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CULTURAL INFLUENCES ON PERSONAL DATA DISCLOSURE DECISIONS

Ghanaian Perspectives

Veronika Thir, Daniela Wawra

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c/o Chair of German and European Private Law, Civil Procedure, and Legal Theory

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Authors

Veronika Thir is a research assistant in the project *Vectors of data disclosure – A comparative study of the use of personal data from a legal, cultural studies, and information systems perspective*. Daniela Wawra is professor of linguistics and cultural studies at the University of Passau. They work together in an interdisciplinary research team that explores the disclosure of personal data from a legal, cultural studies and information systems perspective.

Abstract

This paper provides an overview of survey results from Ghana on central parameters that can influence the willingness to share (WTS) personal data. It provides insights into Ghanaian mentalities towards data disclosure on a macro level and thus into the cultural preconditions of information governance. This 'country report' is one of several compiled as part of the interdisciplinary project *Vectors of data disclosure – A comparative study of the use of personal data from a legal, cultural studies, and information systems perspective*[1], funded by the Bavarian Research Institute for Digital Transformation[2].

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Keywords

Culture, Data Disclosure, Digitalization, Ghana, Information Governance, Privacy, Willingness to Share (WTS) Data.

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[1] Lead principal investigator: Moritz Hennemann, further principal investigators: Kai von Lewinski, Daniela Wawra, and Thomas Widjaja; external advisor: Urs Gasser.

[2] https://www.bidt.digital/ (last access: 03/09/2023).

Contents

I. Introduction

This paper is part of our interdisciplinary research project *Vectors of data disclosure – A comparative study of the use of personal data from a legal, cultural studies, and information systems perspective*[3], funded by the Bavarian Research Institute for Digital Transformation[4]. In order to gain insights into a variety of cultures, we have selected Brazil, China, Germany, Ghana, Japan, Russia, Switzerland, and the USA for closer study. One of our objectives is to obtain a general picture of each culture's mentality towards data disclosure based on as broad a data base as possible. Therefore, we have primarily analyzed data from extensive global surveys that also allow for country comparisons. Sometimes we complement these with larger surveys that cover at least some of the countries we have chosen for our project. This approach can be characterized as a cultural macro-level analysis (cf. Wawra 2022). The results of our analyses are published in cultural 'reports' for each selected country. They focus on potential cultural influences on the willingness to share (WTS) personal data by reflecting prevailing views, assumptions, attitudes, evaluations, and reported behaviors of the citizens of the respective country regarding data disclosure. Wawra (2022) is an introduction to our project from a cultural perspective. It provides background information on the research context and details the cultural research design. The paper also introduces the parameters according to which the cultural reports are structured. The following parameters were identified as central to capturing the narrower cultural context of data disclosure decisions on a macro level (cf. Wawra 2022): Digital Competitiveness (section III.), General Value of Informational Privacy (IV.), Degree of Privacy of Data (V.), Benefits Associated with Data Disclosure (VI.), Privacy Concerns and Risks (VII.), Data Protection Literacy (VIII.), Attitudes Towards Data Receiver (IX.), and Communication on Data Use (X.) (see Fig. 1). Data Protection Laws is another parameter analyzed in separate country reports. Depending on the specific situational context, the parameters may vary in their influence on the willingness to share (WTS) personal data. Overall, the structure of the country reports compiled in our project is the same.[5] The descriptions of the individual parameters were taken from Wawra (2022) and are rendered in italics.

When searching for survey data on Ghana as part of our research project, we found that there was very little and that Ghana had not been surveyed in the global and other comparative studies we identified as relevant to our other countries (e.g. CIGI-Ipsos 2019a, b, c, Cisco 2021, Ipsos 2019, EVS/WVS 2021a, b, c). This led us to conduct our own survey in this country in August 2022 with the help of the marketing research company *Schlesinger Group*. In order to close the data gap of the existing global surveys on Ghana – at least partially – and to be able to compare the data, we mainly adopted the survey questions we focused on in the other country reports. The main results of our survey in Ghana are outlined on the following pages.

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[3] Lead principal investigator: Moritz Hennemann, further principal investigators: Kai von Lewinski, Daniela Wawra, and Thomas Widjaja; external advisor: Urs Gasser.

[4] https://www.bidt.digital/ (last access: 03/09/2023).

[5] The first report produced as part of our project focuses on the US context (cf. Kessel 2022). All reports are available in digital form, see https://www.jura.uni-passau.de/irdg/publikationen/research-paper-series/.

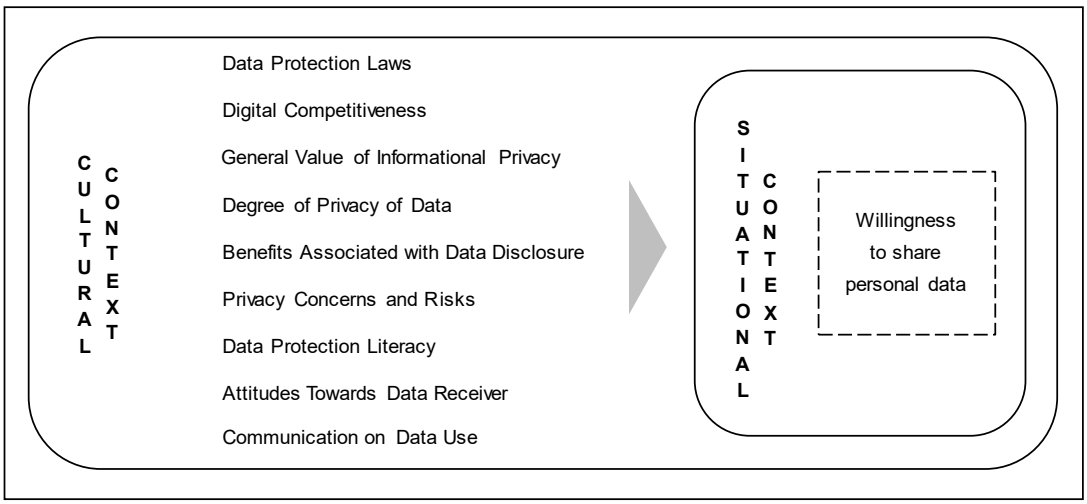

Fig. 1. Central parameters of data disclosure (from Wawra 2022).

II. Selected Survey Data

This report summarizes the findings from our own survey on informational privacy, data control, data protection, and data disclosure in Ghana, conducted in August 2022. The sample size was 500. Appendix 1 provides detailed demographic information on the respondents.

