



**REPORT** 

# OUTCOMES REPORT CAMBODIA ICT CAMP 2022





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Siem Reap, Cambodia

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We thank the Embassy of the Netherlands in Thailand for its financial support in organizing the Camp. Its commitment to Cambodia and the region is highly appreciated. We also appreciate the contributions from all presenters who travelled to Siem Reap from all over Cambodia, Southeast Asia, and further. Thanks to all of them for making the camp meaningful with their inputs. Thank you also all of those who attended the presentations for their comments, questions, and feedback. We are also grateful for the contributions of the Advisory Committee. The inputs of all its members were crucial to make the Camp a successful event. Finally, we would like to acknowledge the effort made by all ODC members. They did an excellent job organizing the event and welcoming all presenters and participants in the Camp.

## **EXECUTIVE SUMMARY**

Striving for a safe and secure open data ecosystem and digital sphere, the Cambodia ICT Camp 2022 was designed as a boarding-style event centered around three main thematic areas: Open Data, Digital Security, and Data Journalism. The Camp gathered a total of 155 attendees, 61 of them female, to join the three-day event in Siem Reap province from 23 to 25 June 2022. The objectives of the Camp are to equip participants with knowledge and digital capacities, empower participants to communicate and disseminate their work online, facilitate the creation and implementation of technology-enabled solutions, generate new evidence on the digital challenges and concerns, and forge an active network of like-minded professionals. Participants in the event were Cambodian nationals coming from diverse fields – but inclusive - namely media and journalism, civil society organizations, digital rights working groups, environmental rights defenders, the private sector, indigenous communities, people with disability, the LGBTQ+ community, university lecturers, and students from media and technology majors.

Throughout the three-day Camp, a total of 45 (4 online sessions) presentations, workshops, panel discussions, and sharing sessions were conducted and led by 31 national and international experts, shading light on the current changes and implementation of the legal framework regarding the restriction on digital freedom in Cambodia. Among all the sessions, there

were 12 from Open Data, 15 from Digital Security, 8 from Data Journalism, 8 sharing sessions by participants, and 2 panel discussions.

The Camp provided in-depth conceptual discussions and hands-on experiences of various forms of data, digital safety practice, and data-driven storytelling to build participants' capacity and strengthen their safety on the internet. Three conclusions were made. First, open data has huge potential to improve social, economic, and political system across Southeast Asia. Second, online data protection must be ensured to netizens' online experience safer. Third, data offers a new lens through which complex social dynamics can be observed and interpreted. Two key challenges were also identified. On the one hand, digital literacy indexes remain relatively low. On the other hand, digital security currently hinders hopes of a digital sphere that is democratic and just.

The Camp resulted into meaningful sustainable impact. It was an opportunity to create new inclusive professional networks and strengthen existing ones to identify the current challenges to the development of a safe digital space in Southeast Asia. The Camp was also a platform to start new collaborations to overcome these challenges and influence draft legislations. Additionally, the outcomes of the Camp were disseminated to the wider public with traditional media and social media publications to increase impact.

# **SUMMARY OF ACTIVITIES**



The Camp started with an opening ceremony with the opening remarks from Mr. Thy Try, Executive Director/Editor-in-Chief of Open Development Cambodia (ODC) and co-founder of the Cambodia ICT Camp, followed by two in-depth keynotes concerning the Digital Security by Mr. Ngeth Moses, Digital Security Consultant and Data-driven Journalism by Mr. Nop Vy, Executive Director of Cambodian Journalist Alliance (CamboJA). A panel discussion was conducted on "The progress of Cybercrime Draft Law", which engaged all relevant stakeholders, including a representative from the Ministry of Interior, members of digital rights working groups, and a representative from a media institution to debate the current situation of the digital legal situation in Cambodia.

The panel discussion brought a timely topic to discuss and gave an insightful understanding of the current implication of digital legal frameworks, including the Cybercrime Draft Law, the Data Protection Law, and most importantly, the sub-decree in National Internet Gateway. The newly adapted and implemented laws and sub-decree raised concern among digital and internet rights defenders, as they feared the laws mentioned above would give the government more power to restrict online expression and oppress internet freedom and freedom of speech.

The panel discussion allowed attendees to learn more about how the newly drafted laws and regulations work and how they can protect themselves from being the victims of online crime. This discussion also provided a unique opportunity for the participants, who were the human rights and digital rights defenders, to question the unclear and uncertainty of the newly drafted law to the government representative. As a result, the digital rights defenders requested the government representative to involve them in drafting the law and other regulations regarding the digital and legal framework.

After the panel discussion, participants were divided into three breakout rooms where experts trained them on the topics of Open Data 101, Leverage open data to deliver positive development impact, Introduction to Data Journalism, Cyberattack, Data Protection, Fact-checking tools, Secured messaging applications, and Digital Security Audit. In the session "Digital Security Audit", the participants were highly engaged in the discussions led by the speakers, asking questions, and giving comments.

During the second day of the Camp, the participants were exposed to various technological tips to stay safe digitally. The sessions under the Digital Security thematic area include Smartphone Privacy, Digital Hygiene Practice, and Personal Data Empowerment. Under the Open Data thematic area, experts introduced the concept of Open Environment Data.

Speakers and participants worked together in a group discussion to generate new inputs on the topic. Besides, the Interviewing and Simplifying Data session was introduced to the participants under the Data Journalism thematic area, where they learned the importance of data in journalistic story writing.

The Camp concluded the last day with 21 sessions, workshops, and presentations across the three thematic areas. On the final day of the program, participants were introduced to many topics, including Using data science to improve public services, Creative commons license, Data trust, Mobile journalism, Data visualization, Podcasting, Data-driven Storytelling, Data governance in ASEAN and its implication to Cambodia, WordPress security 101, and others.

After spending three days learning at the Camp, participants were asked to evaluate the topics or sessions they were most interested in. Under Open Data, most participants voted the topics Open Data 101, Using data science to improve public services, and Open Environmental Data as the most engaging and exciting presentations. For the Digital Security thematic area, the topic "Cyberattack 101" was the highest-rated session among all participants, followed by Digital Security Audit and Data Protection and Personal Data in Cambodia. Under the Data Journalism thematic area, the participants rated Data Visualization as the most interesting session, followed by Factchecking tools and Introduction to Data Journalism.

One participant of the Camp said that the Camp shaded some light on the topics that have never been covered before.

"To me, I think all the session in this Camp are really useful for me. Some of topic I never learned and hear about it before. I will share and self-practice what I learned from this Camp in my career."

Another participant shared that the Camp is an opportunity to learn and share between experts and the participants.

"This forum provides opportunities for people from various backgrounds to learn from the experts and share their knowledge and practical experience with one another."

Another participant of the Camp mentioned that the Camp has extended the knowledge on digital security.

"The first ever ICT Camp that I have joined which gathers numbers of experts in the field of open data, digital security as well as data journalism. The Camp broadened my existing knowledge specially in the field of digital security."

## **BACKGROUND**

This year marked the 2nd Cambodia ICT Camp organized by Open Development Cambodia (ODC), together with its partners and the Cambodia ICT Camp Advisory Committee.<sup>1</sup> The Camp was grounded on the success of the previous edition of the Cambodia ICT Camp 2018,<sup>2</sup> as well as the Mekong ICT Camp 2017,<sup>3</sup> both hosted in Siem Reap.

The Cambodia ICT Camp 2022 was a three-day boarding-style event centered around Open Data, Digital Security, and Data Journalism. The Camp was hosted between June 23-25, 2022 in Siem Reap province, Cambodia.

This event consisted of a series of interactive workshops, sharing sessions, and hands-on activities led by professional experts in the fields of data, media and communication, journalism, and technology. The Camp was in part motivated by the new waves of repression and information blockages in Cambodia. The expanding legislative framework granted the government a growing number of unchecked powers to justify online surveillance, citizens' online activity monitoring, information blockages, arrests and internet shutdowns in the event of social protests. In particular, the Sub-Decree No.23 on the National Internet

Gateway (NIG) creates a single point of entry for internet traffic and strengthens control over service providers; the Sub-decree on The Management and Use of National Domain Names on the Internet requires all organizations and companies to register their domains under the Telecommunication Regulator of Cambodia; and the Cybercrime Draft Law, facilitates, which is expected to deteriorate privacy rights and free speech online.

Amidst such context, this event aimed to raise awareness about such expanding legislative framework in Cambodia, and to discuss its implications for internet users and freedom of expression. In this line, the Camp sought to enhance the skills and knowledge of journalists, CSOs, and grassroots organizations to identify reliable data on the internet, communicate and disseminate their work in a secure manner. all ensuring their online privacy and security. Likewise, participants were encouraged to delve into the potential use of such tools for addressing societal issues, building inclusive communities, and promoting freedom of expression in Cambodia.

Cambodia ICT Camp (2021) Facilitators, Cambodia ICT Camp. Available at: https://cambodiaict.net/facilitators-2022

Cambodia ICT Camp (2018) About Camp 2018. Available at: https://cambodiaict.net/camp-2018/about/

ODC (2017) Mekong ICT Camp 2017, Open Development Cambodia (ODC). Available at: https:// opendevelopmentcambodia.net/mekong-ict-camp-2017/ (Accessed: October 29, 2022).

