

Why Women Still Experience Unequal Digital Access and Opportunities: Comparing How Social Norms, Economic Barriers, Technology Skills, and Online Safety Challenges Shape the Gender Digital Divide in Indonesia and Zimbabwe

Suharnanik Suharnanik^{1*}

¹Wijaya Kusuma University, Surabaya, Indonesia

Mohammad Suud²

²Wijaya Kusuma University, Surabaya, Indonesia

Yudi Harianto Cipta Utama³

³Wijaya Kusuma University, Surabaya, Indonesia

Cindy Kushata⁴

⁴Wijaya Kusuma University, Surabaya, and students from Zimbabwe

Blessing Chainaimoyo Change⁵

⁵Wijaya Kusuma University, Surabaya, and students from Zimbabwe

Corresponding author : nanik_fisip@uwks.ac.id

Abstract

The gender digital divide remains a multidimensional challenge across the Global South, particularly for women in Indonesia and Zimbabwe. Using a mixed-methods design that integrates quantitative survey data with qualitative interviews, this study examines how social norms, economic barriers, technological skills, and online safety risks shape women's unequal digital access and participation in both national contexts. The findings reveal significant structural disparities: Zimbabwe records lower internet penetration (59.1%) and a wider gender gap (15%), with only 45% of women possessing basic digital skills, while 78.9% cite the high cost of data and 55.3% report poor connectivity as major barriers. In contrast, Indonesia demonstrates higher internet penetration (73.7–79.5%) and a smaller gender gap (1–3%), yet women remain disadvantaged in advanced digital competencies, productive digital engagement, and online safety, with 45% reporting experiences of gender-based online violence. Drawing on Cyberfeminist theory, the study illustrates the ambivalent nature of digital technologies, which simultaneously

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offer new avenues for empowerment while reproducing patriarchal control, objectification, and gendered surveillance. An intersectional analysis further reveals that women who are poor, less educated, or residing in rural areas face compounded forms of digital exclusion due to the overlapping effects of gender, socioeconomic status, and geographic marginalization. The study concludes that expanding internet access alone is insufficient to bridge the gender digital divide; targeted interventions must include gender-responsive digital literacy initiatives, robust online safety protections, supportive policy frameworks, and community-based empowerment ecosystems. By comparing Indonesia and Zimbabwe, the study highlights that despite contextual differences, both countries share underlying structural patterns of inequality, underscoring the need for cross-country learning and coordinated strategies to promote safer and more inclusive digital futures for women.

Keywords: gender digital divide; Indonesia; Zimbabwe; digital literacy; cyberfeminism; intersectionality.

INTRODUCTION

The development of digital technology over the past two decades has fundamentally transformed social, economic, and cultural structures, including in Global South countries such as Indonesia and Zimbabwe. Information and communication technology (ICT) is now a crucial prerequisite for access to education, economic participation, social mobility, and global connectivity. However, amidst rapid digitalization, gender-based inequality remains a structural issue, creating significant barriers for women to equally benefit from these technological developments. Various studies confirm that the digital gender divide is not simply a matter of physical access to devices and the internet, but rather a multidimensional phenomenon tied to social norms, economic structures, cultural representations, literacy skills, and the risk of gender-based violence in online spaces (Surti et al., 2024). Indonesia and Zimbabwe provide interesting examples of the dynamics of the digital gender divide, as they both exhibit similar patterns of inequality but operate within very different economic, political, and social contexts. Data shows that Indonesia has higher internet penetration, at 73.7%–79.5%, with a gender gap of around 1–3% (APJII, 2023, 2024). In contrast, Zimbabwe has a penetration rate of 59.1%, with a much larger gender gap of 15%, favoring men (Choczyńska, 2024). However, the availability of technology does not automatically guarantee equitable distribution of its benefits to women, as access does not always equate to the ability to use technology productively and safely. The quality of this



technology use is crucial in understanding how the digital gender divide is reproduced in social life.

