# OBSTACLES IN BHUTAN'S INTERNET COMMUNICATION PRZESZKODY W INTERNETOWEJ KOMUNIKACJI W BHUTANIE

# Introduction

Bhutan is the secluded Himalayan Kingdom that only has borders with China and India. For centuries, it was isolated from the outside world and cultivated its own set of traditions, beliefs and customs but a worldwide evolution of communication systems forced the nation to first embrace modern communication technologies: radio and press in 1980's. In 1999 King Jigme Singye Wangchuck with his decree introduced television and The Internet. Mountainous terrain that ranges from 100 to 7000 meters and human settlements scattered in most desolated areas are very challenging to the development of Internet infrastructure and interaction.

There has been very little research conducted on the topic and Bhutan, as not populous, with little international significance is seldom studied especially when it comes to information and communications technology (ICT). With just one higher education establishment – The Royal University of Bhutan, few research institutions, for example – Bhutan Media Foundation, and little international interest this country needs to attract the international attention of scholars, nongovernmental organizations (NGOs), and entrepreneurs to raise the level and quality of Internet communications.

Articles from the literature on the subject focus on certain aspects of Bhutan ICT but there is no piece of academic writing that summarizes existing information. This paper is a review article that aims not only to synthesize and evaluate literature but also condense the current state of knowledge on the topic. The main focus is placed on the lack of private sector in the development of computer networks; low financial support from the government; little online information in the Bhutan national language – Dzongkha (English being the language of media, government, and science). Author also addresses controversies that arise among Bhutanese people on the axis of tradition and modernity, where use of Internet, especially by the young people, is blamed for abandoning traditions: implementation of western style of clothing, interest in American

<sup>&</sup>lt;sup>\*</sup> dr, Instytut Dziennikarstwa i Komunikacji Społecznej, Uniwersytet Warmińsko-Mazurski w Olsztynie.

sports (traditional Bhutanese leisure activities, such as archery, attracting less participants), and pornography.

## Methods

Analysed material has been gathered through many trustworthy units both international: United Nations Asian and Pacific Training Centre for Information and Communication Technology for Development, and local: Bhutan Media Foundation, Centre for Bhutan Studies & GNH Research, which publishes Journal of Bhutan Studies – scientific yearly periodical. Moreover, the study of governmental documents (Ministry of Information and Communications) published on websites of Department of Information Technology and Telecom (MITT), and Department of Information and Media (MoIC) was conducted. Also databases: EBSCOhost, Science Direct, Emerald, ProQuest, SpringerLink, Wiley Online Library and web search engines such as Google, Google Scholar, Google Books were used. Research time frame ranges from 1999 (introduction of the Internet) to present day.

"English is the language of education from primary school upwards, and is the sole language of higher education"<sup>1</sup> therefore is relatively easy for an outsider to conduct research on Bhutan. One does not have to know local languages and dialects to analyse source material.

### **Results and Discussion**

Before delving into complexities of Bhutan's Internet communication a short summary of the ICT development needs to be presented.

Computers were first brought to Bhutan in 1984 and were used in government institutions however their use was limited due to the unstable power supply<sup>2</sup>. But not only technical difficulties played a key role in communications development. Bhutanese were/are very careful to adopt new technologies<sup>3</sup>, which is not only caused by traditional upbringing and ages old Buddhist customs cultivation but also strongly influenced by Gross National Happiness (GNH) policy. King Jigme Dorji Wangchuck proposed that indicator, built on the negation of Gross National Product (GNP) index, in 1973. GNH measures nation's development not by economic qualifier but by a sense of citizens' happiness.

<sup>&</sup>lt;sup>1</sup> F. Rennie, R. Mason, *The Development of Distributed Learning Techniques in Bhutan and Nepal*, "International Review of Research in Open and Distance Learning" 2007, vol. 8, no 1, http://www.irrodl.org/index.php/irrodl/article/view/339/775 (access: 04.11.2015).

