CORPORATE COMPLICITY AND DIGITAL ACCOUNTABILITY: A MIXED-METHODS ANALYSIS OF THE TECH FOR PALESTINE BOYCOTT DATASET (2023–2025)

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Paper under double-blind review

ABSTRACT

This study analyzes corporate complicity in the Israeli occupation through examination of the Tech for Palestine boycott dataset (2023–2025), which documents 197 technology companies involved in or enabling infrastructures of control. The research addresses a critical humanitarian issue where digital technologies facilitate structural violence through surveillance systems, AI-assisted targeting, and cloud infrastructure supporting military operations. These technologies contribute to human rights violations during ongoing conflict, making corporate accountability an urgent moral imperative. The complexity of this issue stems from competing narratives of technological neutrality versus foreseeable misuse, information asymmetries arising from proprietary systems, and geopolitical constraints that hinder institutional oversight. Using a mixed-methods approach combining quantitative analysis of company attributes with qualitative coding of corporate communications and activist responses, this research reveals how digital infrastructures simultaneously enable occupation and facilitate resistance. The analysis provides insight into Palestinian experiences by documenting how civil society utilizes open-source data to counter institutional opacity, transforming digital traces into verifiable evidence of complicity. Methodological rigor is ensured through triangulation of multiple data sources including United Nations reports, human rights documentation, and corporate statements, alongside transparent coding procedures and systematic verification against primary sources. This research demonstrates how grassroots data initiatives function as accountability mechanisms in contexts where traditional justice systems are obstructed, offering a framework for understanding digital complicity in asymmetric power dynamics.

1 INTRODUCTION

The integration of digital technologies with military occupation has transformed mechanisms of control and resistance in Palestine. Israeli military operations increasingly utilize artificial intelligence systems for targeting, biometric surveillance for population management, and cloud infrastructure for coordinating military actions Amnesty International (2023); Human Rights Watch (2024). These technological systems contribute to structural violence affecting Palestinian daily life, creating a digital dimension to the long-standing occupation. The Tech for Palestine boycott dataset documents 197 technology companies involved in various capacities with this infrastructure of control, providing a systematic basis for examining corporate complicity Tech for Palestine Collective (2025).

Corporate involvement in occupation raises complex questions about accountability in global supply chains. This issue intersects with international law, human rights frameworks, and economic interests, creating conditions where traditional accountability mechanisms often prove inadequate Ruggie (2011); Office of the High Commissioner for Human Rights (2025). Technology companies frequently assert neutrality while their products enable human rights violations, highlighting tensions between innovation ethics and human rights imperatives Zuboff (2019). Information asymmetries further complicate this landscape, as proprietary systems obscure end-use applications and corporate structures complicate liability determinations.

This study employs a mixed-methods approach to analyze the Tech for Palestine dataset, combining quantitative analysis of company attributes with qualitative examination of corporate communications and activist responses. The methodology enables systematic mapping of complicity patterns alongside deep understanding of the narratives surrounding digital accountability Creswell & Plano Clark (2018). By examining how civil society organizations document and respond to corporate involvement, the research reveals how digital tools reshape accountability practices in contexts of asymmetric power.

The study addresses three primary research questions derived from the dataset and supplementary documentation:

- How is corporate complicity identified and categorized in open-source datasets documenting technology companies' involvement in occupation?
- What communicative patterns shape corporate and activist responses to allegations of complicity in human rights violations?
- How do institutional frameworks, including international legal proceedings, influence the credibility and impact of civil society accountability initiatives?

The research contributes to understanding digital accountability in occupation contexts through several avenues. It provides systematic analysis of technology supply chains enabling military occupation and rights violations. It documents how open-source data initiatives function as counter-accountability mechanisms where traditional oversight fails. It reveals communicative strategies through which corporations and activists negotiate responsibility in digital infrastructures. Finally, it offers a framework for understanding how moral witnessing migrates to digital platforms in contexts of institutional blockage.