In Indonesia, women generally have physical access to digital devices and internet connections. However, several studies indicate that this access has not fully translated into in-depth digital literacy. Suharnanik et al. (2024), in their study on women's digital media literacy, found that women tend to be more passive consumers than producers of information. This limitation not only limits women's ability to participate in the digital economy but also makes them more vulnerable to misinformation, content manipulation, and online security risks. This suggests that women's digital literacy is not only related to technical skills in using devices, but also to critical skills in accessing, processing, and producing information independently. In contrast, Zimbabwe faces more fundamental structural barriers, particularly related to affordability and digital infrastructure. Based on survey data in their study, 78.9% of respondents reported high data costs as a major barrier, while 55.3% faced poor connectivity. Furthermore, only 45% of Zimbabwean women possess basic digital skills (Long et al., 2023). These barriers not only limit online activities for educational or work purposes but also prevent women from engaging in the digital economy. As a result, only 25% of women in Zimbabwe are involved in e-commerce activities, significantly lower than the 37% of Indonesian women who participate—particularly in the digital MSME sector (Fauzia & Hidayati, 2023; Rajagukguk et al., 2023). In addition to structural and economic factors, social norms and cultural expectations also reinforce digital gender inequality in both countries. Women are often burdened with domestic roles that limit the time, mobility, and resources they can dedicate to learning digital skills or developing online businesses. Suharnanik (2020) explains that social constructions of the female body and the performance of femininity in digital spaces often create symbolic pressures that limit women's space for expression. In her study of Bourdieu's subjectivism-objectivism dilemma in social media, she shows that women are often trapped in a social habitus that demands they conform to certain beauty standards, making digital spaces an arena for symbolic reproduction that limits women's potential agency. These findings show that although digital media can be a space for expression, it can also be a space for social control that reproduces gender bias.

This perspective aligns with cyberfeminist thinking, which views technology as an ambivalent field: it can be a vehicle for empowerment, but also a tool for the reproduction of patriarchal structures. Haraway (1991) describes technology as a space for identity negotiation, while Suharnanik (2022) shows that social media opens up significant opportunities for the empowerment of Indonesian women through community networks, the creative economy, and



access to knowledge. However, she also notes that technology presents challenges in the form of risks of online harassment, digital misogyny, and the objectification of women's bodies, all of which limit women's sense of security in using digital spaces. This reality is also reflected in the empirical findings in your file. A total of 22.2% of Zimbabwean women reported experiencing online harassment, and 26.3% reported direct harassment related to their digital activities. Meanwhile, 45% of Indonesian female internet users have experienced online gender-based violence (UNFPA & SurveyMETER, 2020). These high rates of violence indicate that digital spaces remain unsafe for women, and online security issues are a factor influencing women's involvement in technology. Differences in economic contexts between the two countries also influence the scale of the digital gender divide. Zimbabwe is facing a prolonged economic crisis and high inflation, making device and data costs a difficult barrier to overcome. This situation exacerbates the disparity between urban and rural women. Surveys show that nearly 90% of respondents are from urban areas, indicating that rural women are largely underrepresented in digital technology use. They are trapped in multiple inequalities encompassing poverty, geographic location, cultural norms, and low digital literacy (Kawazi, 2023).

Indonesia, despite having better infrastructure, still faces unequal access between urban and rural areas. Women in rural or remote communities often rely on unstable internet connections and lack access to adequate digital training. This finding aligns with previous studies showing that urbanization and education levels are important indicators in determining women's digital literacy and participation (Long et al., 2023). However, the most striking difference between Indonesia and Zimbabwe lies in the policy ecosystem and women's empowerment initiatives. Indonesia has a relatively more mature policy framework, including a national program for digital literacy, the protection of women and children online, and community initiatives such as Women in Tech, Girls Code, and various grassroots movements advocating for women's rights in the digital space. Indonesia also has explicit policies to increase women's participation in STEM and science and technology, as stipulated in Government Regulation No. 2 of 2022. In contrast, Zimbabwe's policies still focus on general gender issues and do not specifically address digital equality. As a result, Zimbabwean women lack strong institutional support that can promote sustainable improvements in digital literacy and online protection.

