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**Cyberage Inequity: Interrogating Social Disparities in Technological Access
and Affordances within a Third World Country**

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12 October 2023

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Cyberage Inequity: Interrogating Social Disparities in Technological Access and Affordances within a Third World Country

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Acceptance Page:

This paper prepared by **Reiko Mae L. Mirabueno** with the title: “**Cyberage Inequity: Interrogating Social Disparities in Technological Access and Affordances within a Third World Country**” is hereby accepted by the Faculty of Information and Communication Studies, U.P. Open University, in partial fulfillment of the requirements for the degree Program.

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Biographical Sketch

Reiko Mae Mirabueno's academic journey is marked by a commitment to lifelong learning and cross-cultural exploration. She earned her Associates Degree in Arts from the University of the Philippines Open University in 2014, followed by a Bachelor of Arts in Multimedia Studies from the same institution in 2017. In pursuit of a well-rounded education, she further honed her skills by obtaining an Associates in Arts, specializing in Motion Picture/Television, from the College of DuPage in 2020.

As an educator, Reiko Mae Mirabueno has made significant contributions to the field of multimedia studies. From 2017 to 2020, she served as a Teaching Assistant at the University of the Philippines, where her dedication to guiding and mentoring students was evident. Building on this foundation, she assumed the role of Lecturer at the University of the Philippines, specializing in courses such as Gender in Multimedia, Popular Culture, and Film History and Literature, from 2020 to the present. Reiko Mae Mirabueno's academic journey, combined with her teaching expertise and research endeavors, showcases her as a versatile and dedicated scholar committed to unraveling the complexities of our digital world. Through her work, she continues to contribute valuable insights to the fields of multimedia studies, internet communication, and sociocultural analysis.

Acknowledgement

My completion of this paper could have not been accomplished without the support of my advisory committee. I would like to express my deepest appreciation to my thesis advisory committee, Dr. Alexander Flor, Dr. Serlie Jamias, and Dr. Benjamina Flor for their dedication and patience to my academic growth.

I am grateful for the faculty members of the Development Communication department at University of the Philippines Open University for their commitment to fostering conducive learning environment. I would like to also acknowledge the participants of my study, your willingness to share your insight and feedback for the study deeply contributed to the study's success.

Special thanks are due to my family and friends, who stood by me with unwavering encouragement and support.

Dedication

For *Beau*,

My impostor syndrome
gave up on me;

But *you didn't*.

TABLE OF CONTENTS

Title Page	i
University Permission Page	ii
Acceptance Page	iii
Biographical Sketch	iv
Acknowledgment	v
Dedication	vi
Table of Contents	vii
List of Tables	ix
List of Figures	x
ABSTRACT	xi
CHAPTER I: INTRODUCTION	1
Background of the Study	1
Statement of the Problem	3
Objectives of the Study	5
Significance of the Study	6
CHAPTER II: REVIEW OF RELATED LITERATURE	8
Digitalization	8
Digital Divide	10
The Network Society	11
Digital Literacy	16
Digital Inclusion and Underprivileged Communities	17
CHAPTER III: METHODOLOGY	18
Research Design	18
Sampling and Participants	18
Data Gathering Procedure and Analysis	20
CHAPTER IV: RESULTS AND DISCUSSION	23
Social Influences	23
Social Disparity	32
Cyberage Inequity	36

CHAPTER V: RESULTS AND DISCUSSION	39
Summary	39
Conclusion	39
Recommendations	41
REFERENCES	44
APPENDICES	
Appendix A Survey Questions	50
Appendix B Survey Results	52

List of Tables

Table 1. Internet connection based on location and age	29
Table 2. Connection Speed	30
Table 3. Accessibility of Social Media	31
Table 4. Accessibility of Academic Resource	31
Table 5. Accessibility of Online Marketplaces	32

List of Figures

Figure 1. Four Social Units ... by Networks by Jan van Dijk	13
Figure 2. Philipp Adamik's ... Network Society	14
Figure 3. Analysis of data through theoretical lens	21
Figure 4. Location Bracket of the Respondents	23
Figure 4.1. Occupation Bracket of the Respondents	24
Figure 4.2. Age Bracket of the Respondents	25
Figure 4.3. Income Bracket	26
Figure 4.4. Computer Usage	27
Figure 4.5. Computer Accessibility	27
Figure 4.6. Latest Trends Adoption	28
Figure 5. Do you keep up ... technology respondents	34

Abstract

Cyberage Inequity: Interrogating Social Disparities in Technological Access and Affordances within a Third World Country

This study explores cyber inequity among privileged and underprivileged communities, which impacts the nationwide consumption of the digital environment. The future of informational society has been shaped by polarizing social disparities. With a significant increase in internet usage and the country's progression towards a networked society, the growing digital gap and disproportion have become pressing issues to analyze. The objective of this study is to identify and understand the social influences that contribute to this problem of social inequity, with the ultimate goal of developing effective solutions.

To assess this imbalance, a 20-item questionnaire was distributed to a sample population, resulting in 101 respondents, with 62 acknowledging their inability to participate due to lack of means. The findings indicate that social disparities play a pivotal role in influencing the digitization of the Philippines. The research concludes that there is a limited availability of resources and means of accessibility, particularly for marginalized populations in the country.

Chapter I

INTRODUCTION

Background of the Study

Over the years, efforts to bridge the digital divide among societal classes have resulted in significant reductions through well-planned programs and development initiatives aimed at further digitalizing the country (Tipton, 2002). While technology has made strides in creating inclusive resources that are accessible and user-friendly, the increasing consumption of cyberspace has introduced a new and significant challenge for the country. Marginalized sectors in the Philippines now find themselves limited to consuming what is deemed "good enough" in terms of digital inclusion (Uy-Tioco, 2019).

The Philippines has experienced a considerable surge in internet usage and the integration of digital technologies over the past couple of years. As the country adopts becoming a networked society, the discourse surrounding the implications of cyber inequity on communities has become relevant.

The existing research highlights the adverse consequences of cyber inequity and inequality, indicating that it not only hinders the socio-economic development of communities but it also enhances existing social disparities that influence the drive of the digital divide in the Philippines.

The conclusion of this study is expected to provide valuable insights to policymakers, researchers, and relevant stakeholders, enabling them to develop targeted policies

that address the digital divide effectively; ultimately fostering an inclusive digital society that benefits all communities

The concept of the Network Society was coined by Manuel Castells (Network Society, 2004), who theorizes the idea of a 'new' society formed through the digital age, determined not only by technology but also by cultural, economic, and political circumstances surrounding its consumers and social networks. Castells argues that cyberspace development is influenced not only by technology but also by various contextual factors.

Statement of the Problem

The digitalization of the country has brought about significant positive changes, with a growing number of Filipinos embracing the benefits of technological advancements for functional and convenient purposes. This rapid digital transformation, however, has created a particular digital divide that affects the socio-economic ties of the Filipino people. Social disparities, such as education, occupation, and other exogenous factors like sex, age, and income, play a crucial role in shaping individuals' social conditions (van der Maesen and Walker, 2012).

The concept of the digital divide has been redefined by Virtual Inclusivity (Mossberger et al., 2003), which highlights various aspects of technological inclusion. This framework recognizes the profound impact of developing technologies and resources on societal communication, revealing the widening gaps in communities that face societal destitution and have limited access to modern advancements.

This study seeks to investigate the social influences driving cyber inequity in the Philippines and aims to address the following research questions:

1. What are the key factors contributing to the digital divide between privileged and underprivileged communities in the Philippines?
2. How does cyber inequity impact the consumption and utilization of digital technologies?

3. What are the specific barriers faced by marginalized populations in accessing and utilizing digital resources?
4. What potential solutions can be identified to bridge the digital gap and promote a more inclusive digital environment in the Philippines?

This study aims to explore how social disparities influence the technological advancement of the Philippines in the digital age of social media and the thriving digital economy. By analyzing relevant technological literature, consumption patterns, and the construction of the digital environment based on societal classes and networks, this research seeks to identify and understand the emergence of the new digital conspiracy (Castells, 2004).

In the context of a controlled environment like the Philippines, achieving social and digital inclusivity remains a pressing issue. Persistent barriers to digitalization hinder the development of marginalized communities, limiting their equitable access to scarce resources (Alip, 2022). Understanding these circumstances and analyzing the social disparities that fundamentally contribute to the growth of the digital environment, this research aims to initiate a comprehensive discussion and propose measures to create a balanced cyber ecosystem that mirrors the sociological growth of the society.

Objectives of the Study

- To investigate the social influences driving cyber inequity in the Philippines and identify the key factors contributing to the digital divide between privileged and underprivileged communities.
- To analyze how cyber inequity impacts the consumption and utilization of digital technologies.
- To identify and examine the specific barriers faced by marginalized populations in accessing and utilizing digital resources.
- To propose potential solutions to bridge the digital gap and promote a more inclusive digital environment in the Philippines.

By comprehensively examining the underlying causes and dynamics of cyber inequity, this research endeavors to provide valuable insights for policymakers, researchers, and stakeholders. This research aims to enable these stakeholders to develop targeted strategies and policies that foster a more equal and connected digital society. The research seeks to contribute to a broader goal of building an information society that benefits all segments of the population, regardless of socio-economic status.

Significance of the Study

This research aims to provide crucial information and knowledge on the topic, specifically identifying influencers that hinder the development of technological advancements and growth in the Philippines.