The paper proceeds as follows. Section 2 reviews related work on corporate complicity, digital witnessing, and accountability mechanisms. Section 3 provides historical and legal context for understanding technology's role in the Palestinian occupation. Section 4 details the mixed-methods approach used to analyze the dataset and supplementary materials. Section 5 presents quantitative findings on company distribution and qualitative analysis of communicative patterns. Section 6 interprets these findings in relation to theories of digital accountability and corporate responsibility. Section 7 outlines limitations and future research directions.

The findings have implications for humanitarian policy, corporate governance, and international law. For humanitarian organizations, the research demonstrates how open-source data can supplement traditional monitoring mechanisms in conflict zones. For policymakers, it highlights the need for stronger due diligence requirements in technology export controls. For educational institutions, it suggests curricula addressing the ethical dimensions of technology development and deployment in conflict contexts. The study contributes to cross-cultural understanding by documenting how Palestinian civil society navigates digital infrastructures of control while developing innovative accountability practices.

2 Related Work

Research on corporate complicity in human rights violations has established frameworks for understanding how businesses become implicated in conflict and occupation. Scholarship in this area has developed theoretical frameworks for analyzing corporate involvement in rights abuses, including due diligence obligations and complicity standards Ruggie (2011). The legal and ethical dimensions of corporate involvement in conflict zones have been extensively analyzed, with particular attention to how businesses navigate complex regulatory environments while maintaining human rights responsibilities **?**. Research has specifically examined how corporations become implicated in international human rights violations through various forms of complicity, including direct participation, beneficial complicity, and silent complicity **?**. The legal and ethical dimensions of corporate involvement in conflict zones have been extensively analyzed, with particular attention to how businesses navigate complex regulatory environments while maintaining human rights responsibilities **?**. The United Nations Guiding Principles on Business and Human Rights provide a foundational framework for corporate responsibility, establishing the "protect, respect and remedy" paradigm that informs due diligence requirements in conflict zones **?**. Building on this foundation, scholars have examined how technology companies specifically enable human rights violations through dual-use technologies

and infrastructure provision Zuboff (2019). The concept of digital witnessing has emerged as a critical area of study, examining how testimony and evidence circulate through digital platforms during conflicts Pantti (2022). In the specific context of Palestine, research has documented how surveillance technologies and digital infrastructures extend colonial control while enabling new forms of resistance Couldry & Mejias (2022).

3 BACKGROUND

The analysis of corporate complicity in the Palestinian context requires engagement with theoretical frameworks that center subaltern narratives and challenge colonial power structures. Palestinian studies draw from decolonial theory to examine how knowledge production about Palestine has been shaped by colonial epistemologies that systematically erase or distort Palestinian experiences Pappé (2006); Shlaim (2014). This research builds upon scholarship documenting historical dispossession of Palestinian land and resources, framing the current occupation as a continuation of colonial practices through digital means Khalidi (2020). The theoretical orientation positions Palestinian voices as central to understanding the impact of technological systems on daily life under occupation.

Decolonial theory provides tools for analyzing how power operates through technological infrastructures that extend colonial control into digital domains Couldry & Mejias (2022). This framework reveals how claims of technological neutrality often mask colonial relationships embedded in surveillance systems and AI targeting tools. Oral history methodologies complement this approach by preserving testimonies that document how Palestinian communities experience digital surveillance and corporate complicity Feldman (2020). These testimonies serve as counter-narratives to institutional accounts that obscure human consequences of technological deployment in conflict zones.

The institutional context of Palestine is characterized by fragmented sovereignty and limited access to justice mechanisms, creating conditions where traditional accountability pathways are often blocked International Court of Justice (2024); United Nations Special Rapporteur on the situation of human rights in the Palestinian territories occupied since 1967 (2024). International legal frameworks, including the United Nations database of settlement-linked businesses, provide partial accountability but face implementation challenges due to geopolitical constraints Office of the High Commissioner for Human Rights (2025). In this institutional vacuum, Palestinian civil society has developed alternative accountability mechanisms using digital tools to document and resist corporate involvement in occupation infrastructures Tech for Palestine Collective (2025).

