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The Resilience of Radio

Emily Marysia Thomas

Department of Communications, Seoul National University

Radio transmission originated from experiments conducted between the late 1800s and early 1900s. The first broadcast of music and voice was made in 1906, initiating the rapid development of radio technology. Since its invention, it has been an incredibly important communication tool. With the power to disseminate information to wide audiences, it was especially useful in times of war and crisis. While some believe that the radio industry is dying and being replaced by new technology such as the Internet, the recent COVID-19 crisis has brought the radio to light as a source of trustworthy information and reassurance during lockdowns and times of uncertainty.

While the Internet provides users with a huge amount of information, most are aware that not all of it should be trusted. Considering the spread of misinformation during the COVID-19 pandemic, social media can be a problematic source of news and credible information surrounding the virus and vaccines. As a result,



it seems that many turned to radio instead to receive information about the pandemic. A poll by IPSOS MRBI found that radio is the most trusted source of information [1]. Many also reported that radio was a source of great comfort and entertainment during lockdowns, showing that we should perhaps be putting more effort into preserving the radio industry.

The hashtag #RadioFromHome became a social media trend in the UK during the pandemic, as people showed support for community radio stations where the staff continued to broadcast even from home or while under lockdown [2]. This campaign demonstrated the value of the local radio to communities, which tend to receive less funding and attention than mainstream stations. However, they have been revitalized during the pandemic, as they are uniquely able to provide up-to-date and accurate information to relevant audiences. Listeners can feel reassured and less isolated, and due to the regulations imposed on stations, the accuracy and credibility of information can be maintained.

Local radio stations are underfunded in the UK and thus have been facing sustainability issues. However, in contrast to television and mainstream radio, we must recognize the value of community radio as “a more participatory and democratic means of communication” [3]. It also has the important social function of strengthening community relationships and local culture, something that is often absent on the Internet where global news and issues are more prevalent. Of course, community radio is not always a perfectly credible information source, as there have been cases of censure from discussions of inaccurate information about the COVID-19 pandemic on community stations [4]. However, they are subject to strict standards, meaning that it is significantly easier to prevent misinformation or harmful content from being broadcasted on the radio than via other sources of media. Whatever the future holds for the radio industry, its original purpose and deep-rooted value in society remains.

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02

Digital Nomads in Southeast Asia

Muzaffar Bin Mahudin

Department of Psychology (MA Candidate), Yonsei University



Digital nomads are people who work, travel, and enjoy their leisure time simultaneously. The convenience of technology has encouraged more people to leave their 9-5 jobs and work independently. Digital nomads are entrepreneurially oriented and tech-savvy freelancers [1]. Their goal is to work smarter and play harder. Stable and fast Internet with multipurpose facilities is the only requirement digital nomads look for. Nonetheless, cost of living, attractions, entertainment, and lifestyle are contributing factors to which destinations digital nomads choose when planning where to stay [3].

Tropical weather, availability of diverse cuisines, and economical options at different price points are what the countries in Southeast Asia (grouped together as ASEAN) have to offer for foreigners to travel and stay while working virtually. In 2019 alone, around 6500 digital nomads resided across cities in the region with the biggest population living in Bali, Indonesia, followed by Chiang Mai and Bangkok, Thailand [2]. Bali has become the central city for digital nomads with affordable prices and beautiful beaches surrounding the island. It is a hassle-free process to live for most digital nomads should they be able to use the visa-on-arrival system to stay for 30 to 90 days depending on which country they are from and which country they are going to [3]. Language should not be a problem as most of these cities are hotspots for tourists, meaning that English is widely spoken among the locals [3]. Additionally, healthcare facilities in these cities are comparably cheap and accessible to foreigners.

When these nomads decide to stay, what are the benefits for locals? Digital nomads bring money [1]. Thailand, a world-famous travel destination, has introduced digital nomad preparatory courses which provide information on cities and unlimited Wi-Fi, and allow free access to several facilities such as conference rooms for long stayers [3]. Malaysia introduced a program, “Malaysia My Second Home,” to bring more foreigners with special visas which attracted widespread attention [4]. In return, the money they spend that was earned abroad will generate local income. It also cultivates a competitive business culture and helps to create more job opportunities. As a result, the flow of digital nomads will increase the locals’ standards of living.

However, knowledge exchange and expert sharing between digital nomads and the communities is yet to happen. The locals are generating income through tourism [1]; they make money as service providers instead of creating and inventing digital-oriented businesses. Due to the COVID-19 pandemic, many of the nomads fled back to their home countries and left the cities incomeless. Businesses were shut down which led to unemployment [5]. Hopefully, in the future, the interaction between the nomads and the locals will not strictly be about society, culture, or leisure [3] but expands to technology, education, and digital transfer. This could open the cities to more diverse sources of income. Ultimately, it will benefit both parties.

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Is AI the New Norm for the Beauty Industry?