# **OBJECTIVES**

- Raise awareness about the growing legislative framework, and promote debates about the coping mechanisms adopted by the target audience, such as self-censorship.
- Equip participants with the knowledge and digital capacities to produce reliable and verified information, and identify fake news.
- Empower participants to communicate and disseminate their work online in a secure manner, ensuring their online privacy and security. This includes raising awareness about the implications of recently approved laws such as the National Internet Getaway (NIG), the sub-decree on data protection and the Cybercrime Draft Law.
- Facilitate the creation and implementation of technologyenabled solutions to circumvent repression and digital barriers.

- Generate new evidence on the digital challenges and concerns faced by professionals in relevant fields, and inform awareness-raising and joint advocacy actions to ensure the protection of internet users' rights.
- Forge an active network of like-minded professionals committed to advancing digital rights and online freedom in Cambodia.

# **CAMP'S ACTIVITIES**

#### **Opening Ceremony**

The Cambodia ICT Camp 2022 officially started with presence of the representative from Ministry of Interior, Open Development Cambodia (ODC) team, Advisory Committee members, national and international speakers, volunteers group, and the Camp's participants.

To kick off the event, Mr. Thy Try welcomed all participants, speakers, and honorable guests from all over the region to join the Camp. He expressed his gratitude to the Netherlands Embassy for supporting the Camp. Mr. Try added that the 2022 Cambodia ICT Camp was the 2nd Camp that ODC and its local partners organized, after a successful Cambodia ICT Camp 2018 and the Mekong ICT Camp 2017, both were held in Siem Reap province, Cambodia.

MENTE LA CAMP

Mr. THY Try, Executive Director/Editor-in-Chief of ODC, giving a welcome remark at Cambodia ICT Camp 2022.

He also addressed the importance of data privacy and open data in Cambodia, which aligns with the new law and policies adapted by the Royal Government of Cambodia on Digital Government Policy (2021-2035), the Digital economy and social policy framework of Cambodia (2021-2035), the National Internet Gateway, the Data Protection law, and the Cybercrime draft law.

The event continued with a welcoming speech by His Excellency Remco van Wijngaarden, the Ambassador of the Embassy of the Netherlands in Bangkok. The ambassador expressed his gratitude and welcomed all the participants and speakers. He wished to join the event physically but could not make it to the camp due to conflicting schedules. The Netherlands Embassy was happy to support ODC to improve digital rights and data literacy in Cambodia.



His Excellency Remco van Wijngaarden, the Ambassador of the Embassy of the Netherlands in Bangkok, giving a welcome speech at Cambodia ICT Camp 2022.

Mr. Nop Vy, Executive Director of CamboJA, gave the first keynote speech on Datadriven Journalism. He emphasized the importance of open data in journalism, such as promoting open society, debate, transparency, social accountability, good governance, development, and quality stories by journalists. In order to find reliable sources to support the importance of data in story writing, he mentioned a few research or documents including archived stories produced by journalists, open data sources, government, and the private sector.



Mr. NOP Vy, Executive Director of CamboJA, ging a keynote speech on Data-driven Journalism.

The second keynote was delivered by Mr. Ngeth Moses, Digital Security Specialist on Digital Security. He focused on social media adoption, smartphone connectivity, access to digital information, and the digital landscape for Cambodia. However, he stated that the changes came with a few risks, including cyberattacks on political and human rights journalists. He hoped that ICT Camp would facilitate the exchange of technology and digital knowledge and experience for everyone.



Mr. NGETH Moses giving his keynote speech on Digital Security.

His Excellency Huy Vannak, Secretary of State, Ministry of Interior, officially opened the event with his opening remarks. He firstly discussed Cambodia's transition into the digital era and Cambodia's vision to transform itself into a middle-income country by 2030 and a high-income nation by 2050 through two main goals, the digital economy and digital government, which is important for everyone to be knowledgeable about technology. Adding to this, he raised about cyberbullying, hate speech, and violence on social media, which cybercrimes were on the rise; therefore, we needed to focus on the improvement of ICT infrastructure, digital literacy, digital legal framework, data protection, data and innovation, and control over censoring data.



His Excellency HUY Vannak, Secretary of State, Ministry of Interior, officially opening the Cambodia ICT Camp 2022.

# Panel Discussion: The Progress of Cybercrime Draft Law

#### Speakers:

- Mr. KHUON Sokpiseth, Deputy Director of Anti-Cybercrime Department, Ministry of Interior.
- Ms. CHHAN Sokunthea, Media Development Director of Cambodia Center for Independent Media (CCIM)
- Mr. NOP Vy, Executive Director of CamboJA

#### Moderator:

 Mr. THY Try, Executive Director of Open Development Cambodia (ODC)

In this session, all participants and speakers gathered together to attend one of the most engaging panel discussion in the Camp. The discussion was centered around the progress of the Cybercrime draft law, which was the responsibilities of the Ministry of Interior (MoI).

The discussion started with the question of the differences between the current cybercrime law being drafted by the MoI and the previous laws implementation on the internet. As a response, one of the speakers indicated that, in 2020, the Cybercrime draft law consisted of 6 chapters and divided into 50 articles. The civil society organizations (CSOs), who have been working on the digital rights and internet freedom in Cambodia, concerned that the newly drafted law could put more oppression to the current situation by punishing those who express their opinion on the internet. CSOs representative also urged the ministry to involve or consult with them during the process of drafting new laws to make it a well-drafted law and acceptable procedure, and that could be achieved by accepting the inputs from all relevant stakeholders. They also requested ministry to release the draft law to the public, so that they can measure the impact of the law when it was put into implementation.



Panel discussion on the Progress of Cybercrime Draft Law.

In term of the newly drafting Cybercrime law, the representative from MoI mentioned that the law was being reviewed, and has yet to be implemented due to technical complexity with data storing mechanism.

There were some questions from the participants asking all the speakers to explain more on the topic of Cybercrime draft law. A participant questioned directly to the representative of MoI about the involvement of representative from CSOs or digital rights group in the process of drafting new laws. The representative from MoI then answered that there was no official confirmation that there would be an involvement from NGOs or CSOs during the

process of drafting law in the future. The representative added that drafting law was enacted solely by the head of government, and that the law was a solid foundation for the future use of technology.

Another participant raised a question regarding the target of the new law if it targeted the human rights activists or not. The participants also questioned the model of the new law, from which it was adapted from, and the timeline for drafting the law.

The MoI representative then said that the Cybercrime draft law based on the model from the United State of America, and there was a committee working on it.

#### **Open Data sessions**

#### Open Data 101

Speaker: OURN Vimoil,

Program and Partnership Manager, ODC



Ms. OURN Vimoil presenting the topic Open Data 101.

The speaker firstly engaged the participants by asking them what "data" and "open data" are. Many participants shared their knowledge on the definition before getting to listen to the elaboration by the speaker that "data" is the information collected, and "open data" refers to the data that is freely and publicly available to everyone without restrictions, and people can use and republish as they wish. The speaker also touched upon the Creative Commons (CC) license, referring to the license and permission by the creators for the users to know the extent they could use or share the content.



Participants were listening to the presentation on Open Data 101 at Cambodia ICT Camp 2022.

# Leveraging open data to deliver positive tangible sustainable development impact

**Speaker:** Adriano AMARAL, Senior Product and Program Manager, Derilinx

In this session, the speaker started by sharing the importance of open data and data sharing, then proceeded to give the definition of data, which is important when it comes to searching and investigating the data monetization. The speaker brought the case study from the statistic of public sector in Brazil. He also explained the importance of data in health sector and well-being of the Ireland's people by using Hale and Hearty project, a comprehensive Health & Wellbeing knowledge base, which can be used for rich analysis, insights and action. The speaker then ended the session by elaborating the problem of data that people should understand about the data they use. On the other hand, he also mentioned data privacy and security which was another important topic.



Participants listening to the presentation on Leveraging open data to deliver a positive tangible sustainable development impact by Adriano Amaral.

#### **Open Environmental Data**

**Speaker:** Saowalak JINGJUNGVISUT, Partnerships and Communication Manager of Open Development Mekong

The research on "Mapping knowledge and gaps in data, transparency, and capacity building practices in the Mekong region" was



Ms. Saowalak JINGJUNGVISUT presenting Open Environmental Data.

the key discussion in this session of Open Environmental Data. The speaker then asked the participants to share their ideas on what "environmental data". The answers revolved around the data on air pollution, clean water, deforestation, etc. Open environmental data matter, but its key challenges mostly covered access to the information, lack of data, and capacity to process the data. The speaker also shared the key findings from the research, which were the discoveries on knowledge gaps, diversity and inclusion, data, infrastructure and tools, security and safety, and institutional barriers. Before ending the session, the speaker asked for recommendations from the participants to improve the research.



Audiences listening to the presentation on Open Environmental Data at Cambodia ICT Camp 2022.