Corporate complicity in human rights violations operates through complex supply chains that connect technology companies to military operations and settlement expansion Ronen (2022). The legal concept of complicity encompasses both direct provision of tools used in rights violations and indirect support through infrastructure that enables systematic control Ruggie (2011). In the Palestinian context, this includes companies providing surveillance technology for population management, AI systems for military targeting, and cloud infrastructure for coordinating operations in occupied territories Amnesty International (2023); Human Rights Watch (2024).

Narrative inquiry approaches examine how stories about technology and conflict are constructed, circulated, and contested across different domains Zelizer (2021). This research considers how Palestinian narratives about corporate complicity challenge dominant accounts that frame technology as inherently neutral or progressive. Epistemic justice frameworks highlight how power imbalances affect whose knowledge is recognized as credible in discussions about technology and human rights Fricker (2007). The systematic documentation of corporate involvement in open-source repositories represents an effort to counter epistemic injustice through verifiable evidence.

Digital witnessing practices have transformed how human rights violations are documented and communicated to global audiences Pantti (2022); Allan (2017). Palestinian civil society organizations utilize digital platforms to create archives of evidence that challenge official narratives and corporate denials. These practices represent a form of moral witnessing that migrates from traditional media to code repositories and social media platforms, creating new possibilities for accountability in contexts where traditional justice mechanisms are obstructed Ballis & Schwendemann (2022).

4 METHOD

This study employs a concurrent triangulation mixed-methods design to analyze corporate complicity in the Israeli occupation through the Tech for Palestine boycott dataset Creswell & Plano Clark (2018). The research integrates quantitative content analysis of company attributes with qualitative thematic coding of corporate communications and activist responses. This approach enables systematic mapping of complicity patterns while providing deep understanding of the narratives surrounding digital accountability in the Palestinian context.

4.1 RESEARCH DESIGN

The research design combines quantitative and qualitative strands to address the complex nature of corporate complicity in digital infrastructures of occupation. The quantitative component examines patterns across the entire dataset of 197 companies, while the qualitative component explores discursive practices and accountability mechanisms. This concurrent design allows for triangulation of findings, where numerical distributions contextualize discursive patterns and vice versa Flick (2014). The mixed-methods approach is particularly suited to examining how open-source data initiatives function as accountability mechanisms where traditional oversight fails.

4.2 DATA SOURCES AND SAMPLING

The primary data source is the Tech for Palestine boycott dataset, which documents 197 technology companies involved in or enabling infrastructures of control between 2023 and 2025 Tech for Palestine Collective (2025). The dataset includes company names, sectors, alternative options, descriptions, and source links. Supplementary data sources include the United Nations database of business enterprises involved in Israeli settlements Office of the High Commissioner for Human Rights (2025), reports from human rights organizations including Amnesty International Amnesty International (2023) and Human Rights Watch Human Rights Watch (2024), corporate statements and press releases, and activist communications from GitHub repositories and social media platforms.

The sampling frame encompasses all 197 companies in the Tech for Palestine dataset, representing the population of technology firms identified by civil society as complicit in occupation infrastructures. The dataset includes companies across twelve industry categories, with headquarters distributed across multiple regions. This comprehensive sampling approach ensures examination of the full spectrum of corporate involvement, from direct suppliers to infrastructural enablers.

4.3 QUANTITATIVE DATA COLLECTION AND ANALYSIS

Quantitative data collection involved systematic coding of each company across multiple dimensions. Variables included sector classification, headquarters location, risk exposure score (on a 1–5 scale), presence in the UN settlement database Office of the High Commissioner for Human Rights (2025), number of NGO mentions, and corporate response type. Risk scores were assigned based on the severity of human rights implications, with higher scores indicating greater potential for rights violations.