III. Digital Competitiveness

[The parameter Digital Competitiveness] is understood in the sense of the "IMD World Digital Competitiveness Ranking" (WDCR), a well-established and widely accepted regularly published ranking, as the "capacity of economies to use digital technologies to transform themselves" (IMD 2021, p. 3). The WDCR "analyzes and ranks the extent to which countries adopt and explore digital technologies leading to transformation in government practices, business models and society in general" (IMD 2021, p. 32).[6] *Specifically, the WDCR aggregates scores to compare 64 countries in terms of 52 criteria relating to "knowledge", "technology", and "future readiness" (IMD 2021, p. 3, 32, 33). Knowledge describes the "[k]now-how necessary to discover, understand and build new technologies" (IMD 2021, p. 33) and is further divided into the subfactors of talent, training and education, as well as scientific concentration relating to, e.g., expenditure on research & development, and high-tech patent grants. The factor technology comprises the "[o]verall context that enables the development of digital technologies" (IMD 2021, p. 33), including the subfactors "regulatory framework", "capital", and "technological framework". Future readiness explains the "[l]evel of country preparedness to exploit digital transformation" (IMD 2021, p. 33) and measures adaptive attitudes, business agility, and IT integration to rank the level of how countries are prepared for exploiting digital transformation (cf. IMD 2021, p. 33).*[7]

This parameter has been included in all other country reports. However, Ghana is not included in the *IMD World Digital Competitiveness Ranking* (IMD 2021, 2022), so no data on the country can be included here. A systematic and regular survey of the respective indicators of digital

[6] Wawra (2022, IV. 2.).

[7] The paragraph from "Specifically […]" to "transformation […]" has been added in all country reports and taken verbatim from the first country report (Kessel 2022).

competitiveness in Ghana is a research desideratum for the future. This would have been beyond the scope of our project. Instead, this section presents our own survey findings on Ghanaians' views on the impact of their country's data protection regulation on various factors related to Ghana's digital competitiveness. Notably, a majority of respondents from Ghana (56%) believe that overall, their country's data protection regulation has a positive effect on digital development and the implementation of digital innovations (Fig. 2). Only 8% believe that data protection regulation has a negative effect in this respect, whereas more than one-third (36%) think that it has a neutral effect.

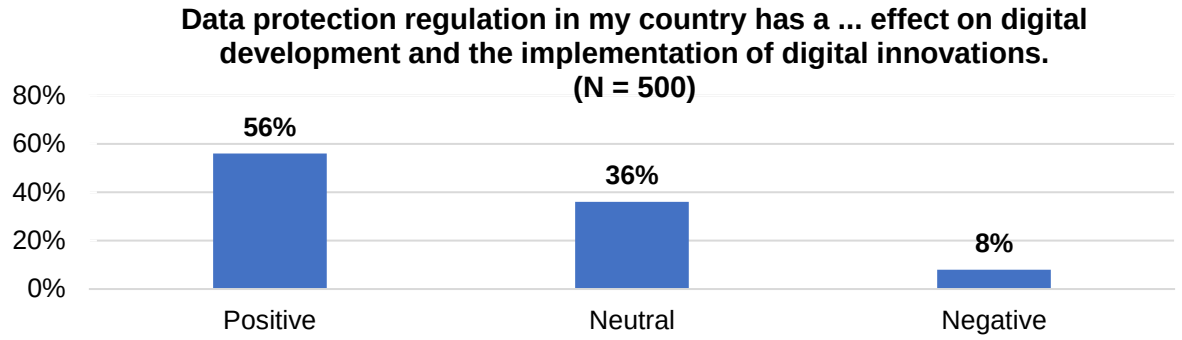

Fig. 2. Respondents' views on the effect of their country's data protection regulation on digital development and the implementation of digital innovations.

Similarly, a majority of respondents (58%) believe that the handling of corporate data has become more professional as a result of Ghana's data protection regulation (Fig. 3). Only about one-fifth (21%) of respondents do not believe that this is the case.

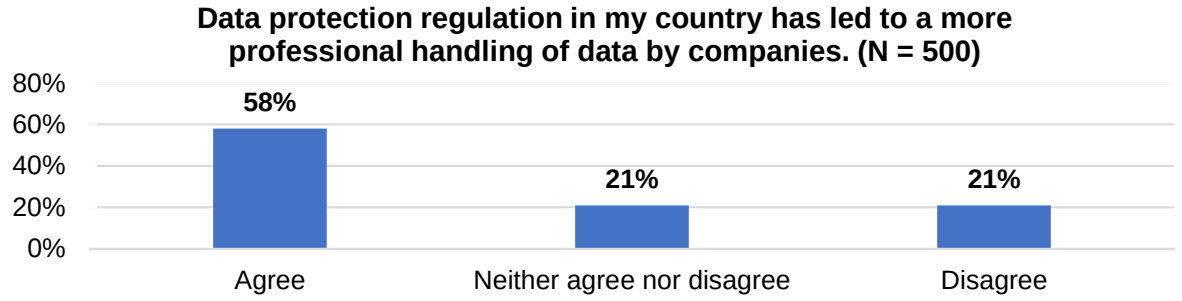

Fig. 3. Respondents' views on the effect of their country's data protection regulation on data handling by companies.

As regards the consequences of Ghana's data protection regulation for the consumer, a majority of respondents (51%) believe that it causes too much bureaucracy for consumers (Fig. 4). Only 16% disagree in this respect. On a more positive note, a majority of 60% of respondents think that their country's data protection regulation allows consumers to easily adjust their privacy needs (Fig. 5).

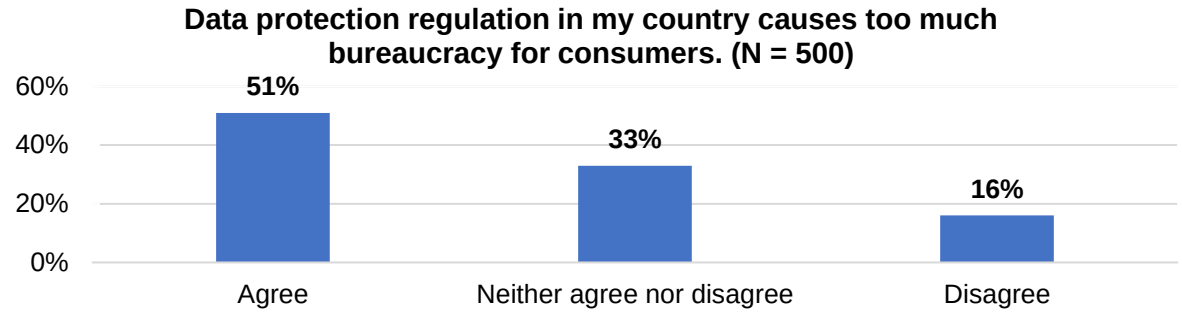

Fig. 4. Respondents' views on the effect of their country's data protection regulation on bureaucracy for consumers.

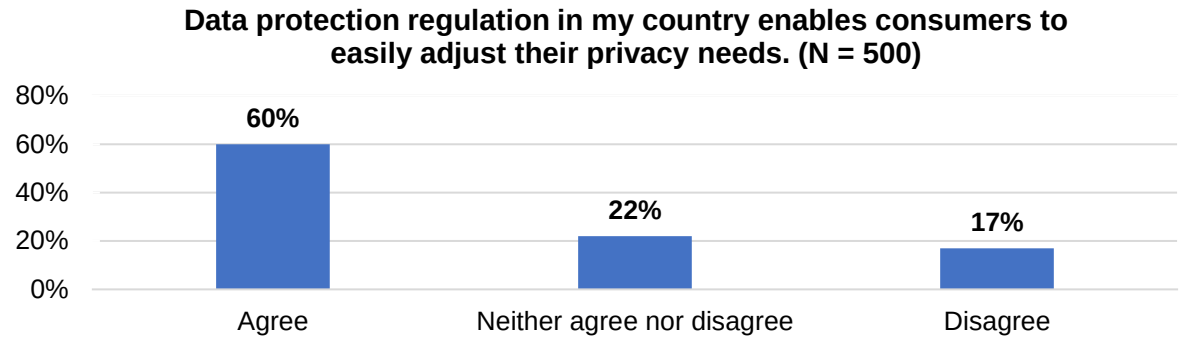

Fig. 5. Respondents' views on the effect of their country's data protection regulation on consumers' ability to adjust their privacy needs.