Policy Development and Growth

The findings of this study can provide policymakers with valuable insights into specific social factors contributing to the digital divide in the Philippines, which could ultimately foster a more inclusive and accessible digital environment for all segments of society.

Academic and Research Contributions

The study's exploration of the new digital conspiracy and its alignment with sociological growth adds to the body of knowledge on cyber inequity and its implications. It offers a valuable study for future researchers, academics, and scholars interested in understanding the dynamics of social and digital inclusion and exclusion in digital society.

Strategic Technological Development

The insights gained from this study will contribute to the development of a strategic approach to technological advancements in the country. By recognizing the impact of social disparities on technological adoption, policymakers, and technology developers can tailor innovations to address the specific needs and challenges faced by various societal groups.

Sustainable Societal Development

Creating an inclusive digital environment that mirrors the sociological growth of society ensures sustainable development. The study's insights can help devise strategies that align with the nation's social goals, ensuring that technological advancements benefit all citizens and communities alike.

Chapter II

REVIEW OF RELATED LITERATURE

This chapter presents correlating literature and relevant studies that the researcher considered necessary in understanding and to help familiarize concepts that are present in the study.

Digitalization

The term digitalization refers to the conversion of analog data into digital format (Bumann and Peter, 2019). In today's modern world, the process of transforming various aspects into digital codes has become the norm, and digitalization is a concept widely discussed in the literature (Brennen and Kreiss, 2016). It is associated with the reconstruction of communities, where social experiences are transferred and exist in the digital space. Digitalization involves the transformation of data into a universal digital language, enhancing economic and social value (Reis et al., 2020).

Moreover, digitalization is conceptualized as maximizing the potential of modernization in the digital age by creating an environment that fosters the consumption of technology. This is achieved by converting analog information into sustainable digital data, leading to advancements in digital services and new technologies.

It is essential to differentiate between digitization and digitalization, as discussed at the University of Oxford (Brennen and Kreiss, 2014). Digitization is the process of

converting raw or analog data into its digital representation, while digitalization involves leveraging digital entities to create new opportunities. For instance, digitization may include converting paper-based records into digital spreadsheets to increase efficiency. Eventually, this transition from digitization (data) to adoption (process) leads to digitalization, which theoretically represents the creation of a digital society.

The accelerated pace of digital transformation, as suggested by the United Nations Department of Economic and Social Affairs, poses risks, particularly for marginalized groups already experiencing social exclusion (Leveraging Digital Technologies for Social Inclusion, 2021). These groups may face further challenges due to a lack of digital literacy or connectivity.

Studies on digital inclusion and discrimination from an economic standpoint highlight that despite being exposed to technological advancements and tools, marginalized communities still face disadvantages due to limited resources, education, and digital competency (Eikers and Rath, 2021).

By understanding the concepts of digitalization and its implications on different societal groups, policymakers and stakeholders can design targeted interventions to bridge the digital divide and foster a more inclusive and equitable digital environment for all.

Digital Divide

The term "Digital Divide" gained public attention following a study conducted by the Markle Foundation in 1995, led by its former president, Lloyd Morrisett. The study revealed similarities between society's divisions along cultural and racial lines, both online and offline. Jan van Dijk defines the Digital Divide as "the gap between people who have access to information and communication technology and those who do not" (2017). This divide underscores the influence of inequality in terms of resources, which is determined by society's participation and network.

As a reflection of the social divide in the digital world, the Digital Divide plays a crucial role in the vision of a technological future where Information and Communication Technology (ICT) is widely implemented and sustainable (Pimienta, 2021). Society's participation is integral to defining the Digital Divide, as many are consumers of modern technological advancements but lack participation in the decision-making process. This idea intersects with societal class, a concept accessible to those with higher digital literacy but elusive to poverty-stricken communities.

Information and communication technology can improve economic policy and facilitate the policymaking process through various tools available to decision-makers and policymakers. However, digitalization remains exclusive and may have significant effects on society, particularly on impoverished communities with limited access to technology (Flor, 2001).

Accessibility and inclusivity of digitalization are notable; however, they are not readily available in poverty-stricken communities. The education system in these communities is often limited to basic arithmetic, language, and communication skills. Anything beyond that requires more resources and funding, which these communities often lack (Mesa, 2017).

Nearly half of the world's population is excluded from the digital revolution, raising questions about whether digitalization is truly a tool for alleviating poverty (UN, 2019). A recent survey by Inquirer showed that out of 57% of internet-sufficient households, only 15% have reliable internet access, and nearly half of the Philippine population lacks access to the World Wide Web (WWW) (Inquirer, 2019). The process of revolutionizing digital means could create accessibility and boundary issues, benefitting only wealth-enriched families to a significant extent.

The Network Society

The term "Network Society" was introduced independently by Jan van Dijk in 1991 in his book "De Netwerkmatschappij" (The Network Society) and by Manuel Castells in "The Rise of the Network Society" in 1996. Van Dijk defines the Network Society as a society cultivated by the combination of social and media networks, which serve as the primary factors shaping its structure. Manuel Castells, on the other hand, describes the Network Society as a social structure of networks powered by information and communication technologies (2004). According to Castells, these social networks play a pivotal role in the network society, utilizing ICTs to create and sustain social relationships in the digital sphere. The theory also emphasizes that the social structures within the digital network are similar to those outside it, with power

being a crucial concept in the network society. "The chief form of power is control and influence over communication" (Castells, 2004).

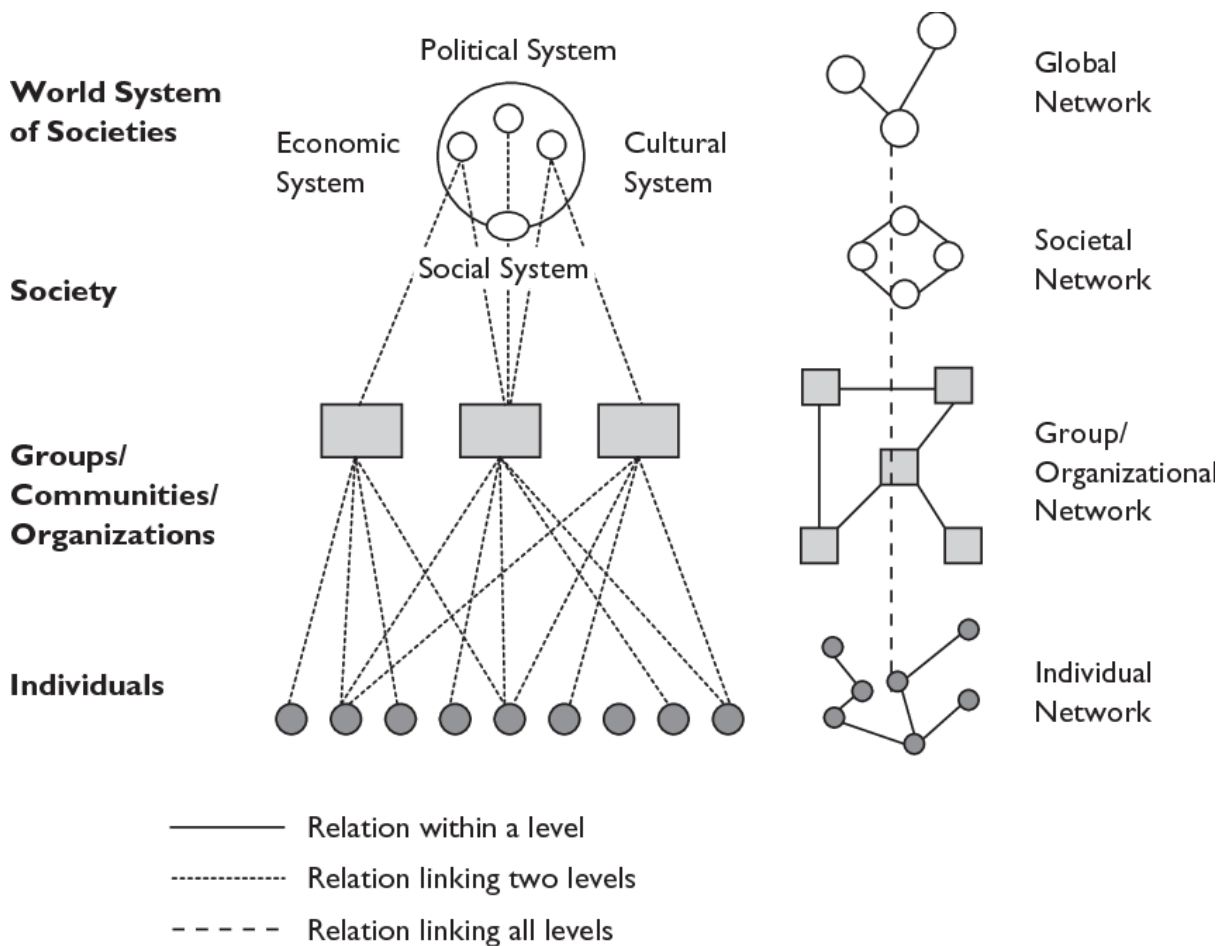
Castells also identifies dividing factors within the network society, particularly centered around the division of labor and poverty. In the context of digitalization, innovators are often more valued than consumers, especially those living in marginalized areas lacking adequate infrastructure to participate fully in the digital market.