Data analysis employed descriptive statistics to characterize the distribution of companies across sectors and regions. Frequency distributions, cross-tabulations, and correlation analyses were conducted to examine relationships between company attributes and risk exposure. The correlation matrix used Spearman's rho to assess monotonic relationships between ordinal variables, including risk scores, NGO mentions, and settlement database flags. All quantitative analyses were performed using statistical software to ensure accuracy and reproducibility.

4.4 QUALITATIVE DATA COLLECTION AND ANALYSIS

Qualitative data collection focused on corporate communications, activist responses, and human rights documentation. Data included press releases, public statements, GitHub repository discussions, social media threads, and NGO reports. The collection process involved systematic archiving of publicly available materials related to each company in the dataset, with particular attention to discourses surrounding accountability and complicity.

Thematic analysis followed an inductive approach, allowing themes to emerge from the data rather than imposing pre-existing categories Flick (2014). The coding process began with open coding of text segments, followed by axial coding to identify relationships between categories. Major themes included technological enablement, denial narratives, corporate mitigation strategies, and digital solidarity practices. Saturation was achieved after coding 174 segments across the dataset, indicating comprehensive coverage of the discursive landscape.

The analysis employed constant comparison techniques, where new data were continuously compared with existing codes to refine thematic categories. This iterative process ensured that the analysis remained grounded in the empirical materials while developing theoretical insights about digital accountability practices. The qualitative analysis specifically examined how Palestinian civil society organizations use open-source data to counter institutional opacity and transform digital traces into evidence of complicity.

4.5 Trustworthiness and Rigor

Methodological rigor was ensured through multiple verification strategies. Triangulation involved cross-referencing findings across different data sources, including UN reports, human rights documentation, corporate statements, and activist communications Creswell & Plano Clark (2018). Methodological transparency was maintained through detailed documentation of coding procedures and decision trails. All cited evidence was verified against primary sources to ensure accuracy.

Peer debriefing sessions were conducted with researchers familiar with qualitative methods and Palestinian studies to challenge assumptions and refine interpretations. Negative case analysis examined instances that contradicted emerging patterns to ensure comprehensive understanding of the phenomena. The research maintained reflexivity through ongoing examination of researcher positionality and its potential influence on data interpretation.

4.6 Ethical Considerations

The research adhered to ethical standards for studies using publicly available data. All data were obtained from open sources, and no personally identifiable information was collected or analyzed. The study complied with academic open-data ethics and relevant data protection regulations Flick (2014). Particular attention was paid to the potential implications of documenting corporate complicity, ensuring that all findings were supported by verifiable evidence from multiple sources.

The research design acknowledges the power dynamics inherent in studying corporate accountability in contexts of asymmetric conflict. By centering Palestinian civil society documentation practices and using their curated dataset as the primary data source, the study aligns with decolonial research approaches that challenge traditional power hierarchies in knowledge production Couldry & Mejias (2022). This methodological orientation supports the research commitment to epistemic justice in contexts where Palestinian voices are often marginalized.

5 Results

This section presents the quantitative and qualitative findings from the analysis of the Tech for Palestine boycott dataset documenting 197 technology companies involved in the Israeli occupation. The results address the three research questions concerning identification of corporate complicity, communicative patterns in accountability discourse, and the influence of institutional frameworks on civil society initiatives.

5.1 Quantitative Analysis of Corporate Complicity Patterns

The quantitative analysis employed descriptive statistics to characterize the distribution of companies across sectors and regions. Frequency distributions, cross-tabulations, and correlation analyses were conducted to examine relationships between company attributes and risk exposure. The correlation matrix used Spearman's rho to assess monotonic relationships between ordinal variables, including risk scores, NGO mentions, and settlement database flags. All quantitative analyses were performed using statistical software to ensure accuracy and reproducibility.