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# Build a Website with Twitter Bootstrap 5 in 90 Minutes

**Speaker:** TEPKEN Vannkorn, Freelance Fullstack WordPress Developer



Mr. TEPKEN Vannkorn, providing tips on Building a Website with Twitter Bootstrap 5 in 90 Minutes.

How to build a website in ninety minutes? Using getboostrap.com helped the participants in the Camp to get some ideas of how they can have their own website with less than two hours. This practical session was a total demonstration from the expert in website development. The speaker walked the audiences through the process of how to build a website by elaborating each function and element on the website to the learners. The expert introduced the basic elements such as background, color, padding, and text alignment.



Audiences listening to the presentation on Build a Website with Twitter Bootstrap 5 in 90 Minutes at Cambodia ICT Camp 2022.

# Plus, and Beyond – Open Source and Creative Commons Licenses

**Speaker:** Poren CHIANG, Digital Law Researcher and Software Developer



Poren CHIANG presenting Open Source and Creative Commons Licenses at Cambodia ICT Camp 2022.

The speaker started the session by introducing the concept of open sources, creative commons licenses, and copyright. Copyright, as the expert explained, was invented to protect the creative personal that include utilization, expression reproduction, modification and distribution. In this session, the participants had the opportunity to learn about different types of creative commons licenses, which benefited to their current work as a CSO staff or university student. The 4 types of Creative Commons included attribution, share alike, no derive, and non-commercial.



Audiences paying attention to the presentation on Open Source and Creative Commons Licenses.

# Using Data Science to Improve Public Services

**Speaker:** CHHORN Chhayyuth, Monitoring, Evaluation, and Learning Manager of Research Triangle Institute (RTI)



Mr. CHHORN Chhayyuth giving his presentation on Using Data Science to Improve Public Services.

Data science, in this workshop, was used to illustrate the impact of using modern data-related tools to solve or improve the delivering of public service in Cambodia. Public service, in this case, was in the education sector, where the expert brought up the discussion on how to use data collection and visualization tools to assess the learning outcome of Grade 1 students in Cambodia. Participants in this session had the opportunity to exposed to some of the data collection tools including Kobo Toolbox, and data visualization tools including Microsoft Excel, Flourish, Data Wrapper, Piktochart, and Tableau. The expert and participants shared one common idea, which was to encourage young people to learn or involve in coding and programming in order to develop new tools for improving public service delivery in Cambodia.



Participants listening to the topic of Using Data Science to Improve Public Services.

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#### Natural Language Processing (NLP)

**Speaker:** PEANG Ratana, Founder of STEM

Club Cambodia



Mr. PEANG Ratana giving a presentation on Natural Language Processing (NLP).

This session, the speaker and participants interacted and discussed the newly topic, introduced Natural Language Processing (NPL). As defined by the speaker, NPL was a subfield of linguistics, computer science, and artificial intelligence concerned with the interactions between computers and human language, in particular how to program computers to process and analyze large amounts of natural language data. The expert and the audiences were sharing the idea of the impact of data science, and how big tech companies used data to predict or infer the behavior of their users.



Participants in the Natural Language Processing (NLP) session at Cambodia ICT Camp 2022.

23-25 JUNE 2022 | Siem Reap

#### Data-Centric Digital Rights in Cambodia

**Speaker:** Andrew COCCOLI, Legal Research Intern of ODC



Mr. Andrew COCCOLI, Legal Research Intern of ODC.

The digital rights discussion in this workshop was mainly in Cambodian context that each participant could relate to, such as the human rights mentioned in the Cambodia Constitutional law. The speaker started the session with some general inquiries about rights, human rights, and digital rights. Besides sharing the legal human rights context in Cambodia, the expert also introduced the audiences to some international instruments including Universal Declaration of Human Rights. International Covenant on Civil and Political Rights, and International Covenant on Economic, Social, and Cultural Rights. In the final part of the session, both expert and the audiences discussed the matter of hate speech online, self-censorship, disand misinformation, and the human rights analysis.



Audiences in the Data-Centric Digital Rights in Cambodia session.

# Data Governance in ASEAN and Its Implication to Cambodia

**Speaker:** CHANTY Pisal, Director of Digital and Innovation Policy Research of the Cambodia Academy of Digital Technology (CADT)



Mr. CHANTY Pisal, Director of Digital and Innovation Policy Research of the Cambodia Academy of Digital Technology (CADT)

In this interactive session, the expert and the participants discussed the economic and legal framework of the data usage in Cambodia and in the ASEAN. After asking why data was important, the speaker then highlighted the Data Governance framework in ASEAN, which focused on the digital economy policies. The participants also had the opportunity to understand the implementation of data management framework, including the data classification framework, which mainly touched upon the governance and oversight of data such as data type and element, and data life cycle.



Audiences listening to the presentation about Data Governance in ASEAN and Its Implication to Cambodia at Cambodia ICT Camp 2022.

The discussion then shifted to Cambodian context, in which the expert and audiences shared their experiences and opinion on the Cybersecurity Draft Law. The speaker presented that the law was being drafted, and the important part was the "Critical Information Infrastructure", which the participants said that they did not have any inputs for the newly drafted law as they have not seen it yet.

# Enable Heterogenous Open Data with Internet-of-Things

**Speaker:** NHEM Thayheng, Research Coordinator at Institute of Digital Research and Innovation at Cambodia Academy of Digital Technology



Mr. NHEM Thayheng presenting the topic "Enable Heterogenous Open Data with Internet-of-Things".

In this session, the discussion was centered around how the Internet of Things (IoT) could contribute to the increase in availability of open data in Cambodia, while the demand was still high. The IoT, by definition, enables the objects to gather and exchange information based on the communication protocols which creates opportunities

for more direct integration between the physical and virtual world. The goal behind the internet-of-things seeks to increase efficiency, report information in real time, and bring it to the surface faster than a system that relies on human intervention, and has two motives: monitoring and automation. The expert outlined the possible use cases of IoT in data production, which included user reported application, skill-based survey platform, satellite image in agricultural data production, greenhouse gas emission in the country, and the utilities data production. The speaker then ended the session by stressing that "information is everything"

#### **Data Trust**

**Speaker:** Saowalak JINGJUNGVISUT, Partnerships and Communication Manager of Open Development Mekong



Ms Saowalak JINGJUNGVISUT bringing a discussion on the topic of Data Trust in the context of Mekong region at Cambodia ICT Camp 2022.

The expert and the participants had a fruitful discussion on the topic of Data Trust in the context of Mekong region. Data Trust, by definition, is a form of data collaborative – "a legal structure that provides independent

stewardship of data". It is also a way of stewarding data by and for the benefit of defined communities. The workshop outlined the trust and transparency of data from the government, and how much the participants trust the data from the government portal. The speaker shared the situation of data trust in the context of Thailand that the data protection law and personal data protection act in Thailand, signed in 2019 and enforced in 2022, received negative responses from the communities. In Cambodian context, the expert and participants agreed that there has not been any law on personal data yet, but acknowledged that there was one data protection law was being drafted. They then had group discussions on what they wanted to see from the citizen's perspective toward to data protection law. Some participants demanded that the law should be released to the public for inputs, while some participants said that the law should involve all stakeholders during the drafting process.

# Towards National Spatial Information Infrastructure

**Speaker:** CHANTHONG Bormy, Freelance Solutions Architect



Mr CHANTHORNG Bormy introducing Spatial Information Infrastructure.

In the Cambodia ICT Camp 2022, Spatial Information Infrastructure was introduced with the target of heading toward the nation-wide implementation of the abovementioned topic. Spatial Data Infrastructure (SDI) is defined as a framework of policies, institutional arrangements, technologies, data, and people that enables the sharing effective usage of geographic information by standardizing formats and protocols for access and interoperability. The idea of having SDI is to share the data that all organizations can use and the other people can open to sharing and use. The National Spatial Information Infrastructure, on the other hand, is the technology, policies, criteria, standards, and employees necessary to promote geospatial data sharing throughout the Federal, State, Tribal, and local governments, and the private sector (including nonprofit organizations and institutions of higher education). For a better understanding of the topic, the speaker then used ODC's website as a reference of how the spatial information looked like, then encouraged all participants to support the data sharing for a better open data environment.



Participants attending a sharing session at Cambodia ICT Camp 2022.

#### **Conclusion**

Data plays a key role in improving societies worldwide. In such regard, open data is a highly valuable resource to make positive change happen due to its interoperability: it is available as a whole, can be re-distributed, and can be used by everyone. The Cambodia ICT Camp 2022 was a meeting point for open data experts to discuss the state of publicly available data. They concluded that, while Cambodia and ASEAN states have made significant progress in the use of open data to improve Southeast Asian societies, there are significant challenges that are still limiting the open data's potential that must not go unnoticed.