Non-adaptors often rely heavily on labor-intensive jobs and experience exclusions from certain technologies due to their lack of literacy in specific mechanisms. The complexities of the growing digital revolution underscore the increasing need for modern advancements in education. Opportunities for digitalization should increase with the acquisition of new skills; however, in reality, learning computer programs tailored for facilitating digital implementation remains a challenge for many (Bach et al., 2018).

Van Dijk conceptualizes the Network Society as a form of society increasingly dependent on organizing relationships through media networks, gradually replacing traditional face-to-face interactions and communication (Van Dijk,2006).

Figure 1.

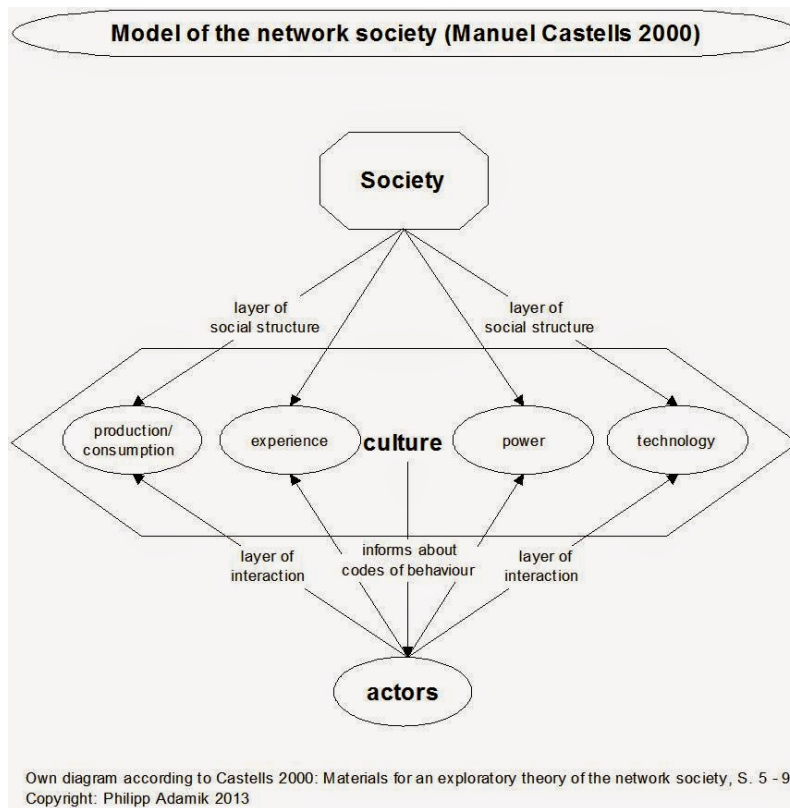
Four Social Units and Levels linked by Networks by Jan van Dijk (1997)



As shown in the figure above, Van Dijk created the correlation of factors that influence individual and social networks within the social system. The paper will base the arguments on this group factoring, with the societal systems and structures to determine the group of people for the study. With the concept of digitalization a main influence of the study, the hypothesis theory will be derived from The Network Society by Van Dijk and the conceptualization of the theory by Manuel Castells.

Figure 2.

Philipp Adamik's diagram of Manuel Castells's Network Society (2013)



The correlation between the digital divide and existing literature and language further widens the gap for underprivileged sectors, limiting their access to modern enhancements of social and cultural lifestyles. The influence of literacy in a socio-cultural environment becomes evident in the context of digital literacy, as digitalization shapes the communal environment, mirroring societal disparities and revealing critical social exclusion.

The presented framework above analyzes Manuel Castells' concept of "The Network Society," where individuals' power lies in accessing and using information beyond the conventional norms to create their hierarchy. Castells theorizes that the society of today gives rise to a new information age, where individuals (actors) possess the

technology to shape a digital environment, ultimately leading to information society (Castells, 1996). The six factors he identifies - Power, Society, Network, Experience, Production, and Culture - play vital roles in shaping the new society, creating a rift of power manifesting through social, political, and cultural changes.

The construction of the digital society is heavily influenced by culture and the actors' environments, with their social structures shaped by different demographic consumptions. This segmentation begins with the access to resources available to individuals and their communities, confirming their identities and assuming their socio-economic ties and cultural backgrounds.

In this context, privileged communities and individuals have greater access to resources, including computers and information networks, whereas underprivileged communities and individuals face limited access to technology and other resources that hinder their progress and development in the digital society.

The digital divide not only reflects economic disparities but also perpetuates social inequities, making it essential to address this issue to foster a more inclusive digital environment where all individuals can fully participate in the opportunities offered by the Network Society. Understanding and bridging the gap in digital access and literacy are crucial steps toward creating a more equitable and connected society in the digital age.

Digital Literacy

A study conducted in the rural communities of the Philippines (Flor, 2008) concluded that the development of ICT infrastructure in developing countries can lead to community growth, particularly in sustaining agricultural livelihoods. This raises the question of the relevant infrastructures in rural areas where electricity and water are scarce, and basic education is already a growing problem. How can these communities adapt to digital literacy? (Floor, 2008)

Before the term "digital literacy" was coined to distinguish socio-economic differences in literacy, it was known as the "urban bias." Many researchers considered it a "non-issue" and believed that the digital age's literature was merely a subject of relation, not important enough to warrant a separate study (Henry, 2019). However, the data from the National ICT Household Survey in 2019 reveals that only 2 in 5 Filipinos have at least basic information and knowledge about computers, while 3 out of 5 have none. This underscores the pressing need to reform the conceptualized ideology of the term.

The resources accessible to these rural communities greatly influence the level of digital literacy among individuals within these limitations. Affluent resources and access to newer technologies contribute to the creation of an information society. Individuals who are digitally fluent and have consistent computer literacy development, as well as knowledge of both old and new media, create a barrier between those who are only familiar with traditional media. Bridging this digital divide and fostering digital literacy in rural communities is vital for their empowerment and inclusion in the information age.

Digital Inclusion and Underprivileged Communities

The concept of digital inclusion has its roots in sociology, which emphasizes social inequality in terms of resources, accessibility, and participation in society. While inclusivity in general demographics may consider factors like age, race, gender, and physicality, digital inclusion focuses more on the digitized aspects of these social constructs, such as digital literacy, education, gender representation, income levels, and digital accessibility.

A reconceptualized definition of digital inclusion involves the appropriation of technology beyond mere physical access (Van Dijk and Hacker, 2003). It highlights the importance of addressing digital inequality, by acknowledging that having access to technology is not enough; any community needs to know the necessary skills, knowledge, and resources to effectively use digital tools to engage in the digital society.

The presence of categorical inequalities in society also extends to the digital realm, impacting the distribution of resources and leading to unequal access to technology (Van Dijk, 2017). Understanding these shifts in dynamics in the digital sphere allows for a deeper interpretation and discourse about social disparities and information inequality. Digital inclusion becomes a powerful tool in empowering these communities and individuals; by providing equal opportunities to underprivileged communities and access to technology, digital inclusion for all is a significant step toward creating a more inclusive environment in the digital age.

Chapter III

METHODOLOGY

This chapter explores the research methodology and what variables were applied in the study. This chapter accounts for the research design, data-gathering procedure, and data analysis.

Research Design

The main objective of this quantitative study was to determine the relationship between societal discrepancies and cyberage inequity in the digital society of the Philippines. This study followed a quantitative research design to examine the relationship between digital inclusion and marginalized communities.

The usage of the quantitative method allowed for a systematic data collection, analysis and statistical interpretation, further providing a comprehensive understanding of the variables involved.

The research instrument was developed based on the analysis of the suggested topics by Castells, Flor, and Van Dijk. The survey focused on measuring variables related to societal discrepancies, digital inclusion, and cyberage inequity.

Sampling and Participants

The survey will be conducted solely online as it offers several advantages to the research; wider reach, cost-effectiveness, and ease of data collection and analysis.

However, the study also acknowledges the potential challenges associated with online surveys.

The participants were chosen through affiliate link which were dispersed through Facebook. Facebook was the chosen social media site to work alongside this survey because of the following reasons:

- Easier access through any portable mobile device and technology.
- Facebook also has a feature of being able to share links easily and to send it to multiple people, groups and other participating individuals that has a Facebook profile.
- Communicating through “*Messenger*” for inquiries about the project feels more personal and connected.
- Facebook has a ‘URL’ opener within the application, so by clicking the link, it would not go to any other application but the built in system for an easier access to the survey.

Since Facebook has the ability to network through individuals by being “mutuals” or have “mutual friends”, the survey was created to be passed along family and friends and create a spiderweb of connections through them. The survey was sent through messenger and Facebook timeline, where anyone can see and participate; it was also shared through various group chats to maximize reach and participation.

It is to be noted that the survey has a disclaimer of only Filipino Citizens and residents should answer the survey and be shared to the same group of people.

The first wave of links were sent through Facebook messenger, through a senior citizen group chat. The second wave were sent through a group chat with Bicol residents, Romblon residents, and Laguna residents. The third wave were shared through affiliate links and emails through various organizations of the Philippines in hopes to be dispersed even further and reach more people.

The sample size was determined by the exploratory nature of the study, so the researcher opt to get as many participants as possible within a 2-week (14 day) period.