IV. General Value of Informational Privacy

Informational privacy is understood "as the claim of an individual to determine what information about himself or herself should be known to others" (Westin 2003, p. 431) and as the demand to be protected from unwanted access to personal data (Rössler 2001, p. 25). [This] parameter […] indicates how important or unimportant [respondents from Ghana consider this demand].[8]

The following survey questions allow us to draw conclusions in this regard. Following the World Values Survey (cf. EVS/WVS 2021a, b), we asked Ghanaians about their assessment of the collection of personal data for surveillance by their government. A majority of Ghanaian respondents approve of government video surveillance in public areas (question taken from EVS/WVS 2021c, p. 427): 74% agree that their government should have this right (Fig. 6).

[8] Wawra (2022, IV. 2.).

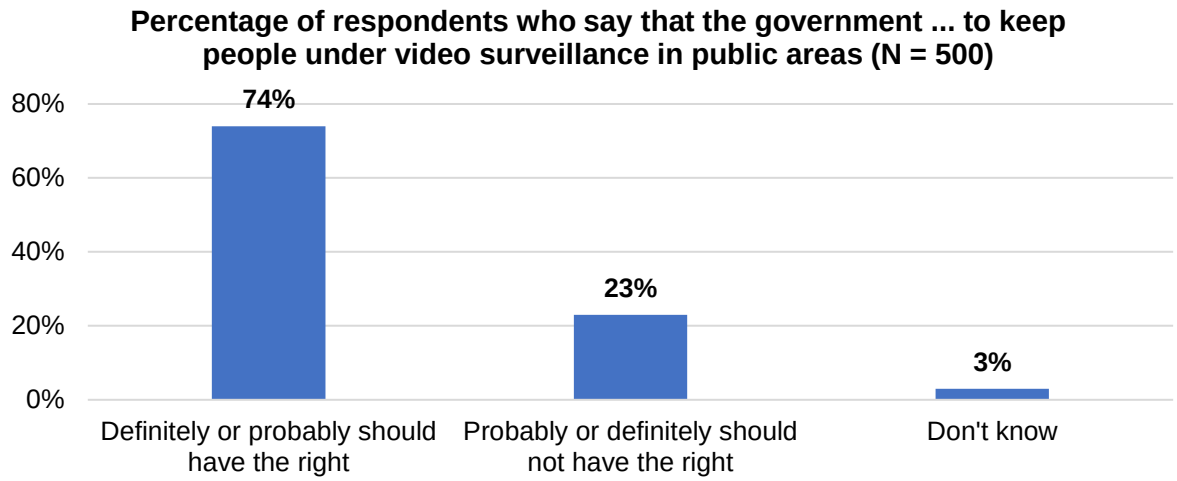

Fig. 6. Respondents' attitudes towards video surveillance by their government.

In contrast, only a minority (24%) of Ghanaian respondents agree that their government should be allowed to monitor emails and other information exchanged online (question taken from EVS/WVS 2021c, p. 429) (Fig. 7).

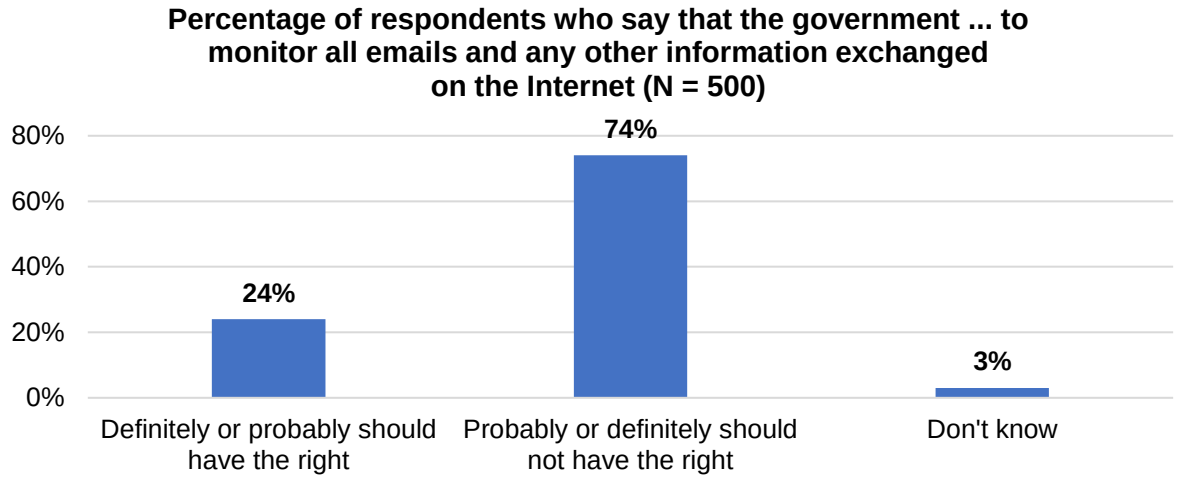

Fig. 7. Respondents' attitudes towards email and Internet monitoring by their government.

Ghanaian respondents are equally opposed to data tracking by their government without their consent: 70% indicate that their government should probably or definitely not have the right to collect information about anyone living in the country without their knowledge (question taken from EVS/WVS 2021c, p. 431) (Fig. 8).

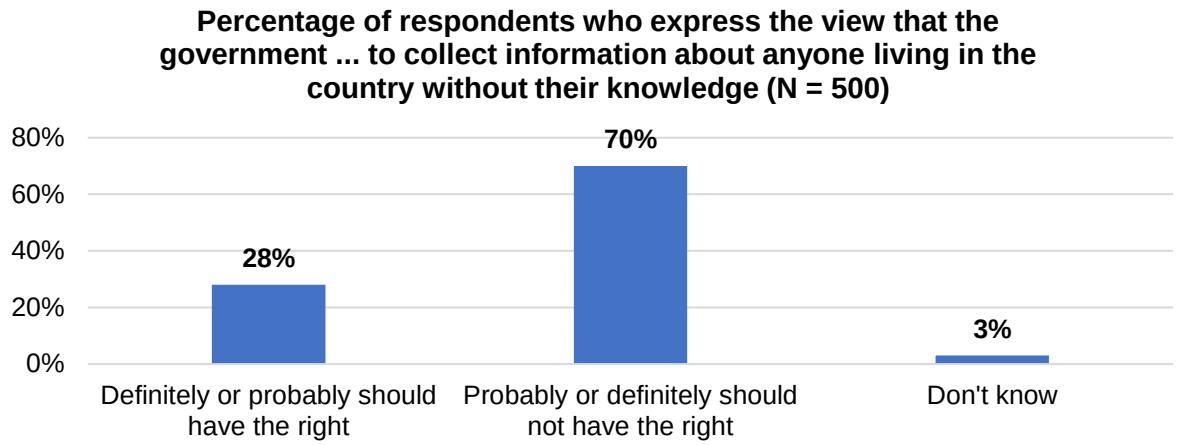

Fig. 8. Respondents' views on data tracking by the government without consent.