On the other hand, intersectionality is a crucial concept in understanding the digital gender divide in both countries. Women are not a homogeneous group; their experiences in the digital space are shaped by multiple identities—such as social class, education, geographic location, and age. Rural women, poor women, older women, or women with limited education face different



and more complex barriers than educated women in cities. UNICEF (2022, 2023) shows that marginalized women in various developing countries face the most extreme disparities, both in terms of access and skills. Your study also shows that some respondents stated that educated women in cities are relatively able to access and utilize technology equally, or even more actively, than men. However, this difference actually highlights the widening gap between women with socio-economic capital and those without. The digital gender divide also has implications for women's empowerment in the digital economy. Digital platforms such as e-commerce, social media, and digital financial services have opened up new opportunities for women to become entrepreneurs, build business networks, and access broader markets. However, women's ability to capitalize on these opportunities depends heavily on their digital skills. As Suharnanik et al. (2024) demonstrate, low information literacy makes it difficult for women to navigate digital workflows, verify information, and optimize the productive use of digital applications. Consequently, women who enter the digital ecosystem without critical and technical skills may find themselves trapped in a passive position, becoming mere consumers rather than independent economic actors.

Furthermore, women's representation in digital spaces also influences how they assess their own capabilities and the available spaces for participation. Suharnanik (2020) shows that symbolic structures in social media often frame women as visual objects rather than as subjects with epistemic authority in producing information. This creates ambivalence: women are present in digital spaces, but not always recognized as knowledge actors. As a result, digital spaces can be both an arena of empowerment and an arena of constraint. In Zimbabwe, these barriers are exacerbated by limited infrastructure, data costs, and a lack of policy support. When women lack stable access and adequate digital skills, opportunities for empowerment through technology become difficult to achieve. In Indonesia, the main obstacles lie in the quality of skills, online security, and structural bias against women in the technology sector. Women in Indonesia are relatively better equipped in terms of access, but still lag behind in mastering advanced skills such as coding, data analytics, and digital content production.

Thus, the comparison between Indonesia and Zimbabwe provides a comprehensive picture of how the digital gender divide operates in different economic and social contexts. In Zimbabwe, the primary challenge is the first-level gap (access divide), while in Indonesia the challenge shifts to the second-level gap (use divide) and the empowerment divide. This background demonstrates that the digital gender divide is a complex issue that cannot be addressed solely through increased internet access. A multidimensional approach is needed that



combines expanding access, improving gender-based digital literacy, developing online protection mechanisms, supporting gender-responsive policies, and strengthening community ecosystems that enable women to participate safely and productively. This cross-country comparison also emphasizes the importance of international collaboration and solidarity among women to develop shared strategies for navigating the risks and capitalizing on opportunities in the digital world.

METHODOLOGY

This study employed a mixed methods design to analyze the gender digital divide in Indonesia and Zimbabwe. This approach was chosen because the digital divide is a complex, multidimensional social issue, involving structural, cultural, and economic variables, as well as women's individual experiences. By combining quantitative and qualitative data, the study can produce a more comprehensive picture of how women experience and negotiate digital barriers in two different national contexts. This mixed methods approach refers to Creswell's (2018) guidelines, which emphasize that mixed methods are effective when one type of data alone is insufficient to answer a comprehensive research question. Creswell explains that a mixed design allows researchers to convert data, compare results, and generate richer interpretations through triangulation.

In the context of this research, quantitative data is needed to numerically describe patterns of digital access, literacy, and barriers, while qualitative data serves to explore the experiences, perceptions, and social contexts underlying these inequalities. Furthermore, this research also refers to the evaluative-qualitative approach as proposed by Patton (2002). Patton emphasizes the importance of a deep understanding of participants' perspectives, especially when research addresses the experiences of vulnerable groups such as women who experience digital exclusion. The use of semi-structured interviews in this study allows researchers to interpret the meanings women give to their digital experiences, as well as to understand the power relations and social norms that influence technology access and use. Thus, mixed methods were chosen not only to enrich the data but also to accurately map the structural and personal dynamics that influence the digital gender divide in Indonesia and Zimbabwe. This approach is consistent with theoretical analyses in cyberfeminism and intersectionality studies, which view technology as a space influenced by power relations and gendered social structures.