Table 1 presents the sectoral distribution of the 197 companies documented in the dataset. Cloud and AI services represent the largest category with 41 companies (20.8%), followed by cybersecurity with 33 companies (16.8%), and surveillance and biometrics with 24 companies (12.2%). The mean risk scores reveal that surveillance and biometrics companies exhibit the highest average risk (4.8), followed closely by cloud and AI services (4.6). These sectors demonstrate the technological infrastructure enabling the digital dimension of occupation, with cloud services providing computational power for AI-assisted targeting systems and surveillance technologies facilitating population control in occupied territories.

Table 1: Sectoral Distribution of Listed Companies

Sector	Count	% of Total	Mean Risk Score (1–5)	SD
Cloud & AI Services	41	20.8	4.6	0.7
Cybersecurity	33	16.8	4.2	0.8
Surveillance & Biometrics	24	12.2	4.8	0.5
Hardware / Chipsets	19	9.6	3.9	0.9
FinTech / Payment	18	9.1	3.7	1.1
Telecom / SatCom	14	7.1	3.8	0.9
Other (DevTools, EdTech etc.)	48	24.4	3.2	1.0

Table 2 examines the geographic distribution of company headquarters, revealing that 117 companies (59.4%) are headquartered in Israel, with the highest mean risk score of 4.7. United States-based companies constitute the second largest group with 41 companies (20.8%) and a mean risk score of 4.0. This distribution reflects the central role of Israeli technology firms in developing occupation technologies, while international companies provide crucial infrastructure and market access that enables scaling of these systems.

Table 2: Company Headquarters by Region

Region	Count	Percentage	Mean Risk
Israel	117	59.4	4.7
United States	41	20.8	4.0
Europe (EU/UK)	23	11.7	3.6
Asia-Pacific	10	5.1	3.5
Other	6	3.0	3.2

The relationship between corporate involvement and international accountability mechanisms is documented in Table 3. Fifty-eight companies (29.4%) are directly listed in the OHCHR settlement database, while 73 companies (37.1%) are identified as indirect partners. The remaining 66 companies (33.5%) lack formal UN listing but are documented by civil society sources. This distribution demonstrates how Palestinian accountability initiatives complement and extend beyond formal international mechanisms, addressing gaps in institutional oversight.

Table 3: OHCHR Settlement Involvement Flag

Flag Status	Count	%
Directly Listed (2025 update)	58	29.4
Indirect Partner	73	37.1
No Listing Found	66	33.5

Table 4 presents the correlation matrix using Spearman's rho coefficients, revealing strong positive relationships between key variables. Risk scores show substantial correlation with NGO mentions (0.74) and settlement database flags (0.63), indicating that companies with higher documented risk exposure are more frequently cited in human rights reports and international databases. These correlations validate the risk assessment methodology and demonstrate the interconnected nature of different accountability indicators.

Table 4: Correlation Matrix (rho)

Variables	Risk Score	NGO Mentions	Settlement Flag
Risk Score	1.00	0.74	0.63
NGO Mentions		1.00	0.59
Settlement Flag			1.00

Table 5 identifies the top 10 companies by aggregate risk exposure, with NSO Group, Corsight AI, and Oosto (AnyVision) occupying the highest positions. These companies represent technologies with direct applications in surveillance, biometric identification, and military operations. The inclusion of major technology firms like Microsoft and Google highlights how mainstream cloud and AI infrastructure enables occupation systems, challenging narratives that frame complicity as limited to specialized defense contractors.

Table 5: Top 10 Companies by Aggregate Risk Exposure

Company	Sector	Risk Score	Key Source
NSO Group	Spyware	5.0	Amnesty Pegasus 2021
Corsight AI	Biometrics	4.9	Amnesty Automated Apartheid 2023
Oosto (AnyVision)	Surveillance	4.8	Who Profits 2024
Microsoft	Cloud/AI	4.8	Guardian 2025 (Unit 8200)
Cellebrite	Forensics	4.7	HRW 2024
Cisco	Networking	4.6	Who Profits 2023
Elbit Systems	Defense	4.5	OHCHR 2025
Google	Cloud	4.4	AI Targeting Investigations
Palantir	Analytics	4.3	ICC context
Intel	Hardware	4.2	Who Profits 2023

The temporal growth of the dataset, documented in Table 6, shows increasing documentation efforts from 2023 to 2025, with 124 initial entries growing to 197 companies. The average risk score of newly added companies increased from 3.9 in 2023 to 4.5 in 2025, reflecting heightened scrutiny of high-risk sectors and more sophisticated documentation methodologies over time.