Simran Karki

Department of Economics, Yonsei University



Image from ibm.com

A marketing professors' favorite phrase - always satisfy your customer's needs and wants - can be observed in the beauty industry. In a world where customers increasingly seek expedient shopping experiences, it is the utmost priority for brands to innovate. However, what can a cosmetic brand do beyond improve its ingredients? SK-II, a luxury cosmetics brand under the consumer goods conglomerate Procter and Gamble (P&G), has challenged the existing norms by deploying Artificial Intelligence to operate its pop-up stores in many locations across Asia.

Back in 2019, SK-II wowed their audience with the "SK-II Future X Smart Store" in Tokyo. First, they performed "Magic Scans" which measured customers' skin condition through an entropy analysis conducted by AI [2]. The process only took 3 minutes after which customers could receive quick, hassle-free, and personalized product recommendations. Second, the pop-up store featured smart mirrors that scanned sample products and tracked eye movements to provide a detailed summary of its ingredients and instructions of

usage [2]. Finally, SK-II introduced Yumi, the robot guide whom customers could consult for detailed product recommendations. SK-II has since opened more similar yet unconventional pop-up stores across Japan, Singapore, and recently China.

However, it is not just the cosmetics industry that has been leveraging AI lately. IBM, a Germany-based fragrance company in partnership with Symrise, has also explored previously untapped opportunities [1]. They used a deep-learning AI algorithm called Philyra to understand and analyze their perfume composition repository and consumer demographics. Philyra then released its unique perfume formula to specify the needs of a target group – Gen Z customers. The perfume was then made available for sale in Brazil. Such achievements undeniably affirm the huge potential of AI in the beauty industry.

Moving forward, we are aware of the massive contribution of COVID-19 in creating new standards of digitalization and online shopping. The changes in lifestyle from lockdowns and heightened social distancing measures have encouraged customers to engage in online or otherwise remote shopping. Amidst this, SK-II's initiative to power their stores with interactive technology allows customers to personalize and shop independently with complete control. Likewise, the use of AI to produce fragrance reduces research-related weight off the employees' shoulders while ensuring accuracy. Despite the prohibitive cost, the use of powerful AI can certainly become a potential solution for brands to operate successfully and survive the pandemic.

The advancements of AI, as seen by SK-II's Yumi and IBM's Philyra, are evidence of AI becoming more deeply embedded into our daily lives. We can expect the reconstruction of industries and changes in how we interact with the world. Steps taken by SK-II and IBM are just the beginning; as a customer, I am curious to what lies in the future. Is AI the new norm for the beauty industry? Only time and innovation will tell.

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China at the Cutting Edge of Digital Currency Popularization

Wenling Piao

Department of Media Communication (Ph.D Candidate), Yonsei University



Image from coingape.com

China's digital yuan or eCNY is becoming a trailblazer as it gains wider circulation. The cumulative number of transactions done in eCNY is more than 70.75 million, representing about 34.5 billion yuan (\$530 million) [1]. The digital currency covers a wide range of transactions in its pilot cities, such as utility bill payments, food services, public transportation, shopping, and administrative expenses. Over a hundred million merchants, including supermarkets, retailers, and restaurants, modified their payment systems to use digital currency. Large e-commerce platforms such as JD.com, cab-hailing app Didi Chuxing, and on-demand service provider Meituan also eCNY [2].

eCNY is the Central Bank Digital Currency (CBDC) issued by the People's Bank of China (PBOC). Unlike popular cryptocurrencies designed to be decentralized, CBDC gives the government a grip on the

financial system and monetary sovereignty. The PBOC accelerated its efforts to remake the way government-backed money works, as cryptocurrencies such as Bitcoin soared in value. In 2014, PBOC set up an internal group for developing digital currency, and in 2017 inaugurated the Digital Currency Research Institute to lead the Digital Currency and Electronic Payment (DCEP) project [4]. CBDC operates in a two-tier system. The PBOC will issue the digital currency to major commercial banks such as the Bank of China, the China Construction Bank, the Industrial and Commercial Bank of China, and the Agricultural Bank of China. Then these institutions will distribute digital currency to the general public [2]. As a result, people can use existing accounts and mobile apps in these commercial banks to accept digital currency rather than familiarize themselves with new infrastructures.

The digital currency was officially opened to the general public last October when the central bank and Luohu District in Shenzhen partnered to jointly issue more than 10 million yuan (\$1.49 million) of the digital currency and distributed it to locals via a lottery [3]. In addition to Shenzhen, Chengdu in Sichuan, Suzhou in Jiangsu, and Xiongan New Area in Hebei have also conducted digital currency tests for the general public [2]. In these cities, citizens need to download the digital currency app, similar to installing WeChat and Alipay payments, which are highly familiar to users. Then, citizens can scan the retailer's QR code or show their QR codes to pay.

There is a good market infrastructure and user base for implementing digital currency electronic payments in China. In 2020, China had 845 million online payment users and 853 million mobile payment users [5]. Most people do not need additional digital literacy education to use electronic payments. Despite the similarity in usage to the established electronic payment system, the popularity of using digital currency is highly significant. As a fiat currency issued by the central bank, it is more advanced than commercial electronic payments in security and convenience. Moreover, digital currency is also available to use in areas without Internet access and network lagging issues, suggesting a promising solution for efforts to bridge the digital divide.