Quantitative data were collected through two online surveys using Google Forms. The first survey was aimed specifically at women in Zimbabwe (n = 19), while the second survey involved a mix of female and male respondents (n = 38). The use of online surveys was chosen to maximize



reach, given that respondents were digital device users. This survey approach aligns with Creswell's (2018) recommendation regarding the use of descriptive survey designs to map social phenomena on a small or medium scale when access to respondents is limited by geography or infrastructure. Qualitative data were obtained through semi-structured interviews with policymakers, academics, gender activists, and female internet users in both Indonesia and Zimbabwe. Interviews were conducted via Zoom and WhatsApp Call, adjusting to participants' connectivity conditions. Interview topics included: women's experiences in accessing technology, socio-cultural barriers to internet use, online security risks such as harassment and doxing, perceptions of national policies, and forms of digital empowerment they experience or desire. The semi-structured interview method was chosen because it provided flexibility for researchers and participants to engage in in-depth dialogue. Patton (2002) emphasized that this type of interview provides a space for participants to share authentic experiences that cannot be captured through surveys, especially when discussing sensitive issues such as online gender-based violence. The final stage is the integration (mixing) of quantitative and qualitative data. This integrative approach aligns with Creswell's (2018) recommendation regarding convergent mixed-method design, which analyzes two datasets in parallel and then combines them in the final interpretation to strengthen the validity of the research.

The study employed purposive sampling, selecting participants based on specific criteria relevant to the research objectives. Inclusion criteria included: women with access to digital devices, social media users, living in urban or semi-urban areas, and experience using the internet for education, work, or economic activities. The choice of purposive sampling is supported by Patton's (2002) argument that when the research objective is to deeply understand the experiences of a particular group, the sample does not need to be statistically representative, but rather informationally rich. Survey data were processed using descriptive statistical techniques, including percentages, frequency distributions, and means. Data were presented through graphs, tables, and diagrams to clarify patterns of disparities in access, usage, digital literacy, and gender digital barriers. Descriptive statistics were chosen because the study focused not on testing causal hypotheses but on comprehensively mapping the phenomenon. This approach aligns with Creswell's (2018) recommended practice for exploratory social research. Patton (2002) emphasized that qualitative analysis should focus on identifying patterns and meanings, so researchers record not only what respondents say but also the surrounding social context. This thematic approach is also relevant to the analysis of cyberfeminism and intersectionality theories used in your research, as both theories emphasize how women's individual narratives are closely



linked to digital power structures.

FINDING AND RESULT

The findings of this study indicate that the digital gender divide in Indonesia and Zimbabwe is a complex phenomenon rooted in interconnected structural, cultural, and economic dynamics, as well as digital security risks. Although the two countries have different economic characteristics and ICT infrastructure, women in both contexts continue to face similar barriers in the form of restrictive social norms, economic inequality, limited technological skills, and the risk of gender-based violence in digital spaces. These results strengthen the argument that the digital gender divide cannot be understood solely through internet access indicators but needs to be analyzed within the context of broader power relations and social structures. The Cyberfeminist theoretical approach developed by Donna Haraway (1991) and intersectional analysis are crucial for understanding how technology becomes a simultaneously empowering and oppressive space. We oppress women.