Regarding surveillance at work, a majority of Ghanaian respondents (77%) would not object to their employer monitoring their performance with technical devices (question from PwC 2021, p. 35) (Fig. 9). In contrast, a majority of 64% would object to their employer having access to their personal data such as their social media profiles (question from PwC 2021, p. 35) (Fig. 10).

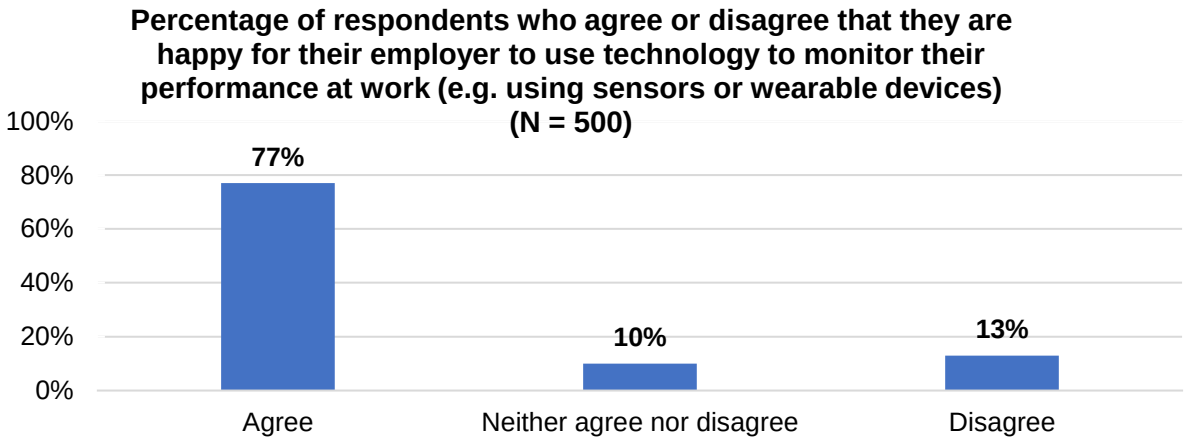

Fig. 9. Respondents' views on employer monitoring at work.

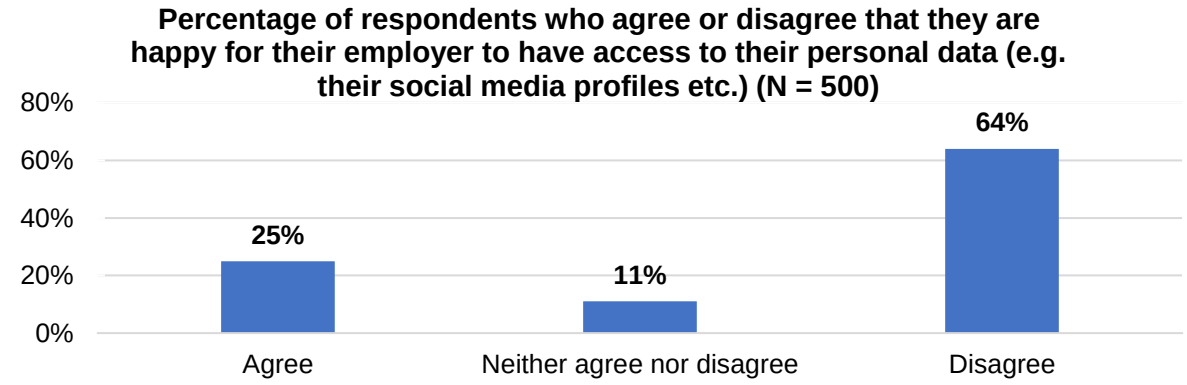

Fig. 10. Respondents' views on employer access to their personal data.

When examining concerns about the use of collected personal data by companies, 65% of Ghanaian respondents somewhat or strongly agree that consumers should be able to refuse this.

Furthermore, 75% believe that consumers should be paid or rewarded for allowing companies to use their data. Only a minority of 21% of Ghanaian respondents do not mind companies using collected personal data (questions modelled after Ipsos 2019, p. 12) (Fig. 11).

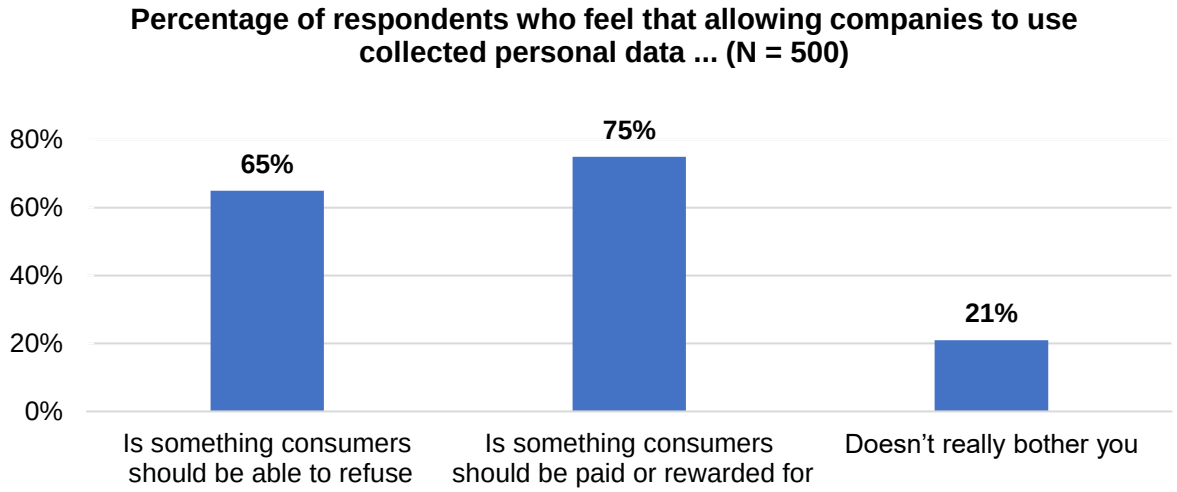

Fig. 11. Attitudes towards the possibility of refusing or being paid/rewarded for the use of the data collected by companies.

Finally, it is noteworthy that the vast majority (82%) of Ghanaian respondents feel that they can make self-determined decisions about the disclosure of their personal data (Fig. 12). Only very few respondents (6%) feel that they lack autonomy over their personal data in this sense.