Speakers at the Cambodia ICT Camp 2022 demonstrated that Cambodia and ASEAN members have benefited from the democratization of data to benefit individuals and communities. Open sources have translated into richer analysis, generating new insights on critical issues like the environment, public health, and human rights, which have resulted into action for the benefit of all. Furthermore, people's digital literacy skills to understand and manage open data has improved. Although Cambodia's progress in generating and analyzing data in the last two decades has been remarkable, hands-on activities proposed by presenters at the Cambodia ICT Camp 2022 also revelated some areas that require action to make open data even more useful. Data availability, access to datasets, digital infrastructure, and lack of specialized research are pressing issues limiting the opportunities of open data. Finally, analysts must pay special attention on the importance of open data regarding data governance. While the internet of things might simplify people's lives, it can also result in increased surveillance. In such regard, experts must monitor cybersecurity and cybercrime draft laws, so they do not undermine the opportunities that come with open data.

#### **Digital Security**

#### Cyberattack 101

**Speaker:** SRENG Saren and CHHEOUNG Veasna, Independent Consultants



Mr. SRENG Saren sharing a session about the basics of cyberattack under the Digital Security thematic area.

In this first session under the Digital Security thematic area, the speaker aimed to discuss the basics of cyberattack including numerous types of cyberattacks, common cyberattacks in Cambodia and methods to mitigate cyber risk. Cyberattack refers to any attempts that try to disable computer or steal data. The speakers also discussed the recent major cyberattack on Internet Service Providers (ISPs) that has caused slow internet connection over the country for weeks. Before ending the session, the speaker introduced some tips to stay safe online including using strong passwords, using two-factor authentication, reducing the use of external hard drive, not clicking on suspicious anonymous links, using encrypted online communication, using VPN and purchasing antivirus software.



Participants and speakers attending a sharing session about Digital Security at Cambodia ICT Camp 2022.

# Data Protection and Personal Data in Cambodia

**Speaker:** Andrew COCCOLI, Legal Research Intern of ODC



Mr. Andrew COCOLI putting on a discussion about Data Protection and Personal Data in Cambodia.

To kick-off the session, the speaker outlined the current legal framework, contemplated future, current practices, analysis and comment. In the current legal framework section, the speaker discussed the role and responsibilities of the government body who was responsible for drafting and enforcing the law on personal data. When discussing potential outcomes in the future, the speaker outlined what technologies will play a key role in the future and drafting new legislation will be a crucial step. The speaker ended the session by providing some recommendations to the participants

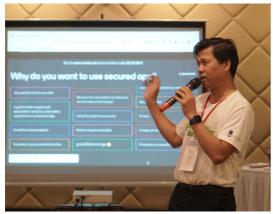
and policymakers including the adapting the model of General Data Protection Regulation (GDPR) from the European Union.



Participants attending the Data Protection and Personal Data session.

#### **Secured Messaging Applications**

**Speaker:** NGETH Moses, Digital Security Specialist



Mr. NGETH Moses sharing the Secured Messaging Applications at Cambodia ICT Camp 2022.

Secured Messaging Applications was one of the most highly engaged sessions in the Cambodia ICT Camp 2022. The speaker provided a basic understanding of online message security, focusing on various approaches to choosing the right and secured online messaging applications that can guarantee privacy and security protection from hackers. The speaker provided a few essential components to look out for when selecting messaging applications such as

encryption, open sources and two-factor authentication features. Most importantly, the speaker defined the secure message applications should have an end-to-end encryption feature that acts as a layer of privacy protection to prevent third parties from reading messages and getting the information one user has sent to the other. At the end of the session, the speaker believed that in the future, the complexity of security can be changed to convenience.



Participants listening to the Secured Messaging Applications session.

#### **Digital Security Audit**

**Speaker:** NGETH Moses, Digital Security Specialist

To begin, the speaker gave a brief introduction that similar to financial audit, digital security audit serves oversee and review company's infrastructure information technology. The main advantage of security audit is to prevent and defend against data breaches and privacy violation. The speaker also mentioned about the data sensitivity in the field of human rights, politics, and other – that if the organizations do not do the auditing on digital-related data, it would affect them when the data were spread outside. The speaker has said that cyber security audit covers fives main areas: (1) Data security, (2) Operational security, (3) Network security, (4) System security, and (5) Physical security. In this session, the

participants were engaging, providing that the topic was relevant to their current work.



Mr. NGETH Moses, Digital Security Specialist starting another session on Digital Security Audit at Cambodia ICT Camp 2022.

#### MyData4Children Workshop

**Speakers:** Jean QUERALT, CEO of the IO Foundation; NHEM Piseth, APLE Cambodia; THY Try, Executive Director of ODC; and Dixon SIU, Software Engineer at Fujitsu Limited



Ms. Jean QUERALT and Mr. NHEM Piseth delivering a special session about MyData4Children.

The MyData4Children was a special and unique workshop in the Cambodia ICT Camp 2022, providing that this session only involved children in the discussion. This session provided an opportunity for participants aged from 12 to 15 to freely express their concern and experiences regarding their online activities and safety. The workshop sough to explore the answers to four main questions: (1) The things that children like to do on the Internet; (2) The

problems that they were facing or issues that they were seeing on the Internet; (3) Kind of digital contents that make children frustrated; and (4) Things that are bothering them on the Internet. The speakers then asked the children to write the answers down on sticky notes, and posed them on the wall anonymously. The speakers also asked another set of YES/NO questions about romance relationship situation and age-gap differences, comments on social media, private photos sharing, the harm of getting too many messages, and sough reflection from participants again.



Participants attending a sharing session at Cambodia ICT Camp 2022.

Along with this, the speaker clarified each issue reasonably to explain in-depth about what children needed to be cautious, rethink and change. The speakers ended the session by summarizing the discussion and asking for participants' cooperation in what and who they needed to report to when facing problems on the Internet and how to recognize and analyze if someone was trying to trick them, especially how to seek help and why you should. The participants added on the discussion and went a little late.

On the other hand, there was a parallel workshop consisting of parents discussing their children's online activities and safety on the internet.

#### MyData4Children Discussion

**Speakers:** Jean QUERALT, CEO of the IO Foundation; NHEM Piseth, APLE Cambodia; THY Try, Executive Director of ODC; and Dixon SIU, Software Engineer at Fujitsu Limited

This discussion was a follow-up session from the MyData4Children Workshop. The speakers introduced the session, informing that this was a children-adult discussion by summarizing the result from the workshop, which was about children's behavior towards the use of the internet and social media, especially online grooming. The participants in this panel discussion, including the adult participants, found answers from children surprising. The participants and speakers were intensively interacting in an open discussion about children's online protection, guidance and the challenges

parents were facing regarding children's behavior toward the use of the internet. The speakers then showed the report of sexual abuse and exploitation of children with data from some websites like inhope. org, aplecambodia.org, which showed the increase of victims sharing the concern of children protection and trends of each cases worldwide especially in Cambodia. The speakers also identified some key factors that contribute to the lack of safety for children including the parents' low digital literacy. The session was wrapped up with the speakers reporting what happened in the previous session, MyData4Children Workshop, and urged the participants to spread more awareness to those who needed so they could work together to better protect children.



Ms. Jean QUERALT, together with Mr. Dixon SIU organizing a workshop on MyData4Children.

# The Glass Room, Data Detox Kit, and Digital Enquirer Kit

**Speaker:** Safa GHNAIM, DATA DETOX Project Lead, Tactical Tech



Safa GHNAIM introducing The Glass Room, Data Detox Kit, and Digital Enquirer Kit at Cambodia ICT Camp 2022.

The Glass Room, Data Detox Kit, and Digital Enquirer Kit was divided into two sessions. In the first session, the speaker introduced the Glass Room, an interactive pop-up exhibition and data and privacy, raising public awareness of digital security. In 2020, the Glass Room introduced another edition called "Misinformation Edition" and aimed to spread to many countries across the world. In this edition, the Glass Room consisted of (1) Deepfake Lab, a project collaborated with students to promote the ability to identify whether the digital image was deep faked; (2) Doublecheck, an application full of captivating guiz and see if the users can spot visual dis- and misinformation; (3) How your phone is designed to grab your attention, an animation video and audio that discover the strategies to keep users hooked to their phone such as fear of missing out



Participants attending an online sharing session at Cambodia ICT Camp 2022.

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(FOMO); and (4) Hooked, a visualization that allows users to add their own screen times - anonymously of course - alongside lots of other people's screen times, so they can all get a picture of how much they are attached to our phones.

In the second session, the speaker introduced the Data Detox Kit and Digital Enquirer Kit. Data Detox Kit, a self-learning guide to increase online privacy, digital security, and online privacy, was originally designed to offer simple steps towards a more balanced digital lifestyle. Digital Enquirer Kit, on the other hand, was an e-learning course about how to prevent the spread of misinformation. Besides concept and tools, this session involved the participants in a hand-on practice and discussion. Throughout the sessions, the participants were discussing among themselves with the coordination from the expertise speakers, and shared their idea regarding the lessons they just learnt. As a part of the future discussion, the participants were keen to learn more and discuss with the speakers in other occasions.

#### **Smartphone Data Privacy and Protection**

**Speaker:** CHY Sophat, Lead Organizer of Barcamp Cambodia

In this edition of the privacy-related sessions, the speaker provided the importance of data privacy on smartphones, and how to protect personal privacy. Using VPN was one of the recommendation to stay safe on the internet, which provided anonymity and security to the users. Besides, the expert urged the participants to have their phone locked to prevent any potential risk from stealing and hacking. The expert also touched upon the risk exposed by online shopping and using credit card without proper precaution.