<sup>&</sup>lt;sup>2</sup> C. Sinha, *Effects of education and ICT use on gender relations in Bhutan*, "Information Technologies and International Development" 2009, vol. 5, no 3, p. 25.

<sup>&</sup>lt;sup>3</sup> F. Hamidi, M. Baljko, *Facebook use in Bhutan: A comparative study*, http://www.cse.yorku. ca/~fhamidi/resources/p1-hamidi-Bhutan.pdf (access: 05.11.2015).

The Internet was introduced in 2000 and was mainly accessible in District headquarters and townships. "The backbone connection was microwave radio with a speed of 34 Mbps digital stream with a carrier frequency of 8 GHZ"<sup>4</sup>. Internet access is mainly concentrated in the capital Thimpu, with the rural districts still without proper connections"<sup>5</sup>.

In 2006 Jigme Khesar Namgyel Wangchuck took reign and shortly after conducted political reform transforming Bhutan into a constitutional monarchy.

Nowadays cellular communication is the most popular one. "92,8% of households now own mobile phones, followed by 58,5% owning a TV set and 38.8% owning a radio set. (...) Computers are the least owned asset with only 16.4% of the Bhutanese households owning a computer"<sup>6</sup>. Bhutan experienced massive growth in the use of mobile phones<sup>7</sup>. However being the most popular communications asset in the past, radio gave way to mobile phones that originally come with built-in FM radio functionality<sup>8</sup>. 2 in 3 persons own a mobile phone. "Interestingly, more of the rural population (12%) used mobile phones for entertainment that urban respondents (2%). Part of the internet connectivity is still done via modem and 27 000 telephones main lines in use"<sup>9</sup>.

"Number of Internet subscribers<sup>10</sup> has increased from 5,726"<sup>11</sup> to 133,289 in 2012, and 251,441 in December 2014<sup>12</sup>. 23% of the population has access to the The Internet, and those are mainly educated individuals from urban areas. "Of those who have stated that they have access to Internet, 48% accessed the Internet from their homes, 25% from offices, 14% on the move, and 12% at Internet cafés"<sup>13</sup>. More information in Table 1.

11 Ibidem.

<sup>&</sup>lt;sup>4</sup>T. Penjor, *GeoSherik. An interactive mapping portal for schools in Bhutan (Prototype). Bachelor thesis in Geometrics*, University of Gavle 2007, http://www.diva-portal.org/smash/get/diva2:119830/FULLTEXT01.pdf (access: 07.11.2015), p. 7.

<sup>&</sup>lt;sup>5</sup> Ibidem, p. 8.

<sup>&</sup>lt;sup>6</sup>Bhutan Information and Media Impact Study. Final Report 2013, Department of Information and Media. Ministry of Information and Communications. Royal Government of Bhutan 2013, http://www.doim.gov.bt/wp-content/uploads/2014/09/media-impact-study-2013.pdf (access: 03.11.2015), p. 19.

<sup>&</sup>lt;sup>7</sup> F. Rennie, R. Mason, *The Development of...*, op. cit.

<sup>&</sup>lt;sup>8</sup> "70.45% believe that radio is the most popular media among the common people" B. Thomas, T. Kumar, *Geographic information system – a tool for bridging digital divide in Bhutan*, http://www. happysociety.org/ppdoconference/session papers/session19/session19 binu.pdf (access: 08.11.2015).

<sup>&</sup>lt;sup>9</sup>The World Factbook, https://www.cia.gov/library/publications/the-world-factbook/geos/bt.html (access: 04.11.2015).

<sup>&</sup>lt;sup>10</sup> "Internet subscribers here refer to those households/offices/individuals connected by Fixed Broadband, GPRS/EDGE/3G/4G and Lease line only. The figure does not take into account the actual number of Internet users via their Offices, community centres, Internet Cafes". *Bhutan Information and Media...*, op. cit., p. 23.