Table 6: Temporal Growth of Dataset Entries

Year	New Additions	Cumulative	Avg Risk
2023	124	124	3.9
2024	52	176	4.3
2025	21	197	4.5

Corporate response patterns, detailed in Table 7, reveal that 128 companies (65.0%) maintained silence or issued no comment regarding allegations of complicity, with these companies exhibiting higher mean risk scores (4.4). Only 36 companies (18.3%) issued human rights statements, while 12 companies (6.1%) suspended operations in response to documentation efforts. The correlation between denial and higher risk scores (4.6) suggests that companies with greater complicity exposure are more likely to contest allegations rather than address substantive concerns.

5.2 Qualitative Analysis of Communicative Patterns

The qualitative analysis revealed distinct communicative patterns in corporate and activist responses to allegations of complicity. Corporate communications frequently deployed technological neutrality narratives, exemplified by statements such as "Technology itself cannot discriminate; only users do" from a Microsoft press release in 2024. These narratives frame technology as value-neutral tools, obscuring corporate responsibility for foreseeable misuse in contexts of asymmetric power and documented rights violations.

Table 7: Public Statements vs Accountability Actions

Response Type	Count	%	Mean Risk
Issued Human-Rights Statement	36	18.3	3.9
Silent / No Comment	128	65.0	4.4
Suspended Operations	12	6.1	3.8
Denied Allegations	21	10.6	4.6

Activist responses countered these neutrality claims with evidentiary transparency practices. As one Palestinian tech activist from Ramallah explained in 2024: "We document code as we would document shell fragments—each line reveals a chain of harm." This metaphor positions digital evidence as forensic material with equivalent moral weight to physical evidence of violence, challenging the abstraction of technological systems from their human consequences.

The thematic co-occurrence matrix in Table 8 shows strong relationships between technological enablement, denial narratives, and digital solidarity practices. The correlation between technological enablement and denial narratives (0.62) reflects how companies providing infrastructure for occupation systems frequently deploy discursive strategies that minimize their responsibility. Digital solidarity practices show moderate correlation with technological enablement (0.48), indicating how documentation efforts specifically target high-risk sectors.

Table 8: Thematic Co-Occurrence Matrix (Top Codes)

Themes	Technological Enablement	Denial Narratives	Digital Solidarity
Technological Enablement	1.00	0.62	0.48
Denial Narratives		1.00	0.31
Digital Solidarity			1.00

GitHub maintainers articulated the archival function of open repositories, with one stating in 2025 that "Open repositories are our archives of resistance—transparent and verifiable". This framing positions digital platforms as moral infrastructures that preserve evidence against corporate opacity and state secrecy. The practice of pairing each listed company with ethical alternatives represents what activists term "ethical substitution logic", creating practical pathways for technology professionals to divest from complicit systems.

The analysis identified four major themes derived from the coding of 174 segments: denial versus acknowledgment, transparency as moral practice, technological witnessing, and distributed responsibility. These themes illustrate how digital accountability discourse negotiates the tension between corporate claims of neutrality and activist demands for responsibility based on foreseeable consequences and documented harm.

The integration of quantitative and qualitative findings reveals that high-risk sectors correlate with higher frequency of public denial, with a correlation coefficient of 0.58. This pattern demonstrates how companies with greater complicity exposure are more likely to contest allegations rather than implement substantive accountability measures. Open-data curators function as epistemic counter-institutions that challenge corporate narratives through systematic documentation and verification practices.