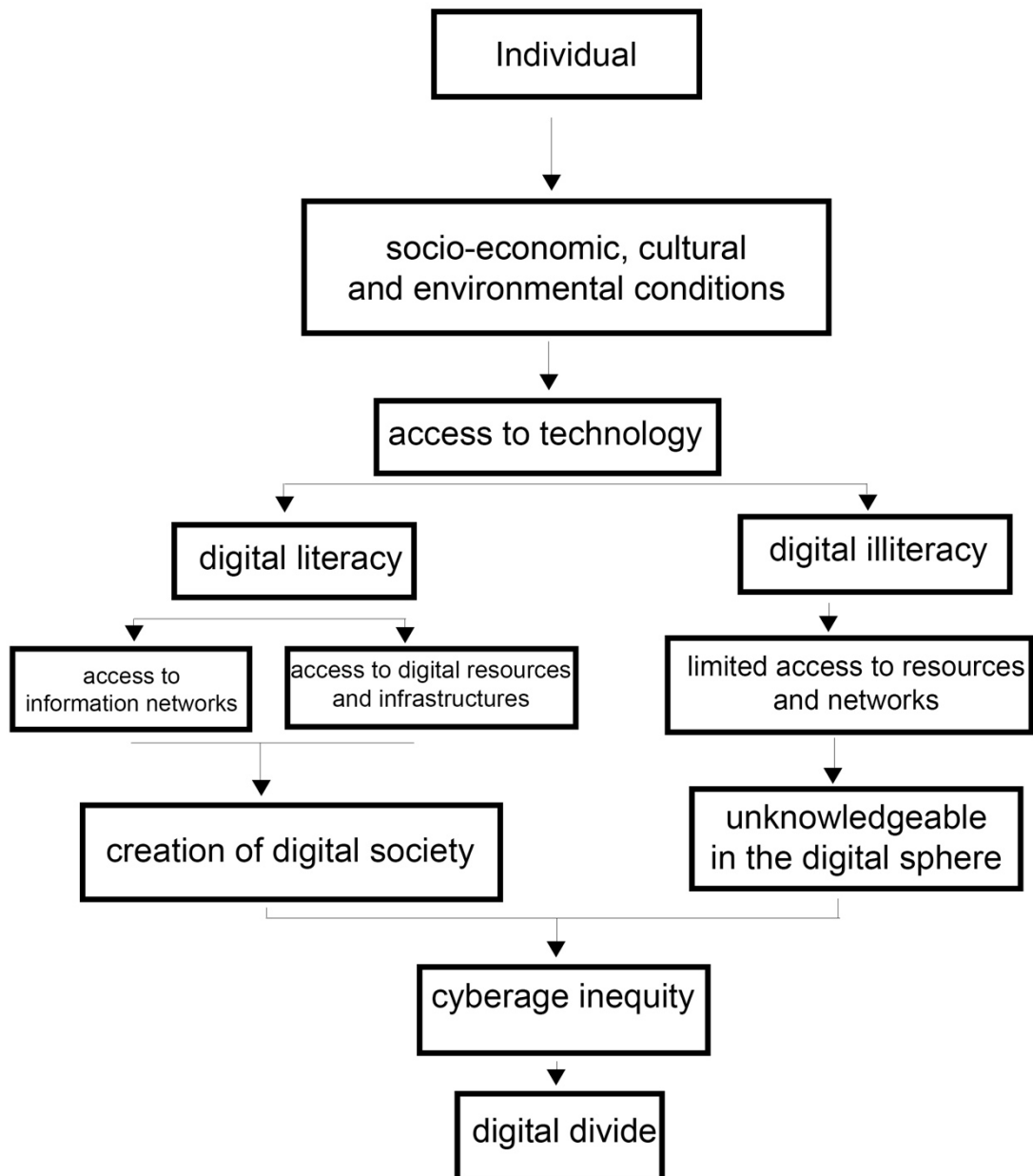
While online surveys are convenient, it's essential to consider digital literacy and access to technology. Underprivileged individuals may have limited access to the internet or may not be digitally fluent, potentially leading to underrepresentation. Addressing this issue may involve providing access to internet facilities or offering alternative data collection methods for those who cannot access the online survey

Data Gathering Procedure and Analysis

Data will be collected through structured surveys designed to measure and quantify the extent of societal discrepancies, digital inclusion, and cyberage inequity. The survey will consist of closed-ended questions and rating scales to gather quantitative data. Quantitative data collected from the surveys will be analyzed using appropriate exploratory data analysis. The analysis will aim to identify any significant associations between societal discrepancies and cyberage inequity.

Figure 3.

Analysis of data through theoretical lens



A 20-item survey was sent out to be answered online, to maximize the factoring element of the analysis by already determining which among the individuals who can answer the survey has access to it. among the list of items in the survey were demographics (age, occupation, etc.) and it serves as the empirical data to support the claims of the paper.

The interpretation of the data is descriptive using frequencies and percentages and supported by the review of literature. A limitation of the study is that it did not use any statistical analysis such as correlation that could have empirically shown the relationships of the variables shown in the conceptual framework.

Chapter IV

RESULTS AND DISCUSSION

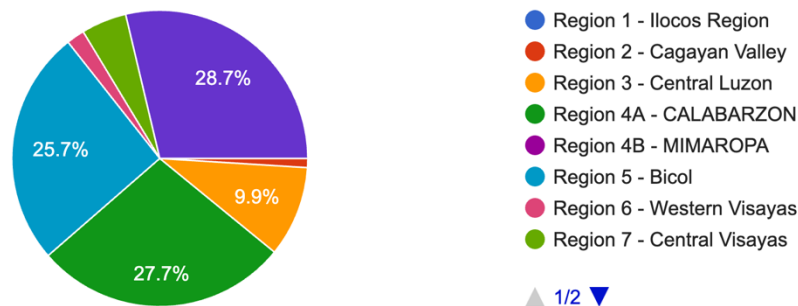
This chapter will present results and discuss them retroactively by analyzing correlated literature to the study.

Social Influences

Figure 4.

Location Bracket of the Respondents

Location
101 responses



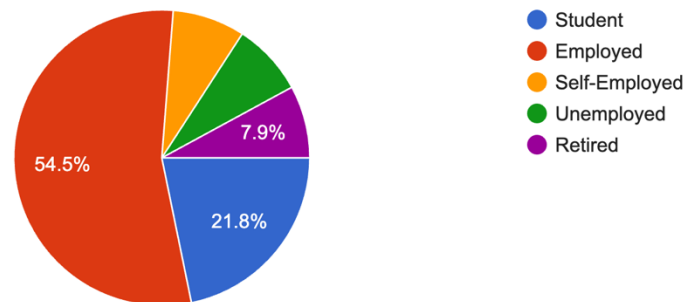
The main respondents of the survey are currently living in NCR, Region 4A (CALABARZON), and Bicol. No respondents from Region 4B (MIMAROPA), Western and Eastern Visayas, Zamboanga Peninsula, Northern Mindanao, Davao Region, SOCCSKSAGEN, Cordillera Administrative Region, and Bangsamoro Autonomous Region in Muslim Mindanao. It's noteworthy that there are no respondents from several other regions. This distribution could potentially impact the

generalizability of findings to a broader context, as responses might not adequately represent the diversity of regions across the Philippines.

Figure 4.1

Occupation Bracket of the Respondents

Occupation
101 responses



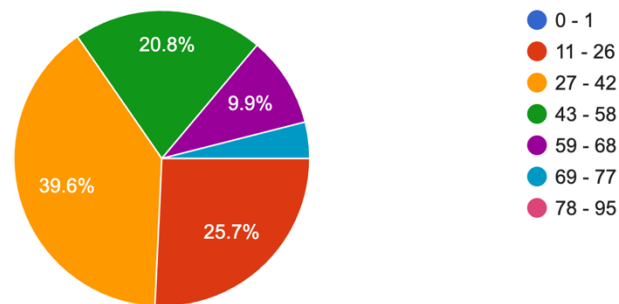
The Majority of the respondents (54.5%) are employed, 21.8% are students, and the rest of the tally was divided among the Self-Employed, Unemployed, and Retired individuals who answered the survey. The survey's inclusion of unemployed individuals provides insights into the experiences and perceptions of those currently seeking employment. This group might have distinct views on matters such as job opportunities and the impact of technology on their employment prospects.

Figure 4.2

Age Bracket of the Respondents

Age

101 responses

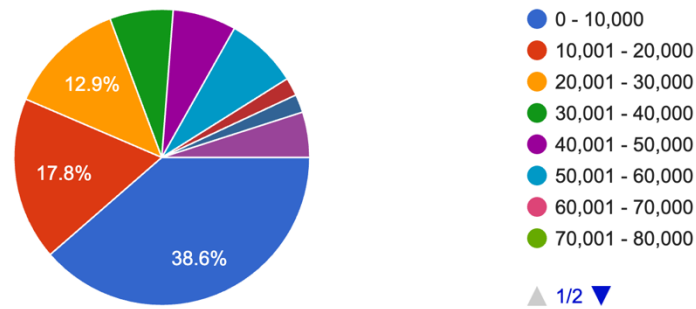


Most respondents are below the age of 42, which is 65.3% of the respondents of the survey. The remaining tally consists of individuals who are above 42 years old to 77 years old. There are no respondents from the 78-95 age group and 0-1. Considering that respondents are predominantly below the age of 42, it might be beneficial to analyze the survey data concerning generational cohorts (e.g., Millennials, Gen Z, Gen X). This could unveil generational trends in technology usage and attitudes.