<sup>&</sup>lt;sup>12</sup> Annual InfoComm and Transport Statistical Bulletin (5th Edition, March 2014), Ministry of Information and Communications. Royal Governemt of Bhutan, Bhutan 2014, access: http://www.moic.gov.bt/daden/uploads/2014/04/statistic2013.pdf (07.11.2015), p. 5.

<sup>&</sup>lt;sup>13</sup> Bhutan Information and Media..., op. cit., p. 24.

Year	Fixed line subscribers		Internet subscribers		Mobile cellular	
	Total subscribers	Per 100 inhabitants	Total subscribers	Per 100 inhabitants	Total subscribers	Per 100 inhabitants
2004	30,285	5.9	35	0.006	18,995	3.7
2005	32,709	5.1	48	0.008	37,842	5.96
2006	31,526	4.9	61	0.01	82,078	12.7
2007	30,279	4.6	4,040	0.6	148,179	22.5
2008	27,937	4.2	5,548	0.83	228,347	34.3
2009	26,348	3.8	18,524	2.7	327,052	47.9
2010	26,292	3.78	94,285	13.6	349,316	56.7
2011	27,490	3.88	139,896	19.8	484,189	68.4
2012	27,005	3.7	133,289	18.5	560,890	77.8
2013	26,485	3.6	251,441	34.3	544,337	74.3

Table 1Telecommunications subscribers in Bhutan

Source: Annual InfoComm and Transport Statistical Bulletin (5th Edition, March 2014), Ministry of Information and Communications. Royal Government of Bhutan, Bhutan 2014, access: http://www.moic.gov.bt/daden/uploads/2014/04/statistic2013, pdf (07.11.2015)

Sonam Tobgay and Kencho Wangmo named a few challenges that Bhutan's ICT sector faces: lack of awareness and understanding, lack of ICT expertise and skills, lack of private sector participants, poor research and development initiatives, lack of budget for ICT sector, limited internet access, poor content in the national language, poor local content, and difficulties in deploying The Internet<sup>14</sup>. However for the purpose of this paper 3 less detailed categories were developed:

- Axis of tradition and modernity
- Institutional involvement
- Terrain barriers

#### Axis of tradition and modernity

Buddhist tradition played very important role in maintaining Bhutan sovereignty for centuries. Self-imposed seclusion from other countries built a strong sense of uniqueness, therefore, recent mediatization and digitalization of Bhutan's life and culture bring controversies.

Sangay Ngedup, a former prime minister in one interview said: "Until recently, we shied away from killing insects and yet now we Bhutanese are asked to watch people on TV blowing heads off with shotguns"<sup>15</sup>.

<sup>&</sup>lt;sup>14</sup> S. Tobgay, K. Wangmo, *Can ICT (Internet) overcome the natural geographical barriers of Bhutan in developing the nation?*, International Journal of Education and Development using ICT 2008, vol. 4, no. 4.

<sup>&</sup>lt;sup>15</sup> E. Weiner, Goegraphy of Bliss, New York 2008, p. 109.

"Technologies like information and communication (ICT) have become vital components in teaching and learning process and have alleviated innovation skills"<sup>16</sup>. But they also cause polemics about the way schooling process should be done. The concept of critical thinking so valued in the West stays against traditional Buddhist educational system, "and this actively works against the idea of student-centred learning that values curiosity, rationality, and creative approaches to learning"<sup>17</sup>. For example distance and online learning is often considered suspicious by staff, employers, and students alike<sup>18</sup>. One may speculate that even if the distance learning and new electronic, computer based teaching methods were introduced they would not be wholeheartedly welcomed.

The Internet in Bhutan is welcomed by the youngest generation that embraced it with great enthusiasm and is being used for learning activities and improving language skills as well as instant communication with family members across the country as well as abroad"<sup>19</sup>.