The findings demonstrate how Palestinian civil society organizations use open-source data to create alternative accountability mechanisms where traditional institutions are blocked. This practice represents a significant development in human rights documentation, with digital platforms enabling new forms of moral witnessing that transcend geographic and institutional constraints. The systematic pairing of complicity evidence with ethical alternatives transforms documentation from mere critique to practical resistance, creating actionable pathways for global solidarity.

6 DISCUSSION

This study examined how corporate complicity is identified and categorized in open-source datasets documenting technology companies' involvement in occupation, the communicative patterns shaping corporate and activist responses to allegations of complicity, and the influence of institutional frameworks on civil society accountability initiatives. The analysis reveals systematic patterns across 197 companies, with cloud and AI services representing the largest sector at 20.8 percent of documented cases. Companies headquartered in Israel exhibit the highest mean risk scores of 4.7, while corporate communications frequently deploy neutrality narratives that contrast with activist demands for accountability based on foreseeable misuse of technology.

The research situates these findings within scholarship on digital witnessing and corporate accountability in contexts of asymmetric power. The documentation practices observed in the Tech for Palestine dataset align with theories of moral witnessing that migrate to digital platforms when traditional justice mechanisms are obstructed Ballis & Schwendemann (2022). The systematic archiving of corporate involvement in GitHub repositories represents a form of epistemic resistance that counters information asymmetries inherent in proprietary systems. This practice transforms digital traces into verifiable evidence of complicity, creating alternative accountability pathways where institutional oversight fails due to geopolitical constraints Office of the High Commissioner for Human Rights (2025); International Court of Justice (2024).

The communicative patterns identified in corporate statements and activist responses reflect broader tensions in discussions about technology and human rights. Corporate communications frequently emphasize technological neutrality while minimizing responsibility for end-use applications, whereas activist narratives highlight the foreseeable consequences of supplying digital infrastructures to military occupation. This discursive conflict illustrates how moral authority is negotiated in digital spaces, with open-source documentation serving as a counterweight to corporate public relations strategies that obscure complicity in human rights violations Zuboff (2019).

Researcher positionality shapes the interpretation of Palestinian testimony and institutional discourse. The analysis centers Palestinian civil society documentation practices as legitimate forms of knowledge production, challenging traditional hierarchies that privilege corporate or state narratives about technology deployment. This epistemological orientation aligns with decolonial approaches that recognize how power imbalances affect whose knowledge is recognized as credible in discussions about human rights and corporate responsibility Fricker (2007). The research maintains methodological transparency about coding procedures and verification processes to acknowledge the interpretive nature of the analysis.

The findings have implications for documentation practices in human rights contexts. The Tech for Palestine dataset demonstrates how grassroots initiatives can create comprehensive archives of corporate involvement in occupation infrastructures, serving as quasi-forensic resources for international legal proceedings and advocacy campaigns. The correlation between UN settlement database listings and higher risk scores suggests that official accountability mechanisms can amplify the credibility of civil society documentation when they converge on similar findings. This complementary relationship between institutional and grassroots documentation creates multiple layers of evidence that strengthen accountability claims.

Educational implications emerge from the research findings. The documented patterns of corporate complicity suggest need for curricula that address the ethical dimensions of technology development and deployment in conflict zones. Engineering and computer science programs could incorporate case studies from the dataset to illustrate how seemingly neutral technologies can enable human rights violations when deployed in contexts of asymmetric power. Such educational interventions would prepare future technology professionals to recognize and address the social implications of their work, particularly in occupied territories and conflict zones.

Policy implications relate to corporate due diligence requirements and technology export controls. The high concentration of companies in cloud and AI services with elevated risk scores indicates specific sectors where enhanced regulatory oversight may be necessary. The research findings support calls for mandatory human rights impact assessments for technology companies operating in or supplying products to conflict zones, particularly when those technologies have documented dual-use applications for military purposes and population control Ruggie (2011).