Quantitative findings indicate that there are significant differences in access and quality of digital infrastructure between Indonesia and Zimbabwe. Indonesia has an internet penetration of 73.7–79.5% with The gender gap is only 1–3%, while Zimbabwe has 59.1% penetration, with a 15% gender gap favoring men. Survey data makes it clear that Zimbabwean women face significantly more significant structural barriers. 78.9% of respondents reported very high data costs, 55.3% faced poor connectivity, and only 45% of women had basic digital skills (Long et al., 2023). In contrast, Indonesian women have higher levels of basic skills (62%), but their participation remains limited by lower levels of advanced digital literacy, institutional bias, and persistent domestic workloads. These findings are consistent with the analysis of Surti et al. (2024), which shows that women in developing countries face multi-level barriers that prevent them from becoming productive digital users.

1. Social Norms: Reproduction of Patriarchy in Digital Space

One of the most powerful qualitative findings of this study is how gender-based social norms Women in both Indonesia and Zimbabwe are hindering women from fully participating in the digital world. Cultural norms that prioritize men in access to devices, STEM education, and technology ownership leave women at a disadvantage. equality from the start. In the Zimbabwean context, several respondents noted that women are perceived as less deserving of technology access because domestic roles are considered their primary priority. This norm directly impacts



women's low participation in digital use for economic and educational activities. This situation is not entirely different in Indonesia. Although Indonesian women have better physical access, cultural structures still impose heavy domestic roles on them, reducing the time available to learn technology or develop more productive digital skills. Suharnanik (2020), in her analysis of women's representation on social media, asserts that women in Indonesia remain trapped within symbolic structures that require them to conform to traditional expectations of femininity.

This norm means that women's presence in digital spaces is often evaluated not by their intellectual contributions, but by their visual aesthetics and gender performance. This analysis aligns with Donna Haraway's Cyberfeminism theory, which views technology as not a neutral space, but rather as intertwined with patriarchal power relations that have long governed women's bodies, identities, and expressions. In her "Cyborg Manifesto," Haraway (1991) stated that women exist in an ambivalent state: technology can break down patriarchal boundaries, but it can also reinforce them. This is evident in the findings of this study. While the internet allows women to access education, economic opportunities, and new social networks, social norms still restrict how they can present and interact online. Cultural norms that position women as visual objects, rather than knowledgeable subjects, make the digital world a complex negotiation space between freedom and control. In the Zimbabwean context, social norms even impact women's decisions to own a mobile phone or purchase a data plan. Several respondents noted that families perceive the internet as unimportant for women, or even risky because it opens up opportunities for "inappropriate behavior." Such norms reinforce the argument that the digital gender divide cannot be understood separately from the cultural structures that historically govern gender relations.

2. Economic Barriers: Structural Inequalities and Unequal Access

Economic barriers emerged as a dominant factor in shaping the digital gender divide, particularly in Zimbabwe. High data and device costs make it difficult for women to access the internet consistently. According to the survey, 78.9% of respondents cited data costs as the biggest barrier, while 55.3% cited poor connectivity as the second. Furthermore, women's low participation in formal employment or strong economic standing means many lack a steady income to finance internet use. This exacerbates the gender gap in digital literacy and technology-based economic participation. In Indonesia, economic barriers are less severe than in Zimbabwe, but they remain significant for women in rural and low-income areas. Women in these groups often lack personal devices or rely on devices belonging to other family members, usually men.



This reduces women's privacy and prevents them from accessing digital training or leveraging technology for productive activities such as farming. MSMEs Digital literacy. In line with the findings of Juwita et al. (2024), women in Indonesia living in remote areas have significantly lower digital skills than urban women, with the gap widening. From an intersectional feminist perspective, these economic barriers relate not only to gender but also to social class, geographic location, educational attainment, and age. Crenshaw (1989) asserted that gender inequality is always layered, and these findings reinforce the relevance of this concept. Poor women in rural Zimbabwe and Indonesia experience dual barriers: not only due to gender structures, but also due to poverty and geographic isolation. This explains why young, professional women in large cities are much more active in the digital world, while women in rural areas remain left behind despite increased national access.

3. Technology Skills: Digital Literacy Limitations and Their Impact on Empowerment

Digital skills are a crucial component of the gender digital divide. Findings show that in Zimbabwe, only 45% of women possess basic digital skills. This low level of digital literacy impacts reWomen's low participation in the digital economy: only 25% of women are involved in e-commerce. Women who lack technological skills tend to be mere consumers of social media without the ability to use technology productively.