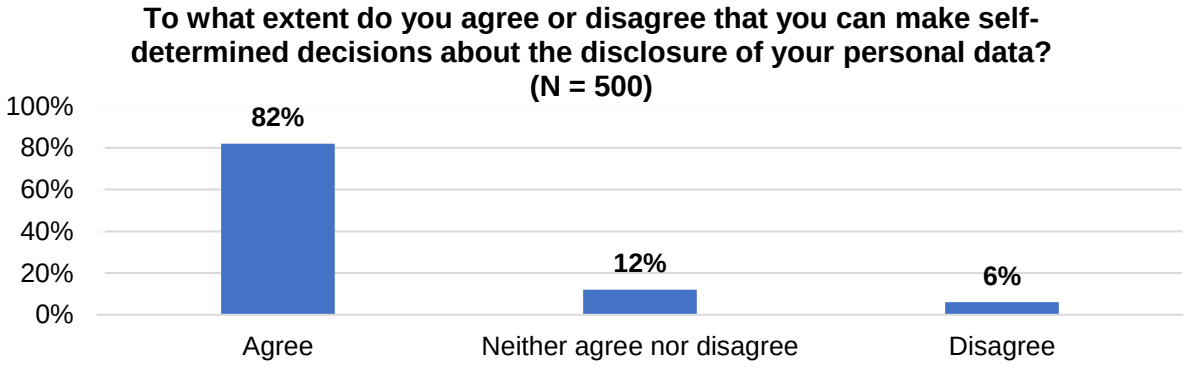

Fig. 12 Respondents' sense of autonomy over their personal data.[9]

V. Degree of Privacy of Data

[This] parameter […] surveys how private or sensitive […] certain kinds of personal data [are for Ghanaian respondents].[10]

An indication of what types of personal data are considered particularly private in Ghana is provided by Ghana's Data Protection Act 2012 (Parliament of the Republic of Ghana 2012, henceforth DPA 2012). This text defines personal data as "data about an individual who can be identified, (a)

[9] This question was not taken from elsewhere, i.e. it was developed by us.

[10] Wawra (2022, IV. 2.).

from the data, or (b) from the data or other information in the possession of, or likely to come into the possession of the data controller" (Sec. 96). Data requiring particular protection are not referred to as 'sensitive' but as "special personal data" (DLA Piper 2023). This category includes data relating to a person's "race, colour, ethnic or tribal origin", "political opinion", "religious beliefs or other beliefs of a similar nature", "physical, medical, mental health or mental condition or DNA", "sexual orientation" and criminal records (DPA 2012, Sec. 96) as well as personal data of minors (DPA 2012, Sec. 37(1)).

We also asked Ghanaians in our survey to indicate the sensitivity of the following data categories for them on a scale from 1 (= not at all sensitive) to 5 (= very sensitive). The categories were extracted from the main data protection laws of Brazil, China, Germany, Japan, Russia, Switzerland, and the USA (cf. Wawra 2023). The sensitivity ratings of the Ghanaian respondents are presented in Fig. 13 in descending order.

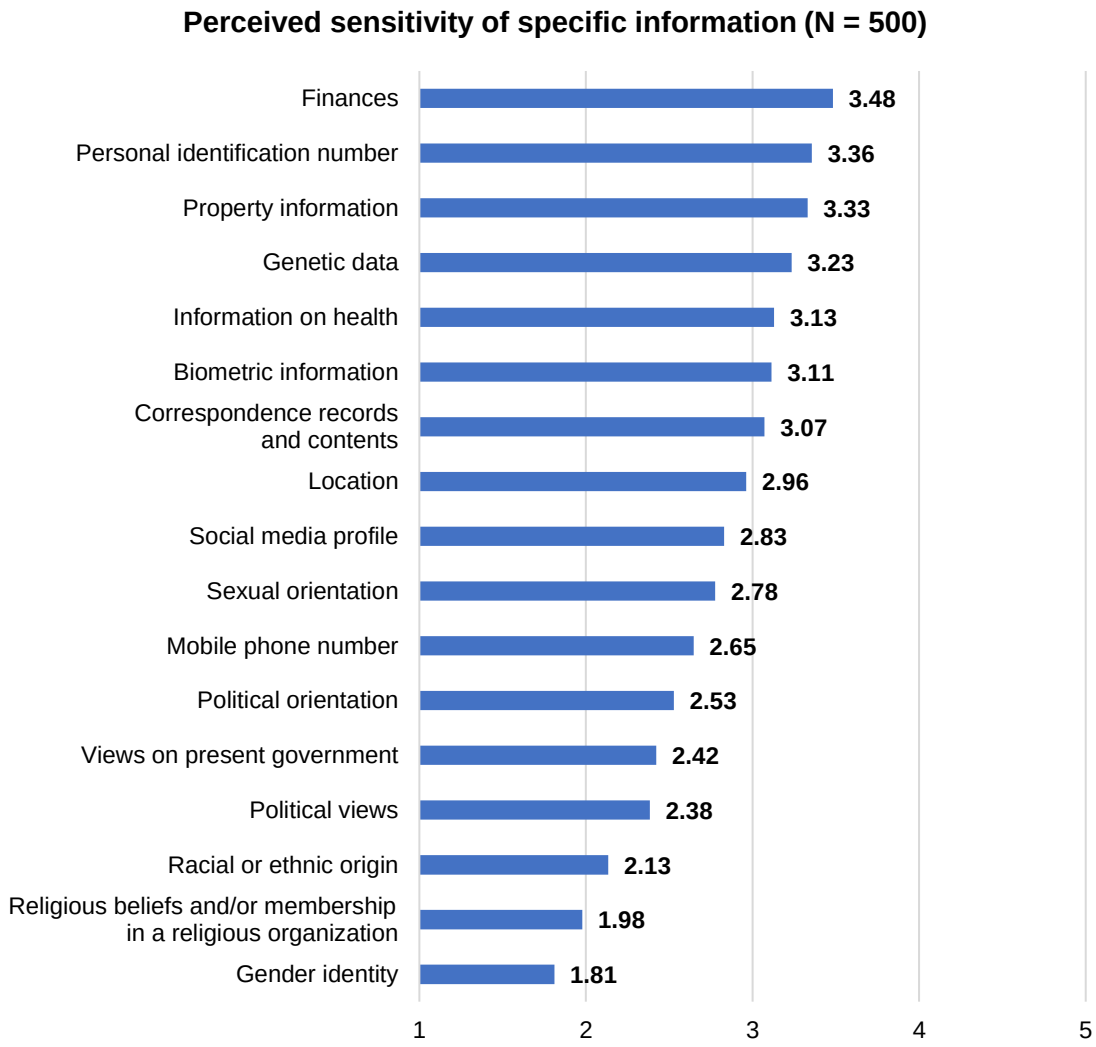

Fig. 13. Perceived sensitivity of information (1 = not at all sensitive to 5 = very sensitive).

The results show that all categories from 'finances' to 'correspondence records and contents' are rated with more than medium sensitivity (> 3.00) by Ghanaian respondents. One's location, social media profile, sexual orientation, mobile phone number, political orientation, views on the present government, political views, racial or ethnic origin, religious beliefs and/or membership in a religious organization as well as gender identity are below a medium sensitivity threshold.

VI. Benefits Associated with Data Disclosure

[This] parameter […] renders the positive effects [Ghanaian respondents] expect from the disclosure of their personal data.[11]

A large majority of Ghanaian respondents (82%) believe that sharing personal data with companies will make it easier for them to provide customers with better information, products, and services for their individual needs. The same percentage of survey respondents (82%) think that it will make it easier for them as consumers to find relevant information, products, and services. Also, a clear majority (69%) indicate that the disclosure of personal data to companies can help them (as consumers) save time, and 57% agree that it can help them save money (questions taken from Ipsos 2019, p. 12) (Fig. 14).