Mr. CHY Sophat delivering a sharing session on Smartphone Data Privacy and Protection at Cambodia ICT Camp 2022.

#### **Digital Hygiene Practice**

**Speaker:** CHY Sophat, Lead organizer of

Barcamp Cambodia

In this presentation, the speaker shared five common practices to the participants so that they can keep their internet usage clean. (1) Proton mail was introduced, as the speaker recommended this mail service as it was secured and encrypted. (2) The expert encouraged the users to use two-factor authentication to strengthen email security. (3) Using Signal for a safe and secured chatting communication was recommended as it provided some functions including encrypted messages, disappearing messages, and two-factors authentication. (4) There were a few secured surfing browsers were shared during the session such as Onion and Tor. And (5) the speaker touched upon the document sharing services



Mr. CHY Sophat leading another sharing session on Digital Hygiene Practice at Cambodia ICT Camp 2022.

such as Onion Share, which is an open source tool that allows users to anonymously share the document and other files.

# Personal Data Empowerment Presentation and Demonstration

**Speaker:** Dixon SIU, Software Engineer at Fujitsu Limited and Jean QUERALT, CEO of the IO Foundation



Mr. Dixon SIU and Mr. Jean QUERALT starting a discussion on Personal Data Empowerment Presentation and Demonstration.

In this presentation, the speakers started by discussing data protection and personal data. Consent of personal data has been shared, as the experts compared consent of data to the freedom of expression. With regards to this, the speakers mention that ignoring personal data protection because there was nothing to hide, was no different from ignoring the freedom of expression when there was nothing to say. The speaker then added that protecting personal data



Some activities in the sharing session at Cambodia ICT Camp 2022.

was a "blanket" to protect human body. The expert then shared the Fair, sustainable and prosperous digital society, a human-centric approach to personal data that people should get value from their data and set the agenda on how it is used.

# **Myanmar Cybersecurity Draft Law Speaker:** Svetlana ZENS, Digital Rights Programme Manager of Myanmar Centre

for Responsible Business



Ms. Svetlana ZENS giving key discussions on Myanmar Cybersecurity Draft Law.

Key discussions of this session was to showcase the current state of Myanmar's cybercrime law, what has happened during the drafting process, potential setback of the law, and reaction from various relevant actors on the law. During the session, the speaker encouraged the participants to advocate for the protection of human rights, providing the transparency on data sharing and digital security awareness. The objectives of the cybersecurity draft law were to be able to safely and securely use the cyber source; safeguard and protect from online harassment, cyberattacking and cyber-frau; to support digital economy; to legally protect the authenticity and integrity of the electronic information; and to ensure that cyber security service are systematically implemented in accordance with the law. In the draft law, the speaker mentioned that using virtual private network (VPN) in Myanmar is illegal, adding that the person who uses VPN could be penalizing and imprisoning. The expert then shared some risks resulting from the Cybersecurity Draft Law including the law being used to abuse rights to privacy instead of protecting the citizens, increasing in surveillance, and heightening risk of surveillance (stop, search, and arrest). This session served as a good lesson-learnt for other countries that currently implementing and drafting law related to cybercrime including Cambodia.



Participants attending a sharing session at Cambodia ICT Camp 2022.

#### Political participation in postauthoritarian regimes in the digital age: insights from Cambodia

**Speaker:** Marc PINOL ROVIRA, Lecturer from the University of Bristol

In this workshop, the expert presented his research on political participation in the digital era in the context of Cambodia. In his presentation, which was based on his



Mr. Marc PINOL ROVIRA presenting at the Cambodia ICT Camp 2022.

doctoral thesis, the expertidentified relevant reasons that discourage Cambodian people to take part in the online political discussion. The main one he outlined is fear. Political fear, stated by the speaker, was started from emotion bias to trigger fear to achieve political goals. According to speaker's thesis, fear makes netizens less engaged in online politics. This workshop was wrapped-up with some conclusions from the speaker's



Mr. Marc PINOL ROVIRA delivering a presentation at the Cambodia ICT Camp 2022.

research study including (1) contextual factors shaping political participation in the digital age remain relatively understudied; (2) political fear is tightly linked to people's use of digital media; and (3) digital tools are one of the many factors that explain why civil society dis(engages) from political processes.

#### **WordPress Security for Beginner**

**Speaker:** TEPKEN Vannkorn, Freelance Fullstack WordPress Developer

Having been working with WordPress and website building platform for almost 10 years, the expert addressed some of the common issues that new WordPress users might have encountered. The speaker stated



TEPKEN Vannkorn, Freelance Full- stack WordPress Developer.

that there was an average of 30,000 new websites got hacked daily. One of the most common ways attackers use to hack websites is using automated tools. It simply means that hackers did not perform things on their own. They use computing tools to collect and steal data, acquire information, gain and maintain access to the targeted website and are capable of removing attack evidence. The speaker has proposed numerous activities that can be simple solutions to strengthen and secure users' WordPress accounts from getting hacked including using strong passwords, multi-factor authentication, and avoid using default credentials. The workshop was concluded with additional tips that the speakers offered to the workshop such as always backup data and system configuration, disable theme editor and avoid using insecure and dictionary usernames.



TEPKEN Vannkorn presenting WordPress Security for Beginner.

# Panel Discussion: Digital Landscape in Mekong Region

#### Speakers:

- NOP Vy, Representation of Digital Right Working Group Cambodia
- Svetlana ZENS, Digital Rights Programme Manager of Myanmar Centre for Responsible Business

#### Moderator:

 Marc PINOL ROVIRA, Lecturer from University of Bristol

The digital landscape in Cambodia has been seen as a growing trend due to the fact that the internet users have increased and the internet has been used actively in political-related activities. The digital restriction, as sometimes referred to as digital rights management, referred to the technologies intended to limit the use of digital media and devices after sale. The discussion also touched upon some law and technology, providing that censorship and surveillance have purified. However, there were opportunities for young people to enhance their knowledge and skill in digital technology.

The digital situation in Myanmar, on the other hand, has faced a major setback, providing the evidence that the internet was cut down as a result from the restriction. In addition, the right to access the internet and right to freedom of expression has been oppressed and restricted.

The speakers encouraged all participants to be a part of the change in digital landscape in Cambodia, as they are the young generation and has more opportunity to explore the benefit of the digital technology. The speakers then urged the participants to pay close attention to their personal data protection, and added that the opportunity to broaden their digital knowledge in Cambodia was better than that in Myanmar.



NOP Vy and Ms. Svetlana ZENS in the Digital Landscape in Mekong Region discussion.

This discussion also has seen some participants raising the weakness of the digital government policy, mentioning that the policies did not reflection the current situation in Cambodia.

#### Conclusion

In the digital age, large amounts of user's data can be found in the online sphere. Although the proliferation of digital tools and media has had numerous benefits for millions of citizens, such as permanent access to information and communication channels, or the simplification of daily tasks like managing one's finances, digital threats like cyberattacks have emerged as a problem. The Cambodia ICT Camp 2022 hosted several sessions to evaluate online threats and how digital resources are being employed to protect people's online identity, data, and other assets. From those it can be concluded that users' ownership of their online data and the will of governments and technological companies to protect users' data is essential in increasing digital security in the digital age.

First and foremost, policymakers and tech companies play a very significant role in making the digital sphere a safer environment. Although tech companies are in business to make money, which explains why social media platforms are designed to keep users online for as long as possible, they must make digital security a top priority. Therefore, even if users spend hours using social networking sites and messaging applications, they can do it more safely. Governments' role is equally important in regulating the digital sphere in a way that respects people's civil and political liberties and enforcing the law. Finally, users must also play their part in making their online experiences more secure. Individuals and companies must pay close attention to the security options of the digital applications they use and make security their priority. This will only happen if they invest in digital literacy, become aware of the security options that digital applications and devices offer, and run digital security audits frequently. Only then, users' ownership of their digital experiences will increase along with their protection online.

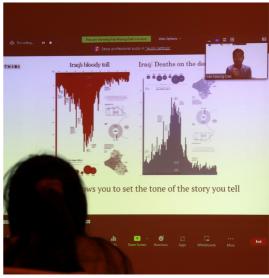
#### Data Journalism

#### Introduction to Data Journalism

**Speaker:** Yan NAUNG OAK, Founder of

Thibi.co

The first session under the Data Journalism thematic area kicked-off with a fundamental subject of the theme itself, Introduction to Data Journalism. The speakers started the session by introducing the concept of data literacy and how it related to journalistic story writing. Data-driven storytelling was a part of the presentation that caught participants' attention. The speaker then provided the components of data storytelling such as data visualization, and gave the context in communication and data in which data journalism uses graphic and design to convey the content of article in an organized manner without involving a lot of text. One of the main items that differentiate journalism and data journalism was the integration of infographic. In this workshop, the expert covered the tips on how to write the data-driven story, which involved data finding, data cleaning, analysis, and story writing.



Mr. Yan NAUNG OAK introducing Data Journalism session.