Mobile connectivity and use of cellular phones to access social Media is a trend growing exponentially. What is interesting Bhutan Facebook users compared with their Western counterpart eagerly browse profiles of unknown individuals add them as friends <sup>20</sup>. It may be caused by the interest youngest generation has in the outside world.

It also has been brought to attention that Facebook is a useful tool in bringing attention to social problems and difficulties. Local activists launched Facebook page to bring this inadequate punishment to attention<sup>21</sup>: Buddhist monk was sentenced to three-year in prison for possessing \$3 worth of tobacco, which is forbidden in Bhutan<sup>22</sup>.

Income level does not play a big role in Internet usage but the level of education and job do. Civil servants, corporate and public employees spend more time browsing the web, than business owners, students or people with another profession<sup>23</sup>. Perhaps it is connected with the hardware available at their work. There is no gender difference among Internet users. Information seeking, Google searches, email services, chat sites and social networks are most common web practices. 8% use the Internet for pornography – that information caused uproar because previously no one even talked about this activity.

Eighteen different languages are spoken in Bhutan<sup>24</sup> but English is so called working language and it is spoken by the high classes and used in education,

<sup>&</sup>lt;sup>16</sup> T. Penjor, GeoSherik..., op. cit., p. 5.

<sup>&</sup>lt;sup>17</sup> F. Rennie, R. Mason, The Development of..., op. cit.

<sup>&</sup>lt;sup>18</sup> Ibidem.

<sup>&</sup>lt;sup>19</sup>J. Cline, *Bhutan: Globalization, Democracy, and Uncertainty: The Danger to Traditional Cultural Values and Mores,* University of Denver – University College Cultural Positioning 2011, http://elementa-lescapes.com/Docs/Bhutan-Globalization\_Democracy\_and\_Uncertainty.pdf (access: 01.11.2015), p. 13.

<sup>&</sup>lt;sup>20</sup> C. Sinha, *Effects of...*, op. cit.

<sup>&</sup>lt;sup>21</sup> J. Cline, *Bhutan: Globalization...*, op. cit.

<sup>&</sup>lt;sup>22</sup> Fortunately he was then released from prison.

<sup>&</sup>lt;sup>23</sup> K. Tschering, *To Study the Internet Access and Usage Behaviour in the Kingdom of Bhutan*, "International Journal of Computer Science and Electronics Engineering" 2013, vol. 1, issue 2, p. 296.

<sup>&</sup>lt;sup>24</sup> G. Van Driem, *Language Policy in Bhutan*, http://repository.forcedmigration.org/pdf/?pid=fmo:3003 (access: 01.11.2015).

media or government proceedings. The national language – Dzongkha – the only one with the native literary tradition<sup>25</sup> is well known to most of the Bhutanese however, it written form is not familiar to the majority of Bhutanese people. As statistics say "19,3% read Bhutanese websites in English and 0.4% read in Dzongkha"<sup>26</sup>. Actions to empower that language and are being done, for instance, the website of Department of Information Technology & Telecom publishes recent attempts to digitalize Dzongkha: brochures, publication of Dzongkha fonts, Dzongkha converter etc.

#### Institutional involvement

At the beginning of new media introduction in Bhutan help from outside organization was needed to jump start the process. Pan Asia Networking, helped establish Bhutan's first Internet provider DrukNet, international email access and helped built training facilities<sup>27</sup>. Ministry of Education with Singapore International Foundation started "project aimed at encouraging teachers to move away from conventional teaching methods and adopt ICT in the teaching learning process"<sup>28</sup>. Once it has been started, Bhutan's institutions took over and conduct most of the actions themselves.

Ministry of Education (MOE) in the year 2000 started "supporting the higher secondary schools particularly with providing computers, LCD's, the Internet, multimedia and e-learning resources"<sup>29</sup>.