Figure 4.3

Income Bracket of the Respondents

Income (per month)
101 responses



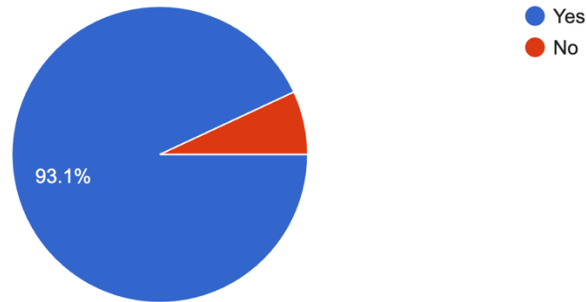
The fact that 38.6% of participants have an income of 0-10,000 PHP per month underscores the presence of individuals who might be dealing with financial constraints. This group's perspectives could offer insights into the challenges and opportunities related to technology adoption within limited budget constraints. For higher salaried participants, while in smaller quantities, it's important to note their presence. These respondents could offer unique insights into the experiences of those with greater financial resources. Income levels often influence technology adoption, access, and usage. Analyzing responses based on income brackets could reveal patterns in terms of device ownership, internet access, and digital behaviors.

Figure 4.4

Computer Usage

Do you know how to use a computer?

101 responses



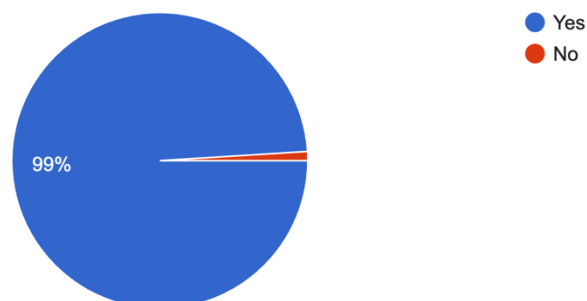
The majority of respondents who are familiar with using a computer underscores the prevalence of computer technology knowledge among the survey participants. It is important to consider the other 7 respondents (7% of the total) who indicated that they do not know how to use a computer, which could reflect a digital divide, where certain individuals lack access to or familiarity with technology.

Figure 4.5

Computer Accessibility

Do you have access to a computer? (Mobile devices, tablet, computers of any kind that can transmit and receive messages offline and online)

101 responses



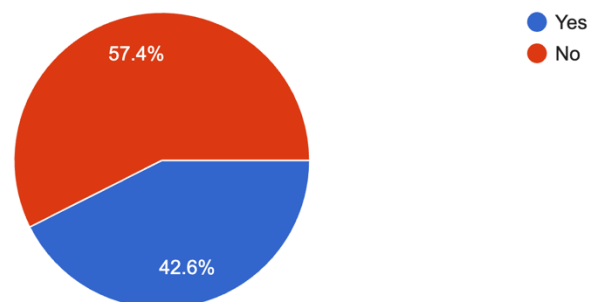
The responses reveal a high prevalence of computer access among surveyed participants, with only a single respondent reporting no access. This insight emphasizes the significance of digital inclusion efforts and underscores the need for comprehensive analysis that considers various demographic, socioeconomic, and geographic factors.

Figure 4.6

Latest Trends Adoption

Do you keep up and get the latest trends in technology? (Newest phones, computers, etc.)

101 responses



The majority who answered “yes” could be considered tech-savvy individuals who have a keen interest in technological advancements. The minority who answered “no” might have different priorities and reasons for not actively following the newest trends in technology. By analyzing the age distribution of those who participated, it could reveal whether there’s a generational pattern; younger respondents might be more inclined to follow technology trends compared to older participants.

Table 2.

Connection Speed (1 – low, 5 – high)

Table 2. Connection Speed (1 – low, 5 – high)

COUNTA of Age		How fast is your internet connection?					Grand Total	
Age	Location	1	2	3	4	5		
11 - 26	National Capital Region (NCR)				1	1	2	
	Region 3 - Central Luzon				2		2	
	Region 4A - CALABARZON	1	6	7			14	
	Region 5 - Bicol			2	2	1	5	
	Region 6 - Western Visayas				1		1	
	Region 7 - Central Visayas			1	1		2	
11 - 26 Total		1	9	14	2	26		
27 - 42	National Capital Region (NCR)		1	3	6	6	16	
	Region 3 - Central Luzon			1	2	2	5	
	Region 4A - CALABARZON			1	3	1	5	
	Region 5 - Bicol	1	5	4	1		11	
Region 7 - Central Visayas			1	1	1	3		
27 - 42 Total		1	1	11	16	11	40	
43 - 58	National Capital Region (NCR)			2	1		3	
	Region 2 - Cagayan Valley						1	
	Region 3 - Central Luzon						2	
	Region 4A - CALABARZON				2	4	1	7
	Region 5 - Bicol			6	1		7	
	Region 6 - Western Visayas					1	1	
43 - 58 Total		13	7	1	21			
59 - 68	National Capital Region (NCR)		1	3	2		6	
	Region 3 - Central Luzon			1			1	
	Region 4A - CALABARZON					1	1	
	Region 5 - Bicol		1		1		2	
59 - 68 Total		3	4	3	10			
69 - 77	National Capital Region (NCR)		1	1			2	
	Region 4A - CALABARZON					1	1	
	Region 5 - Bicol			1			1	
69 - 77 Total		2	2	4				
Grand Total		2	1	38	43	17	101	

Internet connection speed “4” is prominent in NCR and CALABARZON across different age groups, other locations have carrying patterns in terms of internet connection speed. The data shows that the age group with the highest frequency of participants (27-42) tends to have higher counts for internet connection speed ratings, this could suggest that individuals in this age range might have better access and familiarity with digital technologies and concepts including digital inclusivity and internet infrastructure.

Table 3.

Accessibility of Social Media

COUNTA of Age	Do you have access to Social Media? (Facebook, Instagram, Twitter, YouTube, etc.,)		
	No	Yes	Grand Total
11 - 26		26	26
27 - 42		40	40
43 - 58		21	21
59 - 68		10	10
69 - 77		1	3
Grand Total		1 100	101

Table 4.

Accessibility of Academic Resources

COUNTA of Age	Do you have access to Academia.edu, JSTOR, Research Gate or any Online Libraries?		
	No	Yes	Grand Total
11 - 26		13	13
27 - 42		28	12
43 - 58		15	6
59 - 68		7	3
69 - 77		2	2
Grand Total		65	36

Table 5.

Accessibility of Online Marketplaces

COUNTA of Age	Do you have access to Shopee, Lazada or any online marketplace?		
	No	Yes	Grand Total
Age			
11 - 26		1 25	26
27 - 42		3 37	40
43 - 58		3 18	21
59 - 68		3 7	10
69 - 77		1 3	4
Grand Total		11 90	101

Tables 1-4 suggests that digital inclusivity in terms of social media access is evident across various age groups, the implication of the data provides supports the notion of digital inclusivity by showing that individuals across different age groups are actively participating in digital activities across social media. However, the trend of adoption seems to be more accessible and relevant to age groups 11-26 to 43-58. The adoption within the older age group suggests that digital platforms and technologies are becoming more accessible and relevant, ultimately promoting a more inclusive digital society.

Social Disparity

The distribution of the survey questionnaire was fairly easy, individuals who have a computer device (mobile, tablet, or any kind of computer that has access to WWW) and an internet connection could easily access the survey. With the survey being sent out to the web, it already created a rift between those who have a fair amount of accessibility and those who don't.

The survey has 101 respondents with various ages, location-based and diverse occupations. 62 were unable to access the survey outside a Facebook link and were senior citizens who have no prior experience in using the World Wide Web aside from social media networks to talk to their families.

In the study, a notable occurrence among most respondents living outside of Metro Manila was their lack of knowledge of using computers. The paper investigates how these social disparities impact the development of the Philippines' digital society and its implications for cyberage inequity. It highlights the existence of a divide between privileged individuals, who have better access to technology, and underprivileged individuals facing limitations and barriers in adopting and benefiting from digital advancements.

Of the 163 individuals who participated in the study, 42% indicated having little to no knowledge of operating computers beyond social media and basic functionality. Some respondents provided explanations for their limited computer literacy. For instance, one individual, who is already retired, deemed computer skills unnecessary, as their communication needs were fulfilled through calls, texts, and facetime with family and friends. Another respondent expressed reservations about technology, referring to it as a "bottomless pit" of upgrades, suggesting that investing in computers might be wasteful given their lack of knowledge beyond basic computing and documentation.

Conversely, other respondents expressed enthusiasm for using computers and staying up to date with the latest gadgets. They emphasized the value of technology

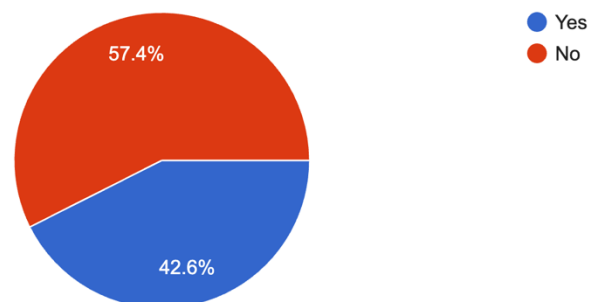
in the development of both technology and society. For some, access to fast internet and computer processors became essential during the pandemic, enabling them to work from home and enjoy a lifestyle they wouldn't have otherwise.