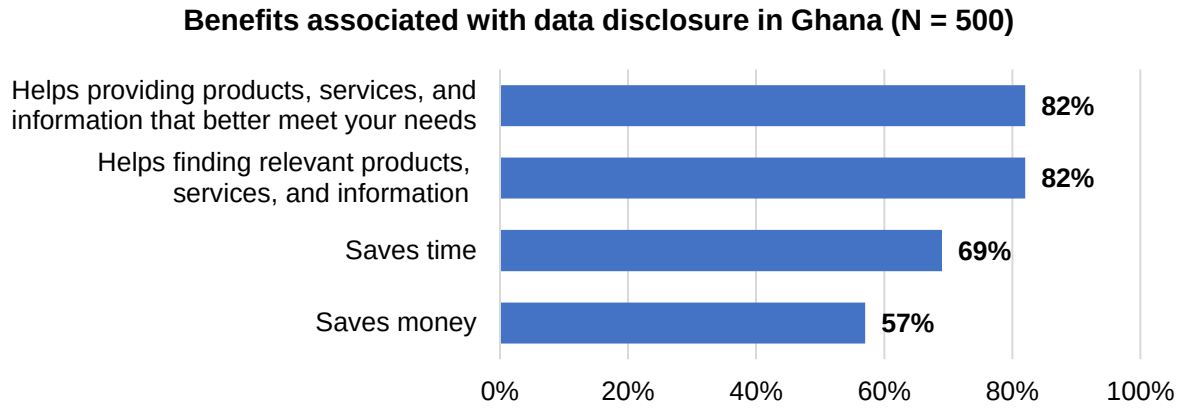

Fig. 14. Benefits associated with data disclosure.

Moreover, two-thirds (66%) of Ghanaian respondents feel more comfortable disclosing their data to companies or brands that compensate them in some way (question taken from Ipsos 2019, p. 14). However, when asked directly whether they would be "willing to share […] personal data (health, financial, driving records, energy use, etc.) in exchange for benefits or rewards like lower costs or personalized service" (GfK 2017, p. 61), only 16% of Ghanaian respondents indicate 6-point agreement on a six-point Likert scale (1 meaning they do not agree at all, 6 meaning they fully agree). After all, almost half of the respondents (47%) rather tend to agree (4-6-point agreement) (Fig. 15).

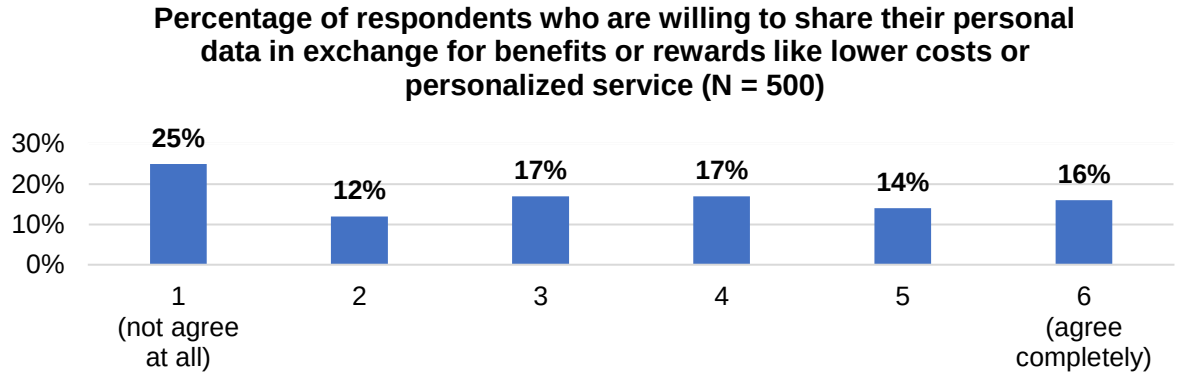

Fig. 15. Willingness to share personal data in exchange for benefits or rewards.[12]

[11] Wawra (2022, IV. 2.).

[12] Question taken from GfK (2017, p. 61).

Similarly, when asked for what reasons respondents would be most willing to share their personal data with a company or government organization, only 14% mentioned services and products that exactly meet their needs (Fig. 16), although customization of services and products was cited as a benefit of data disclosure by 82% (see above). Furthermore, only 16% mentioned the consideration of certain aspects of their personal situation and needs. Even fewer respondents stated they would be most willing to share their data if it allows faster access or navigation of a website or app (6%), or if it allows relevant people to get to know them better (5%).

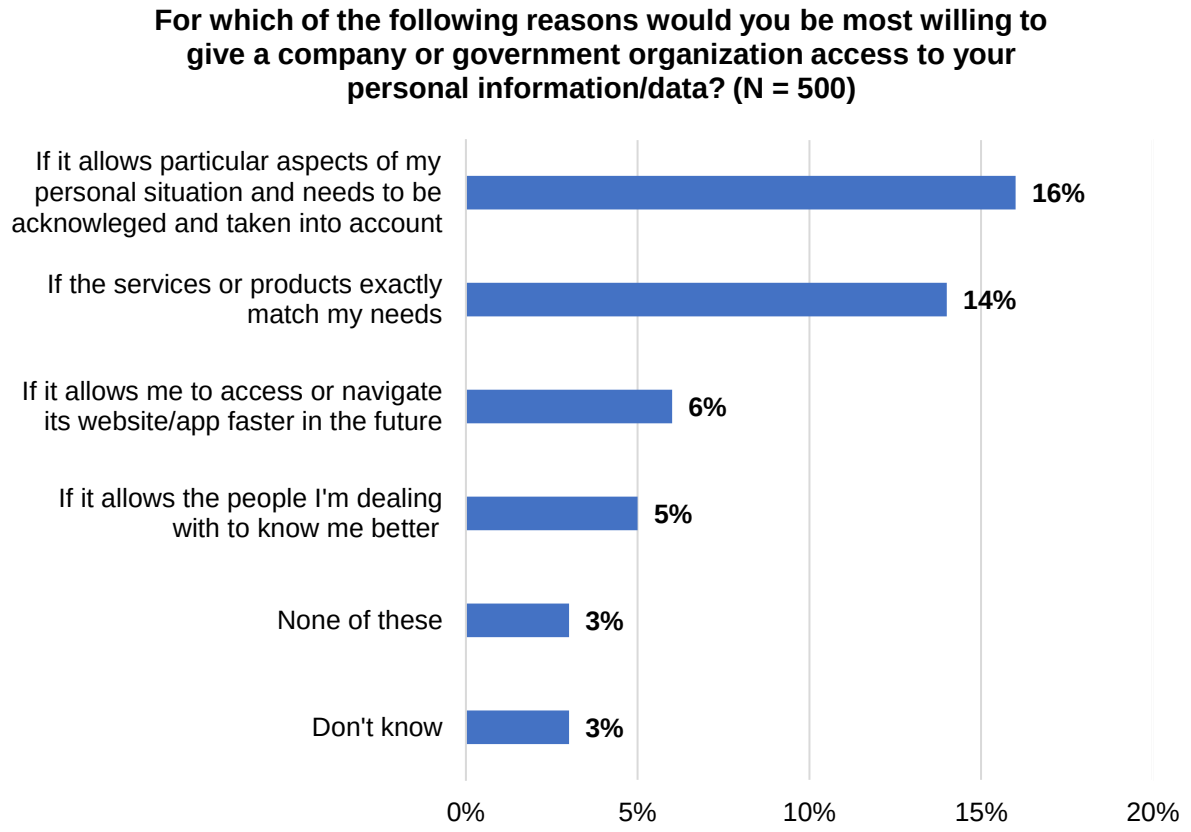

Fig. 16. Respondents' reasons for being willing to disclose personal data to companies or government organizations.[13]