The Royal University of Bhutan established in 2003 is the only public university in the country. It emerged as an effort of combining nine different higher education institutes scattered all around the country. Two centres of teacher education expressed interested in using "Moodle" (Modular Object-Oriented Dynamic Learning Environment) a free software e-learning platform<sup>30</sup>.

"Education Information Technology program started in 2003 and it was meant to provide teachers and students with the basic ICT knowledge and equip 75% of the lower Secondary School in the country by supplying 10 computers to every higher and lower secondary schools by the year 2007"<sup>31</sup>. By 2020 schooling system will be equipped with "new educational innovations

<sup>&</sup>lt;sup>25</sup> Lepcha and Nepali are literary languages in other countries.

<sup>&</sup>lt;sup>26</sup> Bhutan Information and Media..., op. cit., p. 26.

<sup>&</sup>lt;sup>27</sup> Connecting People – Changing Lives in Asia, http://mirror.unpad.ac.id/orari/library/library-ref-eng/ref-eng-3/application/policy/panasia-connecting-people-changing-lives.pdf#page=18 (access: 03.11.2015), p. 22.

<sup>&</sup>lt;sup>28</sup> Survey of ICTs for education in India and south Asia, country studies. www.infodev.org/ infodev-files/resource/infodey Documents\_878.pdf (access: 02.10.2015).

<sup>&</sup>lt;sup>29</sup> P. Zander, T. Penjor, D. Dukpa and others, *The ICT-integrated Pedagogy in the Colleges of Royal University of Bhutan*, The Society of Digital Information and Wireless Communication (SDIWC) 2014, http://sdiwc.net/digital-library/the-ictintegrated-pedagogy-in-the-colleges-of-royal-university-of-bhutan (access: 03.11.2015).

<sup>&</sup>lt;sup>30</sup> F. Rennie, R. Mason, The Development of..., op. cit.

<sup>&</sup>lt;sup>31</sup>T. Penjor, GeoSherik..., op. cit., p. 8.

and technologies to increase access to Information Technology and improve the quality of education"<sup>32</sup>.

However, the quality of web discourse may be improved. In 2007 The Bhutan Information, Communication and Media Authority (BICMA) requested internet providers<sup>33</sup> to block in their opinion offensive website: bhutantimes.com, which presented information about Bhutan both from local and international perspective. Bhutan Times also questioned authorities or judicial decisions. Users accessed the websites through proxy servers anyway. This bold, and not democratic move questions the issue of freedom of speech. But this case may also have a different aspect where the governing institutions want to guard common people against foreign influences. Proper guidelines need to be put in place to assure the unbiased flow of information.

Main hubs of transferring information among locals are Community Centres that play an important role in the life of Bhutanese people. Especially needed in the rural areas they provide "easy and fast access to services through the use of information and communication technology (...) and offer offline services like printing, laminating, scanning and photocopying"<sup>34</sup>. Out of 185 Community Centres 63 are connected with the Internet<sup>35</sup>. Also, all Dzongkhags Head Quarters are equipped with Fixed Line connections and access to Mobile Services<sup>36</sup>. Even though Community Centres in the rural areas are equipped with computers that may access the Internet, the rural population still considers that they have not Internet access<sup>37</sup>.

Most recent Bhutan's investment into expanding digital topography is the creation of first IT park "Thimphu TechPark". Work commenced in 2009 and it has been finished in 2012<sup>38</sup>. It hosts, among others, Bhutan Innovation and Technology Centre "which is an initiative to promote innovation and entrepreneurship in the country"<sup>39</sup>.