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Tech at Tokyo 2020: How Sports Machinery Helps Decide Who Gets the Medal

Paloma Carrillo-Gallegos

Department of International Studies, GSIS, Yonsei University

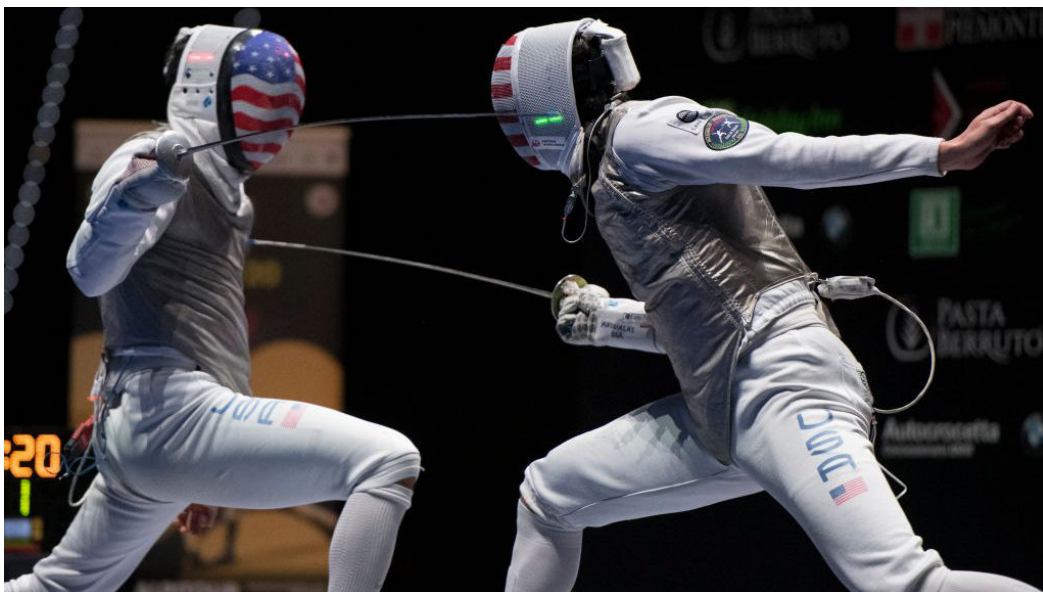


Image from olympics.nbc.com

The modern-day Olympics, which first began in 1896 in its historic home of Athens, Greece [1], has become a global celebration of athleticism across an ever-expanding list of sports. How, then, is a winner accurately determined in races on both land and water where participants often finish within just one second or less ahead of their competitors? Let us take a closer look at how technology can identify the fastest athletes and make determining winners of these events easier for people unfamiliar with the intricacies of certain sports.

Olympics fans can often see replays of iconic and disputed moments alike through “photo finishes” [2]. However, these are not always sufficient when there are split-second differences between times. Thus, in swimming, swimmers must press a timer on the pool wall to register their time [2]. In fencing, bright lights appear on the ground to easily show viewers who made a winning point [3]. New to this year’s competition, the heartbeats of archers were displayed to provide viewers with further analysis [4]. These are just some of

how machinery seeks to clarify point distributions as well as explain individualized sports grading for a wider audience.

What has remained constant in the last 100-years of the Olympics is that the company Omega has provided timer technology [5]. However, these devices alone could face a significant margin of error as they relied solely on a referee's intuition to hit stop at exactly the right time for each racer [5]. While events such as swimming still have one person per athlete who watches to verify when each swimmer reaches the end of the pool, this is supplementary to the sensors on the starting board and the pads activated by the competitors themselves [2].

In previous fencing matches, the winning points were determined by a cable that was attached to each participant's uniform and connected to a point-tracking machine [6]. Since the 2016 Games, however, a cable-less system has been implemented, which athlete Rajan Rai notes facilitates mobility for the competitors [3]. The green and red colors which illuminate the ground as well as both headsets when a point is scored make it easier for people to interpret move sets and learn how grading is done.

At times, technology has also been added for more than timing purposes. At this year's Olympics, TV broadcasts featured the heart rates of archers as they aimed their bows and arrows. While this had no effect on the score, and these measurements were not visible to the participants themselves during the competition, it intended to add tension and uncertainty for television audiences as they waited to see how each athlete would fare [4].

Though there is no such thing as perfection, multifaceted approaches can minimize inaccurate scores caused by relying on only one method. Looking back to all games at Tokyo 2020, it will be interesting to examine how these technologies will be applied in upcoming Olympics.

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YONSEI
UNIVERSITY



Barun ICT Research Center

Barun ICT Research Center, Yonsei University
50 Yonsei-ro, Seodaemun-gu, Seoul 03722, Korea
+82-2-2123-6694 | www.barunict.org

<https://www.instagram.com/barunict/>
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