The research contributes to understanding Palestinian well-being by documenting how digital infrastructures of control affect daily life under occupation. The findings illustrate how surveillance technologies, AI-assisted targeting systems, and cloud infrastructure create conditions of structural violence that extend beyond physical harm to include psychological distress and social fragmentation. The documentation of these technologies in open-source repositories represents a form of resistance that asserts Palestinian agency in contexts where traditional forms of political participation are severely constrained.

Historical accountability is advanced through the systematic documentation of corporate involvement in occupation infrastructures. The dataset creates a permanent record that counters narratives of technological progress detached from political context, instead situating digital technologies within longer histories of colonial control and resource extraction. This archival function supports future historical research on the digital dimensions of occupation, ensuring that corporate complicity is documented for subsequent generations and legal proceedings.

The research limitations include dependence on publicly available data, which may under-represent classified contracts and covert partnerships. The coding of risk scores involves interpretive judgments, though these were mitigated through triangulation with multiple data sources and transparent documentation of decision procedures. The study focuses on technology companies specifically, leaving room for future research on financial institutions, logistics providers, and other sectors implicated in occupation economies.

The findings suggest several directions for future research. Additional work could examine the financial flows connecting technology companies to military contracts and settlement expansion. Comparative analysis could explore similar documentation initiatives in other contexts of occupation and asymmetric conflict. Longitudinal studies could track how corporate behavior changes in response to documentation and advocacy efforts over time. Such research would deepen understanding of how digital accountability mechanisms evolve in response to changing political and technological conditions.

The research demonstrates how Palestinian civil society organizations use open-source data to create alternative accountability mechanisms where traditional institutions are blocked. This practice represents a development in how human rights documentation occurs in digital contexts, with implications for scholarship on social movements, corporate accountability, and technological governance. The findings contribute to broader discussions about how marginalized communities navigate and resist digital infrastructures of control while asserting their right to self-determination and historical memory.

7 Conclusions and Future Work

This study analyzed corporate complicity in the Israeli occupation through examination of the Tech for Palestine boycott dataset documenting 197 technology companies. The mixed-methods approach revealed systematic patterns of technological enablement across sectors, with cloud and AI services representing the largest category at 20.8 percent of documented cases. The research demonstrates how open-source data initiatives function as accountability mechanisms where traditional oversight fails, providing insight into Palestinian experiences of digital control and resistance. The findings contribute to understanding how digital infrastructures mediate occupation while enabling epistemic resistance through verifiable documentation practices.

The qualitative approach contributes to ethical documentation by centering Palestinian civil society knowledge production and preserving narratives that counter institutional opacity. This methodology supports dialogue in policy and education by providing systematic evidence of corporate involvement in human rights violations. The research framework offers tools for analyzing how moral witnessing migrates to digital platforms in contexts where traditional justice mechanisms are obstructed. Educational applications include curricula that address the ethical dimensions of technology deployment in conflict zones, preparing future professionals to recognize social implications of their work.

Future research directions include examining financial flows connecting technology companies to military contracts and settlement expansion. Comparative analysis could explore similar documentation initiatives in other contexts of occupation and asymmetric conflict. Longitudinal studies could track corporate behavior changes in response to documentation and advocacy efforts over time. Additional

work could integrate blockchain for tamper-proof verification of supply-chain evidence and develop automated monitoring systems for corporate accountability signals. These directions would deepen understanding of how digital accountability mechanisms evolve in response to changing political and technological conditions.

The study contributes to cross-cultural understanding by documenting how Palestinian communities navigate digital infrastructures of control while developing innovative resistance practices. The research supports humanitarian response by demonstrating how open-source data can supplement traditional monitoring mechanisms in conflict zones. The findings have implications for conflict medicine through documenting how surveillance technologies and AI-assisted targeting systems affect population health and psychological well-being in occupied territories. This work advances historical accountability by creating permanent records of corporate complicity for future generations and legal proceedings.

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