#### **Fact-checking and Verification Tools**

**Speaker:** SOR Chandara, Coordinator of DW Akademie and TY SAMPHORS Vicheka, UNECSO



Mr. SOR Chandara, Project Coordinator at DW Akademie.

As one of the most interactive sessions, Factchecking and Verification Tools involved the participants in both learning and practicing. speaker started by introducing the definition of fake news, dis- and misinformation. The expert has raised some complications caused by fake news such as disbelief in the media, altered social chaos, and can be an entry point for digital security breaches. The participants then had the opportunity to explore the essential tips and tools to verify the information they received from both offline and online including the text, image, and video verification. The speaker urged the participants to be cautious with the information they consume, and that they should fact-check them before they believe in what they see. In this session, the participants were assigned into three groups to work on making up a fake story, then asked other participants to asked question and fact-checked that information.



Participants in the Fact-checking and Verification Tools session.

#### **Interviewing and Simplifying Data**

**Speaker:** SAM AN Mardy, Information Technology and Website Manager of ODC and VONG Pisith, Senior Data Research & GIS Officer of ODC



SAM AN Mardy, Information Technology and Website Manager of ODC.

This session provided an understanding of how information was extract from data by asking the right questions which is called interviewing data. It drilled down to how to form questions so that it can be answered by data in the data analysis, common mistakes to avoid when forming data-driven questions. Data analysis approach and tools were also introduced where the participant got a glimpse of the big picture of the process. In addition, the trainers also raised awareness of the importance of simplifying data for making the data findings generated from the analysis easy to understand and relatable to the intended audiences. The four simplifying techniques were also introduced.

# Cyber Norms Operationalization in Cambodia and the ASEAN

**Speaker:** Andrew COCCOLI, Legal Research Intern of ODC



Andrew COCCOLI presenting Cyber Norms Operationalization in Cambodia and the ASEAN.

In this session of an international context, the speaker started the sharing session by asking the participants to compare cyber laws between the six countries before moving to discuss Cambodian law. presented, there were five main laws related to cyber law - Law on Telecommunications (2015), Inter-Ministerial Prakas (2018), Law on E-commerce (2019), National Internet Gateway (NIG) (2021), and Sub-Decree No. 252 (2021). In ASEAN context, the speaker mentioned the ASEAN Masterplan 2025 and Personal Data Protection Act 2012 of Singapore, which is similar in many ways to the EU General Data Protection Regulation (GDPR). Law on Cyber Information Security (2018) in Vietnam has also been discussed, alongside the Golden Shield and Personal Information Protection Law 2021 China, a comprehensive surveillance by the government of citizens both online and offline, use of data to analyze citizen behavior, firewall prevention of access to prohibited sites, and prohibition of the use of VPNs. The participants also gained more understanding on the cyber law in the U.S., mainly focuses on the common law, marketcentric, and decentralized - federalism.

#### Digital Hub 101

**Speaker:** SRENG Saren, Independent

Consultant



Mr. SRENG Saren introducing Digital Hub 101.

In this demonstrative session, the participants had the opportunity to find the resource for digital security tips by accessing the Digital Hub 101, a one-stop shop for all digital security related content. Digital Hub 101 was a platform aiming to provide digital security education to Cambodian people, which was in Khmer language that benefited to all Cambodian who were still lack behind in term of digital security literacy.

#### **Data Visualization**

**Speaker:** SAM AN Mardy, Information Technology and Website Manager of ODC and VONG Pisith, Senior Data Research & GIS Officer of ODC



Mr. SAM AN Mardy in his Data Visualization session.

This session introduced the participant the role of data visualization in data-driven storytelling. The participant learned about what data visualization was and how it was used in a data story. Importantly, the trainers introduce the concepts of producing visualization by starting from purpose and problem to choosing the right chart type for visualizing data. During that time, the interesting part is that producing visualization is critical where the chart producer could make the audiences confused and mislead them by producing the chart without a clear purpose. The participants seem to pay attention on that aspect and some of them raise questions to have the speaker explain and give more examples. The participants learned about the goal of data visualization which is a key takeaway when they produce visualization. One of the participants who is a senior iournalist raise about the lack of such data visualization skills in most newsroom and ask for suggestions on how to create human resources to do this job in the institution. The speaker recommends having existing journalists in the newsroom to join the training course on data journalism.



Participants learning from the speaker on Data Visualization.

#### **Data-driven Storytelling**

**Speaker:** SAM AN Mardy, Information Technology and Website Manager of ODC and VONG Pisith, Senior Data Research & GIS Officer of ODC



Mr. VONG Pisith presenting a session about Data-driven Storytelling.

In this session, the speakers introduced the rationality of storytelling and how data played role in the process. The session started with the concept of storytelling by elaborating why story exist and how it could draw people attention. Then the speakers further introduced the role of data for extracting information and insight which was the element of story. Thus, participants learned that data-driven storytelling was impactful and concrete. In addition, the speakers proceeded with the process of how to organize a data story by highlighting the steps to achieve it. Importantly, the speakers also showcased a data-driven story article and reveal the process from the start of brainstorming to organizing the story. With this showcase, the participants learned the big pictures of the process. There were questions raised by the participant around the process of extracting insight from data findings such as information verification from various sources to make sure the information reflects the reality. The speakers pointed out this process should be carried out since the process of literature



Participants in the Data-driven Storytelling session.

review to generating context and identify data for the story.

#### **Mobile Journalism**

Speaker: Le NGUYEN, Multimedia

Producer/Journalist



Le NGUYEN, Multimedia Producer/Journalist

Mobile Journalism was one of the most interactive and practical session during the Camp. The participants were exposed to the concept and technique of how to produce a video story by using their smartphone. In this session, the participants were assigned as groups to produce a short video story using the skill they learnt from the expert. Required to be spontaneous, this session prepared the participants for unexpected events that could happen around them to capture the story for the audiences. By showing his self-produce video by using smartphone, the speaker inspired the audiences to produce their own video using the resources that they have in hands, the smartphone, without demanding expensive equipment.



Participants practicing their skill after learning in the Mobile Journalism session.

#### **Podcasting**

**Speaker:** Thomas WANHOFF, Freelance

Writer



Thomas WANHOFF, Freelance Writer.

In this practical session, the speaker introduced the concept of how to do a podcast audio story to the participants. A podcast is an audio file that people can subscribe to and it automatically downloads to their electronic device. Podcast allows people to listen to what they want and anywhere. The expert recommended that podcasting requires two people as it would make the conversation more interactive and lively. The participants in this session were interesting and interactive, as they asked many questions to the expert. This workshop served as a new way to produce a story for the journalist in particular, and the participants as a whole.

#### **VPN 101**

**Speaker:** CHY Sophat, Lead Organizer of Barcamp Cambodia

The sharing session has seen the expert showed the benefit of using the virtual private network (VPN) for a more secure and safe internet usage. VPN allows users to access internet services without having to expose their IP addresses. The expert mentioned that VPN is best used when we

are in areas that are not safe such as public internet service as well as when we want to protect our privacy from the government, app and services as well as the internet service provider. After explaining the benefit of using VPN, the expert urged the participants to start or continue to use the private network for their personal digital security.



Participants and speaker discussing in the VPN 101 session.

#### Foreign Investment Mapping

**Speaker:** HANG Visith, Investment Data Research Officer of ODC and Y Puthealy, Data Research and GIS Officer of ODC

Major Foreign Investment in Cambodia (FIM) was presented in Cambodia ICT Camp On 25th June 2022. There were quite many participants have joined the session and most of them understood about the topic very clearly. The session outlined why people invest and the data collection process, as well as challenges and limitations. Last but not least, show and practice on the spot on how to access to FIM profile page. Since many of the participants used to access ODC website before, they are very familiar with the accessing process and few of them even go to the FIM profile page and download the data right away.



Mr. HANG Visith, Investment Data Research Officer of ODC in the Foreign Investment Mapping session.

#### Impacts of Digital Rights Restriction on Press Freedom and Active Citizen's Freedom of Expression on the Internet

**Speaker:** HIM Khortieth, Research & Advocacy Manager of CamboJA

To understand the perceptions independent journalists operating Cambodia as well as a segment of active citizens towards "Impacts of Digital Rights Restriction on Press Freedom and Active Citizen's Freedom of Expression on the Internet", the speaker discussed how the newly drafted laws on digital rights could potentially affect the freedom of the journalists. The main findings of the research on the above-mentioned topic outlined that most of the survey respondents thought that the online platform were moderately to not safe at all in term of safety and security, and that resulted in the lack of sensitive work, such as political issue, being delivered



HIM Khortiethsahring a research on Impacts of Digital Rights Restriction on Press Freedom and Active Citizen's Freedom of Expression on the Internet and Active Citizen's Freedom of Expression on the Internet.

to the public. The speaker concluded that all relevant stakeholders, from the government to private sector to CSOs, needed to work together in order to secure a safe digital atmosphere for a better journalism in Cambodia.