In Indonesia, although women have a higher level of basic digital literacy (62%), the gap emerges at the advanced skills level. As noted in a study by Suharnanik et al. (2024), women in Indonesia are still predominantly passive users, rarely involved in digital content production, data analytics, coding, or other technology sectors. This limited skillset leaves women without sufficient digital capital to compete in the digital economy. From a cyberfeminist perspective, this situation demonstrates that technology does not automatically create equality, but can actually widen inequality if women are denied access or opportunities to develop digital skills. Haraway (1991) emphasized that technology can be a tool of liberation if women are able to master it, rather than simply use it as consumers. However, educational and social structures still hinder women from entering more technical and strategic technological fields. In Zimbabwe, digital training is virtually unavailable to rural women, while in Indonesia, digital training is more readily available but unevenly distributed. Indonesia's national digital literacy program is robust, but not always gender-responsive or focused on empowering the most vulnerable women.



4. Online Safety Challenges: Digital Space as a Risk Arena

Digital security emerged as a significant theme in both research contexts. The findings showed that 22.2% Women in Zimbabwe experience online harassment, and 26.3% experience direct harassment related to their digital activities. In Indonesia, this figure is even higher: 45% of female internet users report experiencing online gender-based violence (UNFPA & SurveyMETER, 2020). This digital violence includes verbal harassment, demeaning comments, unauthorized distribution of photos, threats, and even doxing. Respondents stated that these experiences made them afraid to express their opinions or use digital platforms openly. This situation emphasizes that the digital space is not only an arena of opportunity, but also an arena of control and intimidation against women. From a cyberfeminist perspective, this phenomenon demonstrates that technology is not free from patriarchal bias; instead, it often serves as an extension of male power structures. As Suharnanik (2022) points out, social media can be a medium of empowerment for women, but it also exhibits a dark side in the form of objectification, bodily control, and symbolic violence. Digital spaces can reinforce patriarchal structures in both subtle and explicit ways. Meanwhile, intersectional analysis shows that digital security risks are higher for young women, poor women, and those lacking digital security literacy. The inability to manage digital privacy or identify potential risks makes women even more vulnerable to exploitation.

5. Indonesia–Zimbabwe Comparison: Similar Patterns, Different Intensities

A comparison of the two countries shows similar patterns in four key aspects—social norms, economic barriers, digital skills, and online security—but with different intensities due to the political-economic structures and policies of the countries.

Zimbabwe faces a gap the first level (access) is much higher due to economic and infrastructure barriers. Indonesia faces a gap second level (quality of use) and third level (empowerment). Indonesian women are more connected to the internet, but they don't always have the skills, protections, or equal opportunities to use it productively. The results of this study demonstrate that digital technology can only become a space for empowerment if women have equal access, adequate digital skills, online security protection, and are surrounded by supportive social environments. Without these, technology actually reinforces existing inequalities. Cyberfeminism and Intersectionality help explain how technology reshapes gender power relations in the digital space, while also revealing the contextual differences between Indonesia and Zimbabwe.



CONCLUSION

This research demonstrates that the digital gender divide in Indonesia and Zimbabwe is not simply a technical issue of access to devices or internet connections, but rather a complex and multi-layered social phenomenon. This gap arises from the interaction of social norms, economic barriers, limited technological skills, and online security risks, which collectively impact women's ability to fully participate in the digital space. The quantitative and qualitative analysis provides a clear picture that women in both countries face similar challenges, although their intensity and form vary depending on their respective social and economic contexts. While Indonesia has more advanced internet infrastructure and penetration, inequalities persist in the quality of technology use and the high risk of digital violence. In contrast, Zimbabwe faces fundamental barriers such as extremely high data costs, poor connectivity, and unequal access to devices, leaving women behind even at the early stages of digital technology adoption.