The results highlight the disparities in computer literacy and technology adoption among respondents, indicating the importance of addressing social disparities to foster a more inclusive digital society that benefits all members of the community.

Figure 5

Do you keep up and get the latest trends in technology respondents

Do you keep up and get the latest trends in technology? (Newest phones, computers, etc.)
101 responses



Some respondents who expressed hesitation in keeping up with the latest technology cited reasons such as difficulty in understanding the features of their current devices. For them, upgrading to newer gadgets seemed futile when they hadn't fully grasped the functionalities of their existing devices. Another concern mentioned by a respondent was the high cost of technology upgrades, especially amid rising expenses for essential needs like food and groceries. Prioritizing how they spent their family's money became crucial, especially during the pandemic when resources were more limited.

Conversely, those who embraced the latest technologies acknowledged the convenience they brought to their lives, despite the higher costs. For some, staying updated with technological advancements was essential to their job, especially in the field of technological system development. The majority of respondents who kept up with the latest trends resided in NCR and CALABARZON, with most being employed individuals. However, one student respondent expressed a desire to own trendy gadgets but refrained from burdening her parents since her current devices were still functional.

Some respondents identified digital illiteracy as a hindrance to keeping up with the latest gadgets. Their limited knowledge of basic computing principles made it challenging for them to embrace unfamiliar technologies. One older respondent highlighted not wanting to be a burden to her working children when she couldn't fully utilize specific gadgets.

The findings emphasize the diverse perspectives and challenges faced by respondents concerning technology upgrades, highlighting the importance of considering factors such as age, occupation, and digital literacy in understanding their attitudes toward the latest technological trends.

The study highlights barriers and constraints between marginalized communities and accessibility. The analysis indicates that respondents from NCR and CALABARZON regions, which are more developed areas, were more likely to keep up with technological trends. This suggests a technological divide between urban and rural

or less developed regions, where marginalized communities are often located. The disparity in technology adoption between these regions further exacerbates the digital divide and inequity experienced by marginalized communities. While Metro Manila strives to adapt to the latest technology and upgrades, individuals living outside of Metro Manila, particularly in marginalized communities, face challenges in computer literacy. Among the respondents, a significant number of older individuals, students, and those unemployed, reported limited knowledge of using computers beyond basic functionalities. This digital illiteracy in marginalized communities may be attributed to various factors, including limited access to formal education, lack of exposure to technology, and economic constraints.

Cyberage Inequity

Many respondents from these communities reported limited or no access to the survey due to computer illiteracy or lack of internet connectivity. This disparity in access to technology exacerbates the cyberage inequity, as underprivileged individuals are unable to fully participate in the digital society.

The survey results confirm the relationship of social disparities on an individual's digital presence, from the distribution of the survey to the collection of responses. Marginalized communities, such as senior citizens and those residing outside the central regions of the Philippines, face challenges in their online presence and status despite the increasing need for digital participation. The survey data underscores the importance of digital literacy and empowerment in addressing cyberage inequity. Initiatives that provide digital literacy training and affordable access to technology

can bridge the gap between privileged and underprivileged individuals, enabling the latter to fully participate in the digital age and benefit from the opportunities it offers.

Geographical location plays a role in cyberage inequity, as respondents from more developed regions, like NCR and CALABARZON, were more likely to keep up with the latest technology trends. This indicates that urban areas tend to have better access to technology, creating a digital divide between urban and rural communities. Respondents from marginalized communities, including older individuals and the unemployed, mentioned financial constraints as a reason for not upgrading to the latest technology. The high cost of technology upgrades can exclude underprivileged individuals from benefiting from the latest innovations, perpetuating the digital divide.

The adaptation of new media exemplifies the integration of dependent technologies that construct digital infrastructure, facilitating the distribution of information and data through societal and cultural networks (Barney, 2004). Social networking sites like Facebook, Twitter, Instagram, and YouTube are prime examples of the Network Society, enabling individuals to access information and connect with others within their network. Analyzing the social environment of the survey respondents and comparing it to their digital autonomy reveals a lack of change in their social structure.

These social structures involve the interplay of "production/consumption, power, and experience" (Castells, 2000). While power dynamics in society remain relatively consistent in the digital environment, it also creates a culture of exclusivity, discriminating against individuals who lack access to networks and information. For

instance, senior citizens may struggle to access websites and applications due to inexperience, while younger individuals with constant access to new information benefit from fewer restrictions.

Educational institutions in rural areas also face challenges, with limited resources for good processing computers and reliable internet connectivity, hindering access to notable websites for studies. Statista reported that as of September 2021, only 63% of Filipinos have internet access, with a majority of 84% residing in the National Capital Region, while Mindanao lags behind at 47%.

The Network Society, as a global system, contributes to further globalization and digitalization, allowing individuals to create alternate identities mirroring their societal environment in the digital world (Castells, 2005). Addressing these disparities, specifically how disadvantaged marginalized communities are with digital exclusivity, promotes more accessible resources and an inclusive digital environment.

Chapter V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The presented thesis explores the impact of social disparities on cyberage inequity in the development of the Philippines' digital society. The study utilizes a quantitative research design, with a survey questionnaire distributed online to 163 respondents. The survey results reveal significant challenges in computer literacy, particularly among marginalized communities, such as senior citizens and those living outside Metro Manila. Economic constraints and geographical location contribute to the digital divide, limiting access to technology and hindering the adaptation of new media. The Network Society, characterized by the integration of dependent technologies, further exacerbates the digital divide by creating an environment of digital exclusivity. Efforts to bridge the divide and promote digital inclusion are crucial in fostering a more equitable and inclusive digital environment for all members of society.

Conclusion

This study sheds light on the prevailing cyberage inequity in the development of the digital society in the Philippines, influenced by social disparities. Cyberage inequity is defined by the significant challenges faced by marginalized communities, particularly in accessing and utilizing digital technologies. The digital divide persists due to factors of inequity such as computer illiteracy, limited access to technology and internet connectivity, and economic constraints.

The Network Society, characterized by the integration of dependent technologies, creates a digital environment of exclusivity, where privileged individuals have easier access to information and resources compared to those from marginalized backgrounds. This reinforces existing social inequalities and further worsens the digital divide.

To address cyberage inequity and promote digital inclusion, targeted interventions are necessary. Improving digital infrastructure and integrating digital literacy into formal education curriculums will also play a crucial role in bridging the divide. Implementing digital literacy programs and providing affordable access to technology to marginalized areas will empower these communities with the skills to participate meaningfully in the digital world. With collaborative efforts between government agencies, non-governmental organizations, educational institutions, and private sectors are essential to create sustainable and substantial solutions.

Addressing cyberage inequity will not only unlock the full potential of individuals but also contribute to the overall development and progress of the nation in the digital age. Ultimately, embracing digital inclusion will pave the way for a more connected, empowered, and prosperous Philippines.

Recommendations

The research found that marginalized communities have limited to no access to basic computer amenities such as programs that focus on basic computer skills, computer literature development, and sustainability due to unjust resource management and procurement.

Based on the findings and analysis presented in the thesis, the following recommendations are proposed to address cyberage inequity and promote digital inclusion in the Philippines:

- **Digital Literacy Programs**

- Programs that focus on providing basic computer skills. These programs could empower individuals, specifically in marginalized communities, senior citizens, and individuals residing in rural areas. This could also work on a discourse to integrate digital literacy and technology training into basic education curriculums to ensure students from all backgrounds have the necessary skills to navigate the digital age.

- **Digital Infrastructure Development**

- Collaborate with private and public sectors to provide substantial access to affordable and reliable technology; computers and internet connectivity. By improving digital infrastructure, particularly in rural

areas, can ensure better online resources for education, employment, and social participation.

- **Public Awareness Campaigns**

- Launch public awareness campaigns to highlight the importance of digital inclusion and bridge the digital divide. These campaigns should target both the general public and policymakers to garner support for initiatives promoting digital equity.

- **Collaborative Partnerships**

- Foster collaborations between government agencies, non-governmental organizations, educational institutions, and private companies to collectively address cyberage inequity. These partnerships can pool resources, expertise, and initiatives for more comprehensive and sustainable solutions.

- **Tailored Initiatives for Marginalized Groups**

- Develop tailored initiatives to address the specific needs of marginalized groups, such as older individuals, persons with disabilities, and low-income households, ensuring that their unique challenges are taken into account.

- **Data Collection and Monitoring**

- Continue to gather data on digital access, usage, and proficiency in various communities to monitor progress and identify areas that require

further attention. Regular assessment and evaluation of initiatives will help refine strategies and ensure their effectiveness.

By implementing these recommendations, the Philippines can make significant strides in addressing cyberage inequity and creating a more inclusive digital society that benefits all its citizens.