#### Conclusion

In the internet era, digital media has facilitated the analysis of large data sets to create news stories. The role of journalists is still unquestionable in data journalism. Still, computer science, digital literacy, and graphic design, or statistical analysis are other equally relevant elements that professionals must master to make the most out of data sets. The Cambodia ICT Camp 2022 brought together regional experts in using data to create new stories to explore the progress that has been made in this field and what challenges remain to be addressed. While professionals fundamentally agreed that data journalism creates new opportunities to present a simplification of complex data analysis, relying excessively on the digital sphere presents security threats that professional must learn how to address.

Data journalism transformed how news stories are presented to large audiences. By focusing on analyzing data sets, media and communication experts do not have to rely exclusively on individuals to create stories, thus widening their options. In the presentations in the Cambodia ICT Camp 2022, experts highlighted two crucial aspects of data journalism. First, while it is an extremely helpful strategy to create news stories, professionals must develop or improve numerous skills. These include their overall data literacy, graphic design and data visualization, or quantitative analysis. Only when professional become confident

in these fields, they will be able to produce quality podcasts or do mobile journalism to tell their stories from reliable data analysis to wide audiences. Second, data security and reliability are essential to ensure that only contrasted information is broadcasted safely. Analyzing data to broadcast stories might uncover sensitive stories and topics. Therefore, digital security is paramount. On the one hand, experts must be able to fact-check and verify their data sources to ensure that their stories are credible. On the other hand, they must be able to protect themselves online, requiring online security skills such as being aware of cyber norms, or how to use VPNs. Therefore, as it can be seen, the complexity of data journalism is found in the set of skills experts must develop.

### Camp's Outing Session

Outing Day, fall on the second day of the Camp, served as a networking opportunity outside the Camp for all attendees. National and international speakers, organizers team, and participants had the opportunity to explore the cultural site of Angkor Archeology Park, giving an informal atmosphere to interact with each other outside the conference rooms. All participants and speakers were enjoying the view of the Angkor Wat temple and exchanging cultural knowledge, as the Cambodian participants voluntarily shared the historical stories about the temple to their foreign counterpart. The outing activity has proven to be one of the most interactive session and a great opportunity for networking.

### **Keys Achievements**

 Increased awareness of the target audience regarding recent laws affecting internet use: The Camp the necessary concept and tools to improve participants' understanding about the implications for freedom of expression and online security. The involvement of the Ministry of Interior contributed to a fruitful discussion around the Cybercrime Draft Law, created a meaningful debate on the implication, and generated the consolidate feedback from the CSOs media professional, journalists, university students, and other relevant stakeholders working on digital and human rights.

- Improved ability of participants to securely create responsible digital identities: Workshops and sharing sessions under the three thematic area provided useful tools for participants to securely implement their works in order to inform the public and disseminate sensitive information online. The tools, delivered by expert at the Camp, enhance the participant's online activism and protect their digital footprint from being hacked or stolen.
- Online platforms for Camp participants were created: To forge knowledge-sharing and collaborations beyond the Camp, a Telegram group chat was created for all participants, organizers, volunteers, and speaker to communicate among each other. The group are highly active not only for knowledge sharing after the Camp, but also serving as a platform for further discussion among all the Camp's attendees on relevant issues around open data, data-driven journalism, and digital sphere in Cambodia. Besides, a

Telegram channel was created to give the opportunity for the general public, who did not attend the Camp, to be informed about the Camp's activities and shared the knowledge and skills from the Camp's participants and speakers.

 Twenty blogposts produced by ODC and Camp participants addressing relevant open data and digital topics.

#### **Media Outreach**

The Cambodia ICT Camp 2022 has attracted many participants who are the journalists from several media institutions. There are six story coverages written by a media institution, whose reporters also attended the Camp from 23 to 25 June 2022.

- 1. Digital Security for Children is Key<sup>4</sup>:
  Panelists and parents gathered at this
  year's Cambodia ICT Camp to discuss
  how to keep children safe online.
- 2. Experts Raises Concerns About the Risk of Fake News<sup>5</sup>: Fake news is driving public mistrust in the media, an expert warned at this year's Cambodia ICT Camp.
- 3. Value of Data Visualization in the Media<sup>6</sup>: Cambodian media organizations are being encouraged to embrace data-driven journalism

**<sup>4.</sup>** Samoeun, N. (2022) Digital Security for Children is Key, Digital Security for Children is key. Kiripost. Available at: https://kiripost.com/stories/digital-security-for-children-is-key.

**<sup>5.</sup>** Sours, T. (2022) Expert Raises Concerns About the Risk of Fake News. Kiripost. Available at: https://kiripost.com/stories/expert-raises-concerns-about-the-risk-of-fake-news.

Chamroeun, P. (2022) Value of Data Visualization in the Media. Kiripost. Available at: https://kiripost.com/stories/ value-of-data-visualization-in-the-media.

by developing a dedicated team of experts in newsrooms.

- 4. Experts Urges Caution When Shopping Online<sup>7</sup>: Digital security expert has issued a warning for Cambodians to protect themselves when shopping online to avoid being defrauded.
- 5. Cambodians' Digital Security a Growing Concern, Experts Say8: Experts are concerned that while more and more Cambodians have access to the internet their knowledge of how to protect themselves from cybercrime is still in its infancy.
- 6. Cambodia's Cybercrime Law Remains Under Review<sup>9</sup>: Technical details are stalling the ratification of Cambodia's cybercrime law; officials claim as civil society organizations urge the ministry to consult them on the draft.

#### Social Media Outreach

To support the outreach activities, the Cambodia ICT Camp has been using our existing Facebook Page, Telegram Channel, and Twitter Account to engage with the general public as well as the participants of the Camp. For communication during the Camp, we have created a Telegram group

for all the participants, speakers, advisory committee, and organizers to share the information and update about the Camp.

- 1. Cambodia ICT Camp Facebook Page (Cambodia ICT Camp): has a total of 3922 likes and 4237 followers. During the promotion of the 2022 Cambodia ICT Camp from October 2021 to June 2022, the Facebook page has a total 58912 reaches, 2918 page visits, and 715 new page likes.
- 2. Cambodia ICT Camp Twitter (@ CambodiaICTCamp): has a total of 30 followers. During the promotion of the 2022 Cambodia ICT Camp from October 2021 to June 2022, the Twitter Account has a total 2228 tweet impressions and 2995 visits and gained 15 new followers.
- Cambodia ICT Camp Telegram Channel (@CambodiaICTCamp): The Channel was created to diversify the sources of information to the targeted audiences who prefer Telegram to other social media platforms. The Channel has a total of 170 subscribers.
- 4. Cambodia ICT Camp Telegram Group: With a total of 129 members, the Telegram group was created to communicate and share information or update about the Camp to all the attendees including participants, speakers, volunteers, and organizers.

### **Way Forward**

After finishing the 3-days Camp, Open Development Cambodia (ODC) plans our next actions for the project.

<sup>7.</sup> Open Development Cambodia (2022) Expert urges caution when shopping online, Cambodia ICT Camp. Open Development Cambodia. Available at: https://cambodiaict.net/news/expert-urges-caution-when-shopping-online/

<sup>8.</sup> Ngay, N. (2022) Cambodians' digital security a growing concern, experts say, CamboJA News. Available at: https://cambojanews.com/cambodians-digital-security-a-growing-concern-experts-say/

<sup>9.</sup> Ngay, N. (2022) Cambodia's Cybercrime Law Remains Under Review. Kiripost. Available at: https://kiripost.com/stories/ cambodias-cybercrime-law-remains-under-review?fbclid=IwAR 3zlArdehHJQd3YnSWhBrdld9hHspRILOBYOnZ9K1LMKiAFkCt-Jj\_TZew

- 1. Cambodia ICT and Digital Forum (CamIDF): The Forum emerges as a multi-stakeholder platform committed to democratizing ICTs and leveraging their full potential, while ensuring that the digital revolution benefits all citizens. The Forum will promote informed public debates and expertisesharing, and engage in policy-making by working along the three pillars of Cambodia's digital economy plan, namely digital government, digital business and digital citizenship. The principal function of the Forum will be to strengthen the capacity of the CSO and development community to take an active role in the design and implementation of digital policies affecting digital government, digital citizen and digital business. The Forum will work at the National level in Cambodia. Regional cooperation will be promoted for the purposes of sharing expertise, lessons learned and best practices. As proposed by the participants of the Cambodia ICT Camp 2022, the Forum will host a quarterly meeting starting from August 2022.
- 2. Research on cyber and data law, human rights, and digital development: Open Development Cambodia is partnering with William & Mary Law School to place a Legal Research Intern with ODC to assist its activities surrounding the Cambodia ICT Camp 2022. The research will cover three main topics including:
  - Treatment of data in Cambodian law (current laws, indications of government policy, and laws in development);

- **ii.** Comparative survey of overall structures of cyber and data law in the ASEAN (Cambodia, Singapore, Vietnam as examples) and the tripolar models (EU, US, China);
- iii. Definitions of core "digital human rights" (privacy, thought, information, expression), as well as "human rights on the internet" (how internet use affect minority, gender, children's, environmental, labor etc.)
- 3. Follow-up Workshop: One final workshop hosted with Camp alumni and 30 relevant media outlets, CSOs and development partners to share the lesson learned and knowledge gained after attending the Camp and generate debates and collaborations.
- 4. Follow-up with the Ministry of Interior: as a result of the panel discussion about the draft law on cybercrime, members of the Digital Rights Working Group will take further steps to follow up with the Ministry of Interior to release the draft law to the public.