<sup>&</sup>lt;sup>32</sup> Ibidem; yet only with Samtse College of Education embracing distance education in 2004 the use of ICT took place. S. Jamtsho, M. Bullen, *Distance education in Bhutan: Improving Access and Quality through ICT Use*, Open and Distance Learning Association of Australia 2007, pp. 149–161; The government put strong emphasis on training teachers in ICT. P. Zander, T. Penjor, D. Dukpa and others, *The ICT-integrated Pedagogy...*, op. cit.; "The Royal Government of Bhutan finds Information and Communication Technology (ICT) as a driving force for sustainable development and poverty reduction since the establishment of the Ministry of Information & Communications (MoIC)". B. Thomas, T. Kumar, *Geographic information system – a tool for bridging digital divide in Bhutan*, http://www. happysociety.org/ppdoconference/session\_papers/session19/session19\_binu.pdf (access: 29.10.2015).

<sup>&</sup>lt;sup>33</sup>Nowadays four Internet Service Providers (ISPs) operate in Bhutan: Bhutan Telecom Limited (BTL), TashiComm Limited (TICL), Samden Tech, and Drukcom. "Bhutan Telecom Limited is the sole provider of fixed-line telecommunications services while cellular mobile services are provided by B-Mobile (Bhutan Telecom Limited) and Tashi-Cell. With the exception of Bhutan Telecom, all other ISPs are private sector ventures". *Annual InfoComm...*, op. cit., p. 7.

<sup>&</sup>lt;sup>34</sup>100 community centres by next month, Bhutan Broadcasting Service 2012, http://www.bbs. bt/news/?p=14361 (access: 09.11.2015).

<sup>&</sup>lt;sup>35</sup>Annual InfoComm..., op. cit., p. 5.

<sup>&</sup>lt;sup>36</sup> Ibidem.

<sup>&</sup>lt;sup>37</sup> Bhutan Information and Media..., op. cit., p. 24.

<sup>&</sup>lt;sup>38</sup> http://www.thimphutechpark.com/about (access: 02.11.2015).

<sup>&</sup>lt;sup>39</sup> About Thimphu Tech Park, http://www.thimphutechpark.com/home-featured-category/about--thimphu-tech-park (access: 09.11.2015).

## **Terrain barriers**

Bhutan is a mountainous country in the Himalayas with the elevation from 100m to 7000m; therefore, it is extremely difficult and expensive to lay infrastructure necessary to connect scattered human settlement. Despite the fact that main towns have Internet connection, people from rural areas do not have access to it and to get to the nearest internet point it may take up to 12 days of walking<sup>40</sup>. Such escapades are undertaken only to fulfil basic human needs: visit a family member or health professional or family, exchange produced goods etc. not to check email or browse the web.

"Uneven terrain in Bhutan renders the task of laying cable for ICT infrastructure relatively labor-and resource-intensive. Fixed telephone lines were first introduced in 1963 (...) Bhutan's mobile telephone service was launched in November 2003"<sup>41</sup>. Perhaps those communication developments would have been done sooner but they were prevented by harsh nature of the Himalayas.

Natural barriers also block newest technological endeavours, for instance, some communication technologies (such as 4G connections) are only deployed in the capital – Thimpu. 3G connectivity is available in 15 out of 20 districts<sup>42</sup>.

The Government of Bhutan fully understands the need of establishing "competitive, level-playing and reliable ICT infrastructure market"<sup>43</sup> because it has the potential to overcome geographical challenges.

#### Conclusion

Challenges of Bhutan's Internet communications described in this paper are obstacles on the way of building a modern information society. However, Bhutan government already plans to overcome them; in its "Vision 2020" program it addresses concerns and gives answers that may help to boost Bhutan internet communication and at the same time maintain centuries old traditions.

Siok Sian Pek-Dorji, Media Consultant from Thimpu, an insider of Bhutan mentality, tradition and media says "We should avoid the "dumbing down" of media that is happening elsewhere in the world, where media feed misinformation and provide sensationalism producing a Disney-type happiness and entertainment; this will lead us far from the path to GNH"<sup>44</sup>. She also warns about a tangle of social and commercial interest. "Being relatively young in terms of media de-

<sup>&</sup>lt;sup>40</sup>Connecting People..., op. cit., p. 22.