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APPENDIX A

Research Survey Questions

Link to the survey: https://docs.google.com/forms/d/16-GaoUV1Z1kr2rmCAU7fr_cXt2fP41gUCRe7Ps-YPSc/viewform?chromeless=1&edit_requested=true#responses

Survey Questions:

1-4 questions are demographical

1. Age
2. Location
3. Occupation
4. Income (per-month)

5-20 close-ended questions to determine their accessibility

5. Do You know how to use a computer?
6. Do you have access to a computer?
7. Do you keep up and get the latest trends in technology?
8. Why so? (in accordance to question 7)
9. Do you have internet connection?
10. How fast is your internet connection?
11. Do you have access to social media?
12. Do you have access to shopee, Lazada or any online marketplace?
13. Do you have access to Academia.edu, JSTOR, Research Gate or any Online Libraries?
14. How Often Do you use your computer device (using a scale)

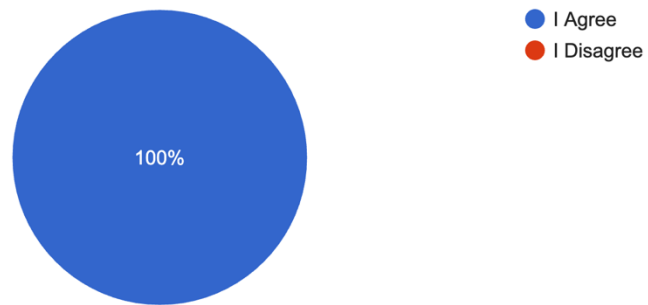
15. Is it easy for you to navigate through the internet?
16. How often do you use social media sites?
17. How often do you use online market places?
18. How often do you use online educational resources?
19. Is it relatively easy for you to keep up with online trends?
20. What do you do online? (drop down multiple answer)

APPENDIX B

Research Survey Answers

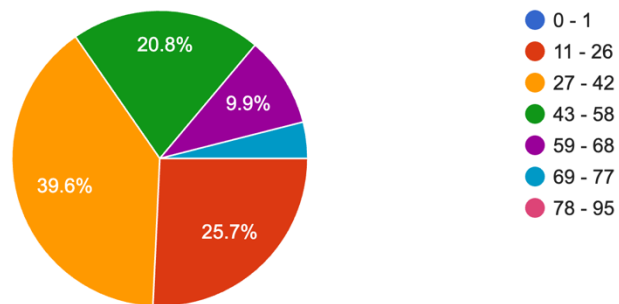
By clicking the "I Agree" button below, you are consenting to participating in the survey.

101 responses



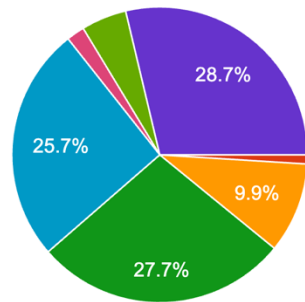
Age

101 responses



Location

101 responses

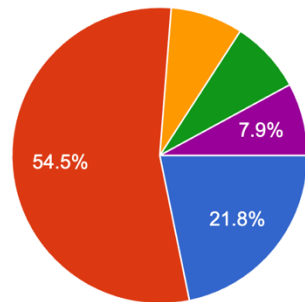


- Region 1 - Ilocos Region
- Region 2 - Cagayan Valley
- Region 3 - Central Luzon
- Region 4A - CALABARZON
- Region 4B - MIMAROPA
- Region 5 - Bicol
- Region 6 - Western Visayas
- Region 7 - Central Visayas

▲ 1/2 ▼

Occupation

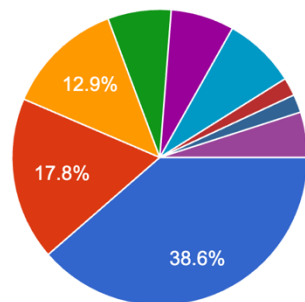
101 responses



- Student
- Employed
- Self-Employed
- Unemployed
- Retired

Income (per month)

101 responses

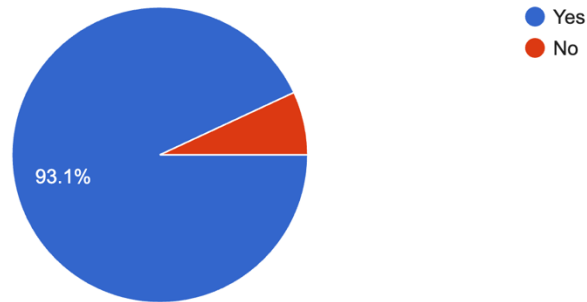


- 0 - 10,000
- 10,001 - 20,000
- 20,001 - 30,000
- 30,001 - 40,000
- 40,001 - 50,000
- 50,001 - 60,000
- 60,001 - 70,000
- 70,001 - 80,000

▲ 1/2 ▼

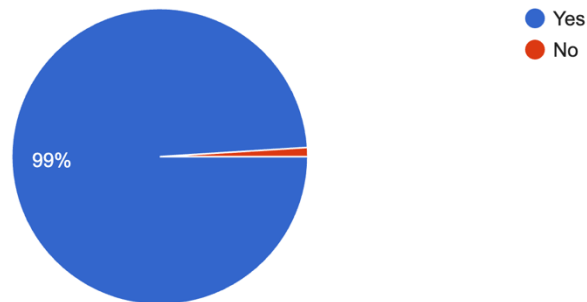
Do you know how to use a computer?

101 responses



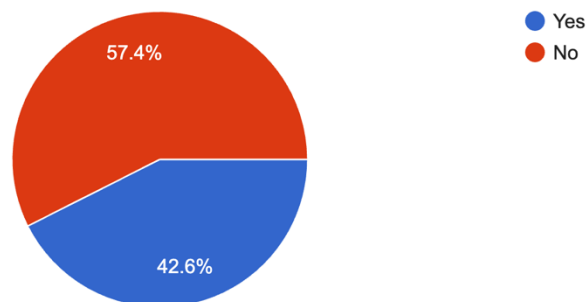
Do you have access to a computer? (Mobile devices, tablet, computers of any kind that can transmit and receive messages offline and online)

101 responses



Do you keep up and get the latest trends in technology? (Newest phones, computers, etc.)

101 responses



8. Why so?

My work requires being up-to-date to recent developments in technology, as such it is important that I keep up with the latest trends

To keep with the performance needed by specific applications.

find latest improvements in technology

I'm not a techi person. I'm ok with my iPhone and simple desktop computer.

Just put on savings instead to buy latest gadgets

I think it is not necessary.

I have to make use of my money wisely.

Technology makes our life easier

Expensive

Technology has become a way for us to easily access information conveniently and fast thus we are able to keep up with the latest trends.

Because most of the time i use my phone and I felt curious on everything so that i prefer to use technology all the time

.

Keep me updated of technology and its upgraded functions

dont have enough money

A lot of trendy/latest tech or gadgets are not a necessity for me. I don't feel the need to keep up with them.

Technology is evolving and upgrading

To be updated

Well, its a must we have to be updated on what's in what's the newest with reference to technology so as to to keep abreast on my part on technological system developmeny

Not interesred

So I can communicate freely with relatives, fri

Na

I am contented with my cellphone unit right noe

To be updated/knowledgeable on the latest technology

to keep up with the technology

To keep up with the technological advances related to my job.

I maximize the usage of my gadget until it dies down on its own.

Buzy

New technology

to be updated about the new technologies development global.

It is essential

I am not interested in updating my gadgets to the latest trend. I prefer to be practical.

By sponsor(smart, globe)

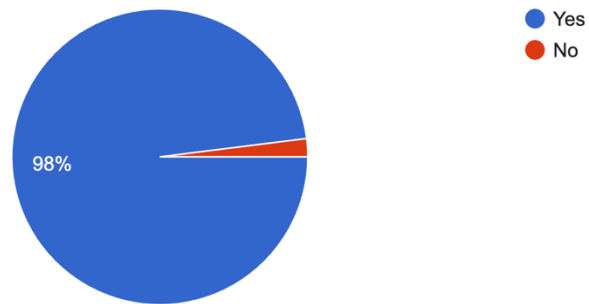
seldom open cp

to update with new trends

Because of fast depreciation value

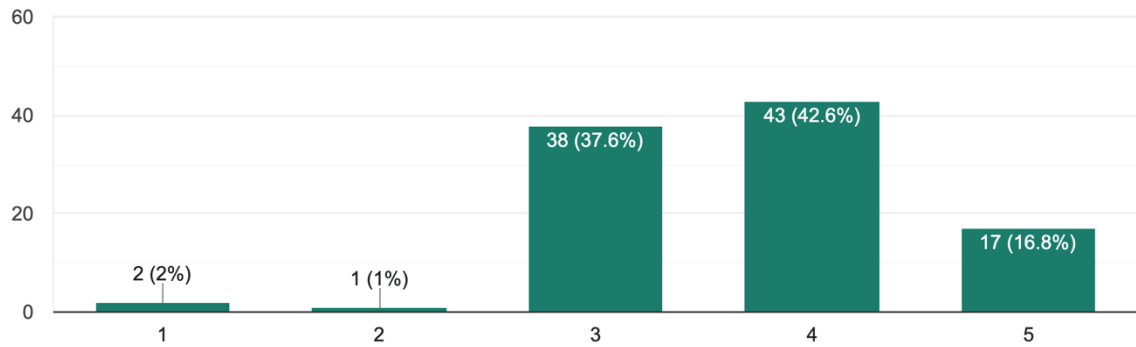
Do you have internet connection?

101 responses

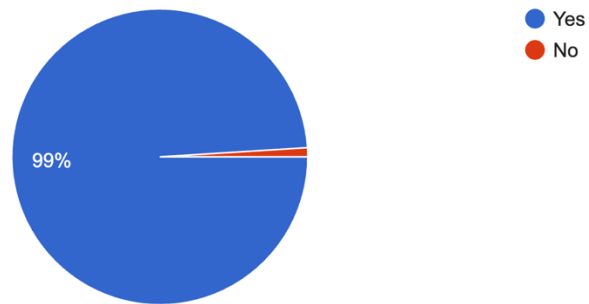


How fast is your internet connection?