In terms of social norms, this study found that patriarchal structures continue to influence how women assess, use, and are granted social permission to access technology. These norms reinforce the perception that technology is a male domain, while women are more directed to domestic roles, limiting their learning and digital literacy opportunities. In this context, Donna Haraway's theory of Cyberfeminism helps map how digital space becomes an arena for negotiation between patriarchal oppression and potential liberation. Haraway views technology as a space where identities can be renegotiated, yet this study shows that women in Indonesia and Zimbabwe remain trapped in old structures that force them to carry the symbolic burden of gender into the digital world. This is evident in how women are judged based on their visual performativity or perceived as more vulnerable to social risks when active on digital platforms. Thus, digital space does not automatically liberate women; it can extend entrenched social control.

Economically, this study confirms that financial barriers are one of the most significant factors in shaping the digital gender divide, particularly in Zimbabwe. High data and device costs are key barriers for women to sustainably use the internet. This situation is exacerbated by national economic instability and women's limited access to independent sources of income. Meanwhile, Indonesian women have relatively better access to digital devices, but still face economic barriers at the micro-level, such as financial dependence on male family members, particularly in rural communities. Intersectional analysis reinforces the understanding that women are hampered not only by gender, but also by social class, geographic location, and education level. Poor women in rural Zimbabwe and Indonesia face multiple barriers that cannot be easily



overcome simply by policies to increase internet penetration.

In terms of technological skills, findings indicate that women in both countries still face significant gaps in digital literacy, particularly at the advanced level. Zimbabwean women lag behind in basic skills, while Indonesian women possess better basic skills but still lack productive skills such as coding, data analytics, and producing high-quality digital content. This skills gap explains why women's participation in the digital economy remains low, despite increasingly widespread internet access. From a cyberfeminist perspective, technological proficiency is a crucial element for women's empowerment; however, without training and structural change, women become mere consumers of technology, not creators or decision-makers in the digital economy.

Online security is another crucial dimension that determines women's participation in digital spaces. Findings indicate that women in Indonesia and Zimbabwe are equally vulnerable to harassment, threats, and other forms of digital violence. High rates of online violence against women create a "climate of fear" that hinders freedom of expression and limits women's ability to actively participate in the digital public sphere. In this context, digital spaces become an extension of patriarchal power, as Haraway notes, and supported by contemporary feminist studies that view technology as an arena for power contestation. Digital violence is not simply a technical security issue, but is related to social structures that view women as objects to be controlled, evaluated, or harassed without consequence.

By comparing Indonesia and Zimbabwe, this research makes a significant contribution to understanding how the digital gender divide is shaped in two countries with very different economic and policy contexts. Zimbabwe faces significant access gaps, while Indonesia faces gaps in quality and empowerment. However, both demonstrate that women do not equally benefit from digitalization due to unaddressed structural barriers. This research demonstrates that expanding internet access alone is not enough; without gender-responsive digital literacy, online safety protections, and changing social norms, technology will not significantly reduce gender inequality.

Thus, this study emphasizes the need for a multidimensional approach to reducing the digital gender divide. These efforts should include gender-responsive public policy reforms, digital literacy programs specifically designed for women from various socio-economic backgrounds, and strengthening protection and regulatory mechanisms in the digital space to minimize the risk of gender-based violence. Furthermore, collaboration between the government, the private sector, educational institutions, and civil society organizations is essential to creating an inclusive and safe



digital ecosystem for women. Finally, this study highlights the importance of solidarity and cross-border learning. Indonesia, with its more mature digital ecosystem, can serve as a model for Zimbabwe in developing policies and programs for women's empowerment. Conversely, Zimbabwe demonstrates the urgency of grassroots interventions, which can serve as a model for Indonesia to better address the most vulnerable women. Through international cooperation, knowledge exchange, and collaboration among women's communities, both countries can strengthen women's capacity to utilize digital technology to create a more equal future. Overall, the digital gender divide can only be addressed if technology is treated not as a mere technical solution, but as a political and social space that must be created equitably for all.

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