#### **Conclusion**

The Cambodia ICT Camp 2022 demonstrated the importance of strengthening the digital sphere in Cambodia and Southeast Asia to create new opportunities for social, economic, and political improvement. Over three days, a range of professionals – ICT, media, third sector, international organizations, academics, and entrepreneurs – gathered in Siem Reap and showed that people's digital awareness is on the rise. At the Camp, 45 presenters and 155 attendees

from different countries exchanged knowledge and developed new professional networks to contribute to a more secure and robust digital environment.

Digital open data, digital security, and data journalism were the Camp's thematic areas around which discussions were arranged. Presentations highlighted three fundamental facts that outline the health of the online space. First, open data has emerged as a powerful tool for social emancipation in Southeast Asia. Second, protecting online data is a crucial challenge to be addressed to create a more robust digital sphere where all netizens are safe. Third, data offers new possibilities to observe, analyze, and interpret the environment to provide simplified explanations of complex social dynamics. Participants also identified two common challenges in the three themes. On the one hand, more digital literacy programmes are necessary to empower all netizens, particularly those from marginalized backgrounds. On the other hand, increased digital security would make the digital sphere a fairer place where all users can make the most of the internet to improve their lives. Improving in all these areas is crucial to address domestic and regional challenges. In Cambodia, the implementation of the national internet (NIG) threatens fundamental gateway liberties like freedom of information and free speech. In light of a narrower digital sphere, creating stronger digital identities will increase user awareness of the change and give them more tools to adapt and remain safe.

The Camp addressed some of these challenges thanks to the presenters' efforts to strengthen the digital identity of all participants with increased awareness of

the opportunities and threats in the digital space and knowledge exchange between attendees to identify the challenges to the democratic development of the digital sphere. The highly interactive sessions of this year's ICT Camp resulted in a tangible impact. First and foremost, the Camp strengthened attendees' digital identity with knowledge exchange, awareness of common security threats in the online sphere, and solutions to overcome them. Some of the Camp's impact was remarkably sustainable, such as creating online spaces to connect presenters and participants and create a more robust user community. Some of its participants have already started discussing further collaborations and projects. Media helped echo the Camp's impact. Several mass media outlets published articles about the event, and most of its content was posted on social media platforms, making communication highly interactive.

Although its success, the Camp organization is aware that a three-day event is the tip of the iceberg. Improving the digital sphere will always be a work in progress since it requires a deep understanding of the social, economic, and political environment and the agents shaping it. The Camp has provided a priceless opportunity to create a sustainable change. Yet, regular efforts from all parties will be necessary to make it materialize.







#### **CHANTHONG BORMY**

Chanthong Bormy graduated in computerscience and engineering in 2005, and earned master of science in Geoinformatics in 2011. He has an extensive working experience in software design, development and management. During his work as a software engineer, he has the opportunity to work cross domains such as finance, telecommunication, construction, aviation, etc.



#### **CHANTY PISAL**

Mr. Chanty Pisal is the Director of the Digital and Innovation Policy Research Centre of the Cambodia Academy of Digital Technology (CADT). He also serves as Vice Director of the ASEAN ICT Centre of the ASEAN Digital Sectoral Body (ADGMIN/ADGSOM). Prior to this, Pisal worked for the Ministry of Post and Telecommunications as an international cooperation officer in charge of ASEAN, Mekong Cooperation, WTO, and trade.





### **CHHORN CHHAYYUTH**

Chhorn Chhayyuth works Evaluation Monitoring, and Learning (MEL) Manager in Research Triangle Institute (RTI). He has nearly 10 years of data management, monitoring, and evaluation experiences in the education sector. He works closely with Ministry of Education, Youth and Sport (MoEYS) and NGOs partner to integrate technology into teaching and learning and to employ the data-driven approaches as result-based to improve the education quality.



#### **CHY SOPHAT**

Chy Sophat is the lead organizer of Barcamp Cambodia and a digital content creator in Cambodia. He has been organizing and contributing to many technological events for 10 years. Besides, he has been creating content on digital platforms relating to digital literacy and internet safety.



### **DIXON SIU**

Dixon is a software engineer at Fujitsu Limited. He is also the Chief Evangelist of Personium which is the only open-source personal data store platform in Japan. Currently, he is leading SDG 9 and the global MyData movement within Fujitsu.





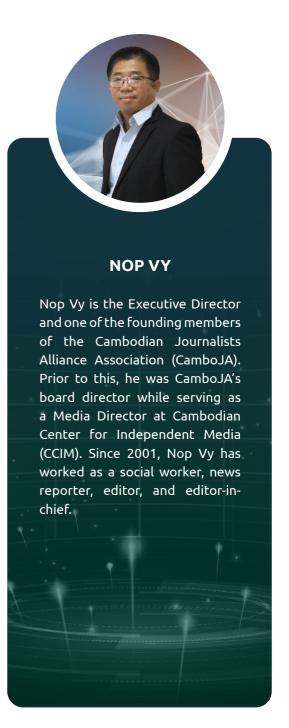




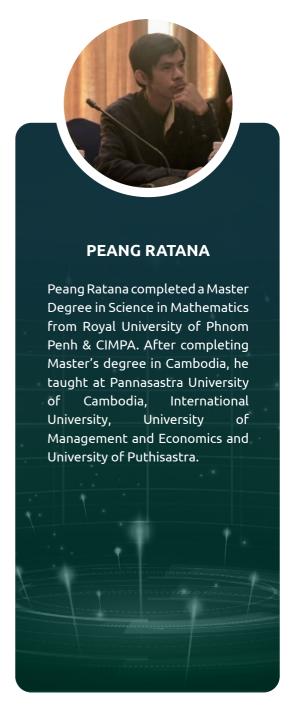














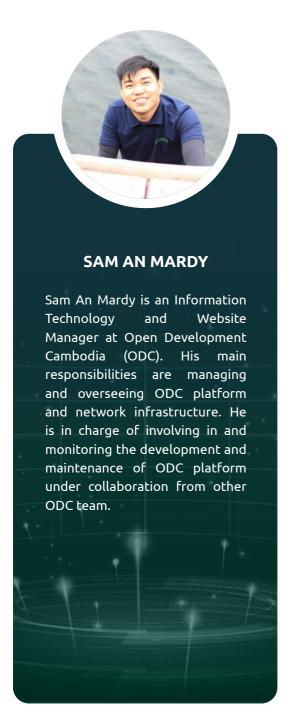
#### **POREN CHIANG**

Poren Chiang is a digital law researcher and a software developer based in Taiwan. His research agenda focuses on digital government and electronic voting. He also writes on a wide range of topics including data surveillance, FLOSS licenses, social media regulations, freedom of speech, and other constitutional law topics in the digital world.



#### **SAFA GHNAIM**

Safa Ghnaim is a Data Detox Project Lead at Tactical Tech, an international NGO based in Germany that engages with citizens and civil society organizations to explore and mitigate the impacts of technology on society.















#### **THY TRY**

Thy Try is an Executive Director/ Editor-in-Chief of Open Development Cambodia (ODC). In 2011, he joined ODC as an advisory board member, and later on, he became a chairman of the board. As an Executive Director/Editorin-Chief, Try plays an important role in increasing public access to current and historical data and information about Cambodia's development trends in an online 'open data' platform, compiling freely-available data from a wide range of public sources.



#### **VONG PISITH**

Vong Pisith works as a Senior Data Research & GIS Officer at Open Development Cambodia (ODC). At ODC, his work focuses on researching spatial data, on various sectors relevant to development in Cambodia from all reliable sources which provide open data, for handling assembling enhancing and visualizing by using GIS to generate a usable data product for publication in organization web pages.



#### **SVETLANA ZENS**

Svetlana Zens is a Digital Rights Program Lead with the Myanmar Centre for Responsible Business (MCRB) and Focus of the Digital Rights issues and ICT sector. She provides recommendations on privacy/data protection and cybersecurity policies and for the public and private sectors. Before joining the MCRB, she worked at the European Union Delegation to the Kyrgyz Republic, the UNICEF-EU Partnership Office, the Organization for Security and Cooperation in Europe, and the Sky Mobile company.

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### **ADVISORY COMMITTEE**



#### **CHY SOPHAT**

Chy Sophat is the lead organizer of Barcamp Cambodia and a digital content creator in Cambodia. He has been organizing and contributing to many technological events for 10 years. Besides, he has been creating content on digital platforms relating to digital literacy and internet safety.



### **CHENG MENGCHOU**

Cheng Mengchou holds a BA degree in Media Management from Department of Media and Communication of Royal University of Phnom Penh and a Master's degree in Global Citizenship, Identities, and Human Rights from University of Nottingham in England. She has journalistic experience in reporting news and coordinating election coverage for Radio Free Asia's Khmer service.





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