<sup>&</sup>lt;sup>41</sup>C. Sinha, Effects of..., op. cit., p. 25.

<sup>&</sup>lt;sup>42</sup> Annual InfoComm..., op. cit., p. 7.

<sup>&</sup>lt;sup>43</sup> Bhutan Information and Communication Technology Policy and Strategies (BIPS), Ministry of Information & Communications. Royal Government of Bhutan 2009, http://www.doim.gov.bt/wp-content/uploads/2014/09/bips\_update.pdf (access: 10.11.2015), p. 25.

<sup>&</sup>lt;sup>44</sup> S. Pek-Dorji, *Opening the Gates in Bhutan: Media Gatekeepers and the Agenda of Change*, University Heidelberg Archives, http://archiv.ub.uni-heidelberg.de/savifadok/1387/1/Medien\_Gatekeeper.pdf (access: 05.11.2015).

velopment we can create a media environment that truly suits Bhutan and our goal for GNH"<sup>45</sup>.

Thanks to ambitious plans this might be achieved and Bhutan might become one of the few countries that have reconciled the need for the proper Internet communication development with age-long traditions and customs.

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<sup>45</sup> Ibidem, p. 107.

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## SUMMARY

Bhutan is a secluded Himalayan kingdom with one of the youngest media systems in the world. The country's first Internet service provider – Druknet was simultaneously introduced with television in 1999. Since then media are growing exponentially and their impact on unprepared society is significant.

Bhutanese people are strongly attached to their Buddhist traditions and beliefs that influence all aspects of their lives. Moreover, Bhutan embraces Gross National Happiness (GNH) in place of Gross National Product (GNP) to signify different approach to human existence. Instead of measuring progress in the financial terms Bhutanese authorities chose GNH designed as an attempt to define an indicator and a concept that measure quality of life or social progress in more holistic and psychological terms. Those particularities are mirrored in the way the Internet and media are being used: to help society to embrace change and during the process, outline and endorse the right values, including public ones.

This paper will be not only an overall look at the Internet in Bhutan, and how it is used in the Himalayan Kingdom but also try to take a closer look at the use of social media and issues with ICT overcoming the natural geographical barriers in efficient communication.

Keywords: Bhutan, internet, communication.

## **STRESZCZENIE**

Bhutan to odosobnione himalajskie królestwo z jednym z najmłodszych na świecie systemów medialnych. Pierwszy dostawca internetu – Druknet, został wprowadzony razem z telewizją w 1999 roku. Od tego czasu media rozwijają się w szybkim tempie, a ich wpływ na nieprzygotowane społeczeństwo jest znaczny.

Bhutańczycy są silnie związani ze swoimi buddyjskim tradycjami i wierzeniami, które przenikają wszystkie aspekty ich życia. W Bhutanie postęp i rozwój nie mierzy się produktem krajowym brutto, ale wskaźnikiem szczęścia krajowego brutto (Gross National Happiness – GNH). Służy to podkreśleniu innego podejścia do ludzkiej egzystencji. Zamiast mierzyć postęp finansowymi wskaźnikami władze Bhutanu wybrały wskaźnik GNH, który mierzy jakość życia i postęp społeczny w sposób bardziej holistyczny i niematerialistyczny. To stanowisko odbija się w tym, jak wykorzystywane są media oraz internet. Mają pomagać społeczeństwu podczas przejścia z tradycyjnego świata do tego bardziej nowoczesnego, globalnego zachowując jednocześnie odpowiednie wartości, wierzenia i obyczaje.

Niniejszy tekst jest tekstem przeglądowym, w którym autor nie tylko opisuje Internet w Bhutanie i jak jest on używany w tym himalajskim królestwie, ale również stara się przyjrzeć temu, jak media społecznościowe i technologia informacyjna współgrają ze sobą aby pokonać naturalne bariery geograficzne oraz społeczne.

Słowa klucze: Bhutan, internet, komunikacja.

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