VII. Privacy Concerns and Risks

[This] parameter […] comprises the negative effects [Ghanaian respondents] associate with data disclosure. These include their general concerns about the security of their personal data, and their control over them.[14]

1. Concerns and Risks related to Data Security

Ghanaians are less willing to disclose data to companies when data breaches occur. A majority of 62% of Ghanaian respondents feel more comfortable disclosing their data to companies that have "never been subject to any breach, leak, or fraudulent usage of data" (Ipsos 2019, p. 14) (Fig. 17). An even larger majority (71%) feel more comfortable sharing their data with companies they have a lot of experience with.

[13] Questions taken from Ipsos (2019, p. 17). The question "If it allows the people I'm dealing with to know me better" was slightly adapted.

[14] Wawra (2022, IV. 2.).

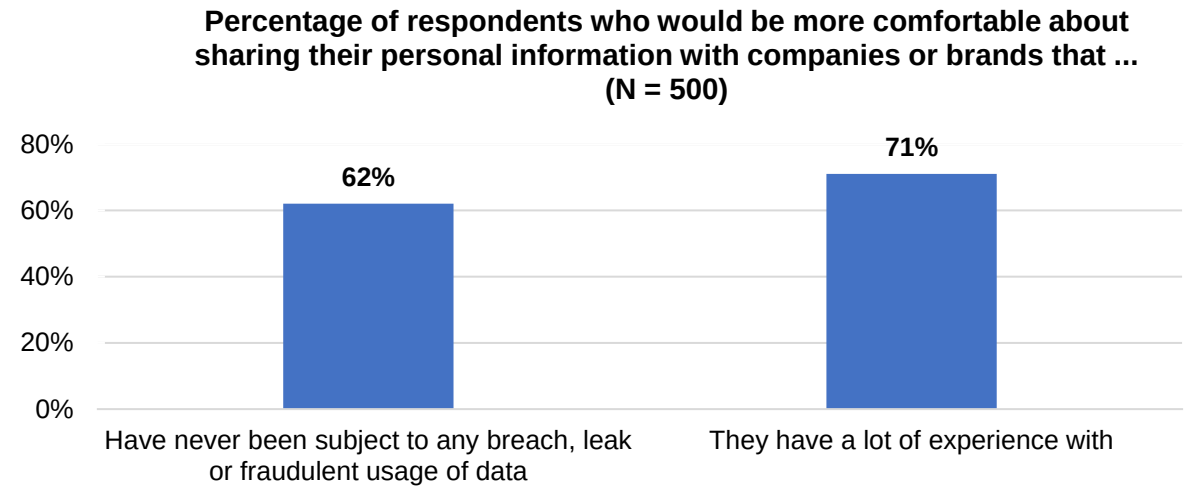

Fig. 17. Willingness to share data with frequently used companies and companies where no data misuse has been detected.[15]

Moreover, 79% of Ghanaian respondents want their "online data & personal information" to be "stored on a secure server", preferably "in their own economy" (as indicated by 73%) (questions taken from CIGI-Ipsos 2019b, pp. 13, 15). 30% want their data to be stored abroad and 27% do not care if their data leave Ghana (questions taken from CIGI-Ipsos 2019b, pp. 17, 19) (Fig. 18).

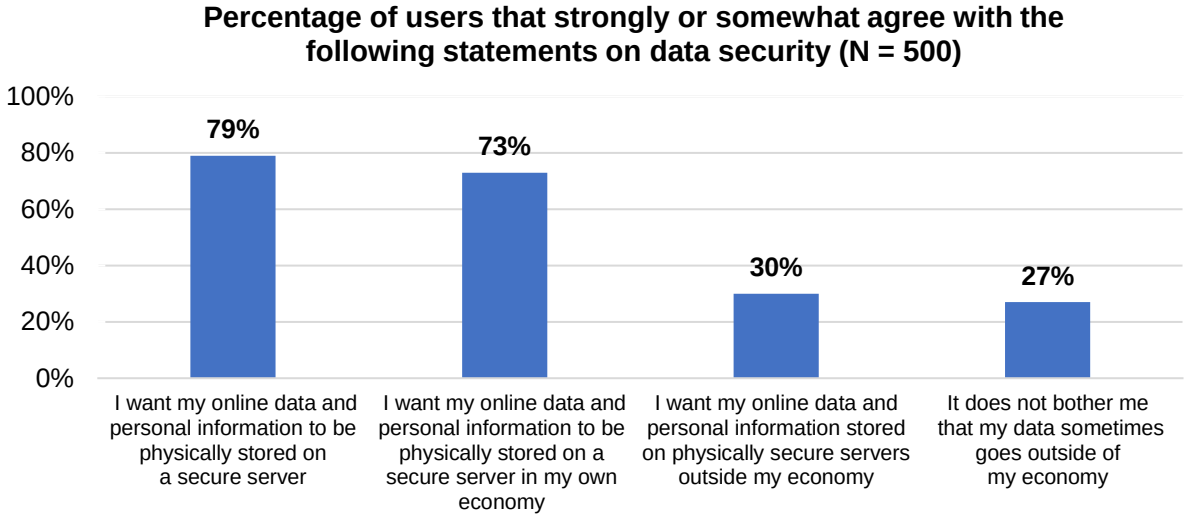

Fig. 18. Percentage of users that strongly or somewhat agree with the respective statements on data security.

2. Concerns and Risks related to Data Control

Respondents from Ghana report that they have adapted their online behavior in various ways due to their distrust of the Internet (Fig. 19). A vast majority report avoiding certain Internet sites (86%) and web applications (74%). A majority of more than two-thirds (68%) say they share less personal information on the Internet than before and more than half (55%) use anti-virus software. Slightly less than half report they change their password regularly, make fewer online purchases and self-censor what they say online (46% each). About 4 in 10 respondents say they limit the amount of

[15] Questions taken from Ipsos (2019, p. 14).

biographically accurate information they disclose online (42%) and that they conduct fewer financial transactions online than in the past (41%). A small minority state that they have closed their Facebook account (13%) or other social media accounts (8%).