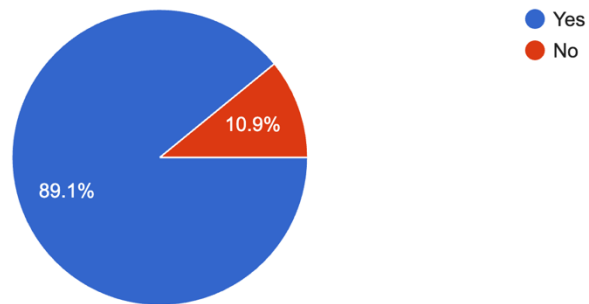
101 responses



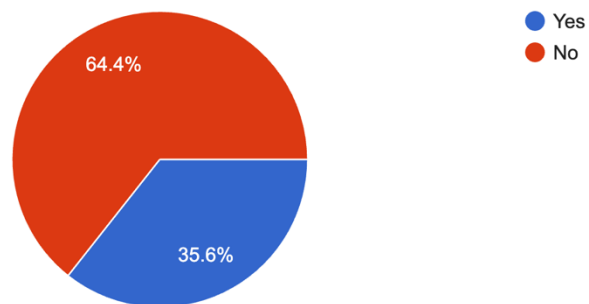
Do you have access to Social Media? (Facebook, Instagram, Twitter, YouTube, etc.)
101 responses



Do you have access to Shopee, Lazada or any online marketplace?
101 responses

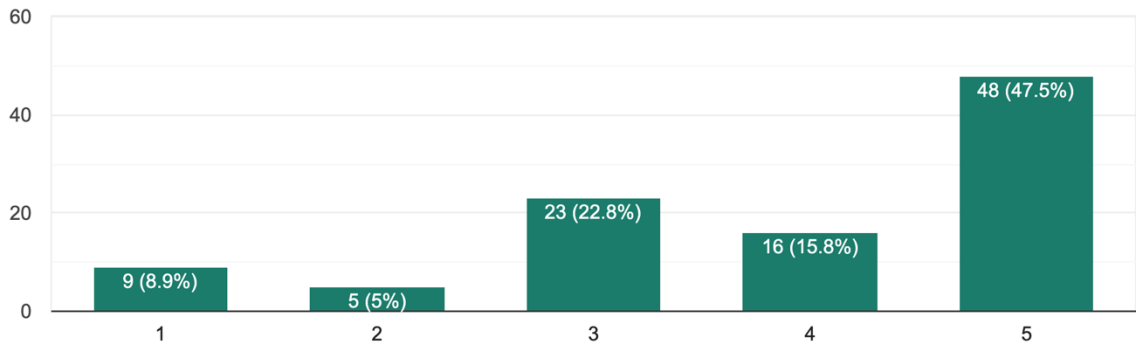


Do you have access to Academia.edu, JSTOR, Research Gate or any Online Libraries?
101 responses



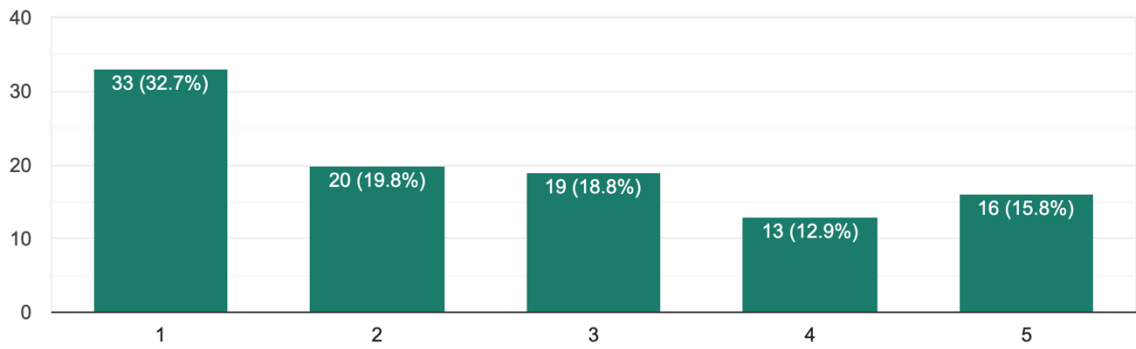
How often do you use your computer devices?

101 responses



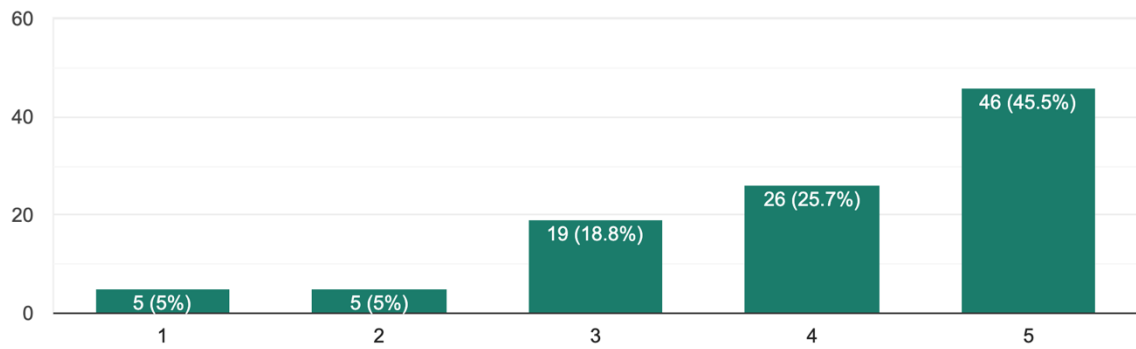
Is it easy for you to navigate through the internet?

101 responses



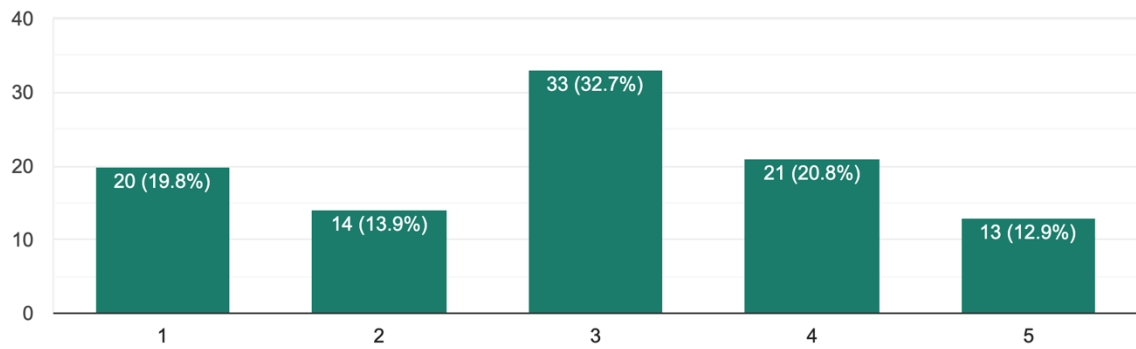
How often do you use social media sites?

101 responses



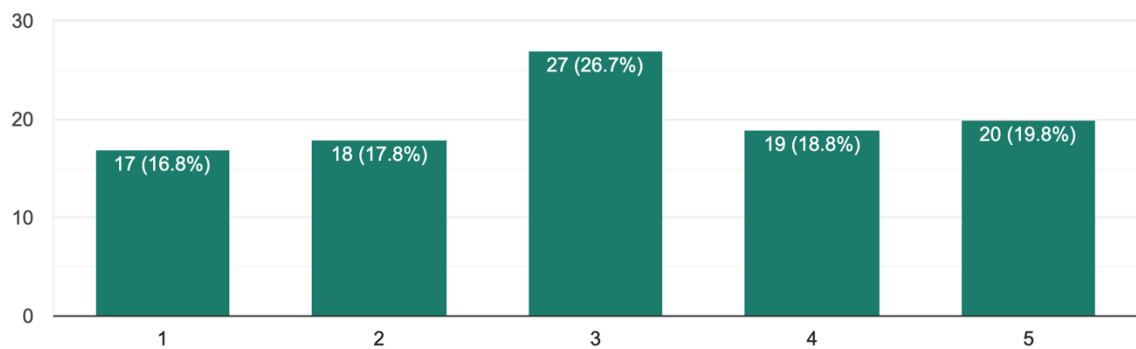
How often do you use online market places?

101 responses



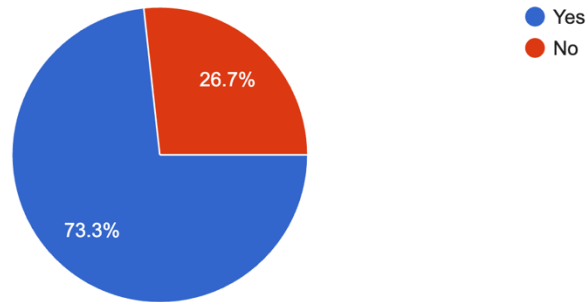
How often do you use online educational resources?

101 responses



Is it relatively easy for you to keep up with online trends?

101 responses



What do you do online? (check all that applies)

101 responses

