) to tourists all around the world. The tea made from yak's milk in Namche Bazar has become a favorite amongst people everywhere. Travelers and tourists write stories about their taste of the yak milk tea. Similarly, in the various parts of Nepal where honey is gathered from bees from steep rock faces in remote locations. This pristine honey was never known to the people around Nepal let alone the world. One Facebook page away, tourism in the area is flourishing. Now tourists come to taste the honey there from all around the world. And, what's more? Now the locals collecting the honey have started letting tourists collect the honey by dangling themselves hundreds of meters along rock faces. Adventure tourism mixed up with culinary tourism. Checked.

Even the homestay concepts have completely had their faces changed with technology. Every homestay in Nepal, even the remotest ones now facilitate their guests with internet and WIFI. And almost all of them are listed in the internet. Almost all have a Facebook page too.

But it technological advancement has certainly overshadowed the local tourism opportunities. Local people tend to go to foreign lands for tourism instead of visiting Nepal itself first. There is a major challenge prevalent in shifting the focus of local Nepalese from cheap international visits to local visits. But this too can be easily accomplished with the help of technology. By creating knowledge/information about the places in Nepal with internet amongst Nepalese, local destinations can be promoted.

Additionally, major shortcomings of safety, information about destination, monitoring, assistance, rescue, and enriched experience has been guaranteed by technological advancement in tourism development.

Hence, technology has paved the way for rapid development of tourism in Nepal. And modern technology has profound impacts on tourism development of Nepal. Most of the impacts seem to be promising and catalytic in the development of tourism in Nepal. There are some which seem to be negative to tourism in Nepal. However with the use of technology itself, they can be turned instead into competitive advantages of tourism.

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