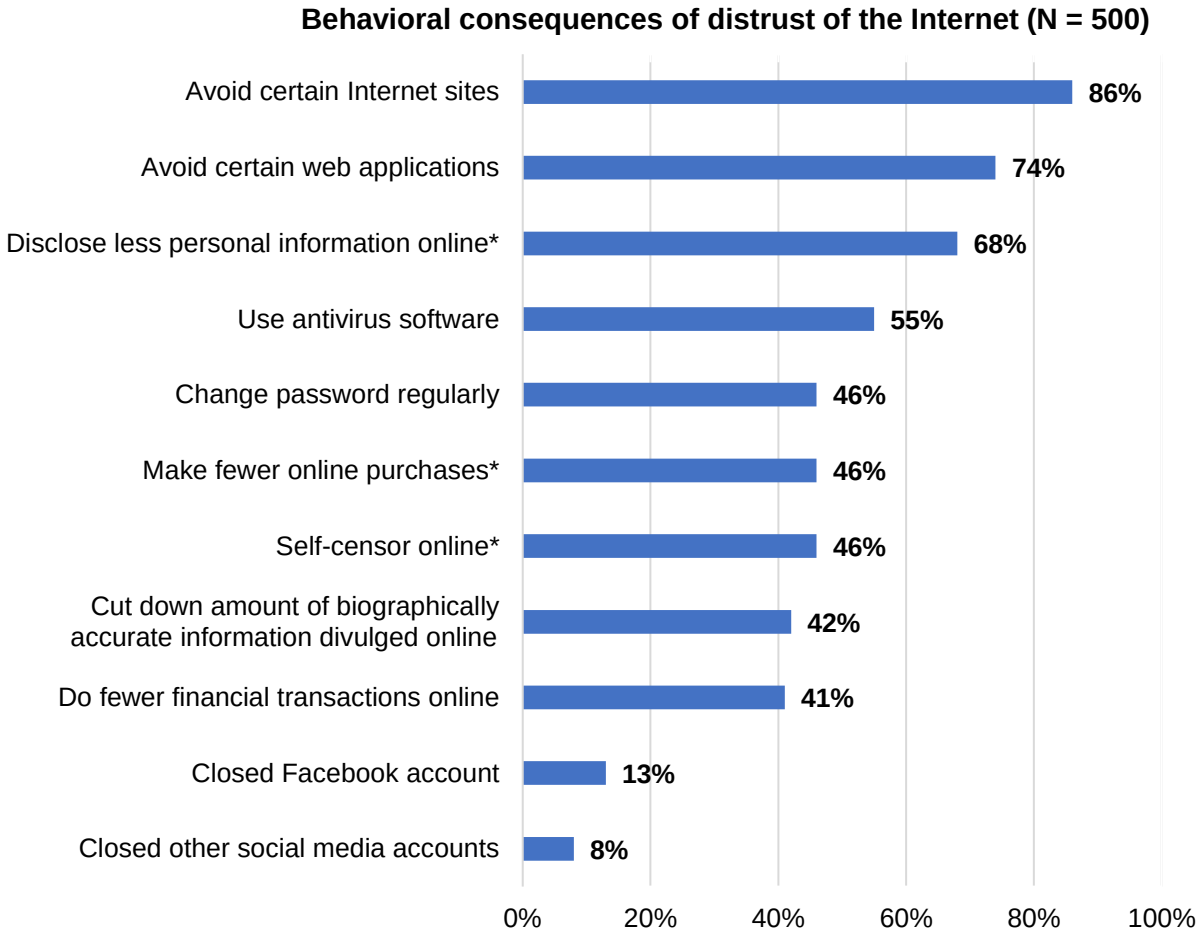

Fig. 19. Behavioral consequences of distrust of the Internet.[16]

VIII. Data Protection Literacy

[Data Protection Literacy] captures [Ghanaians'] awareness and knowledge of data protection, privacy rules and policies as well as the skills they report to have, and the measures they take to protect their personal data.[17]

A majority of Ghanaian respondents (54%) claim to be very or somewhat aware of their country's data protection and privacy rules, while 46% state they are not very or not at all aware of them (questions from CIGI-Ipsos 2019b, p. 8, 2019c, p. 281) (Fig. 20).

[16] Items marked with an asterisk are based on questions in CIGI-Ipsos (2019c, p. 24). All other items are our own.

[17] Wawra (2022, IV. 2.).

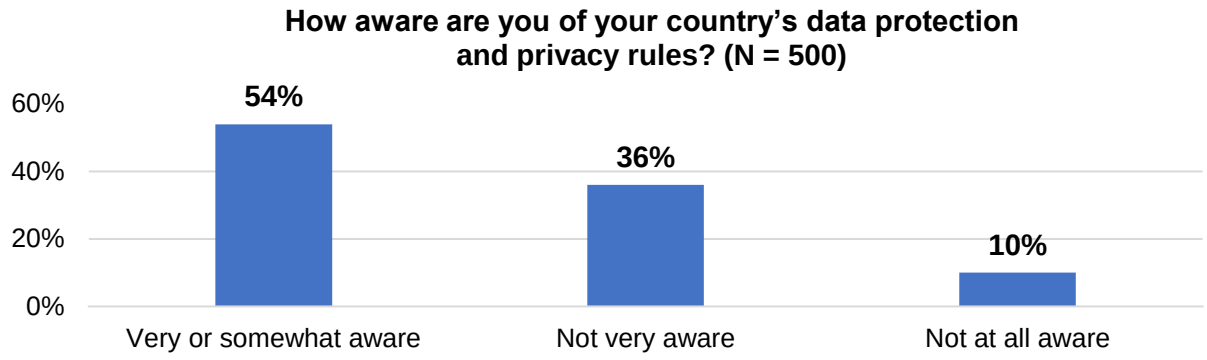

Fig. 20. Awareness of data protection and privacy rules in Ghana.

Only one-third (33%) of Ghanaian respondents attribute a positive effect to their country's privacy laws. A majority (60%) are neutral and a small minority (6%) expect a negative effect (question modelled after Cisco 2021, p. 10) (Fig. 21).

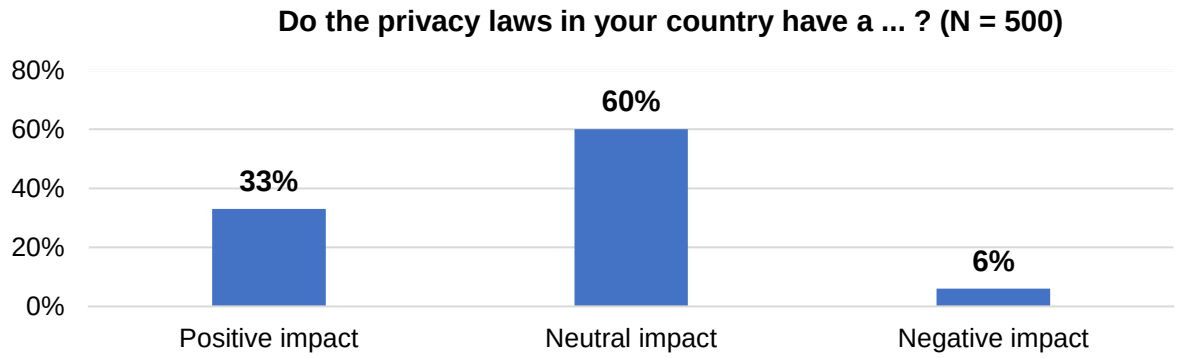

Fig. 21. Respondents' views on the impact of privacy laws.

A large majority of 89% of Ghanaian respondents feel they are doing enough to protect their own data (question taken from CIGI-Ipsos 2019b, p. 29, 2019c, p. 283) (Fig. 22).

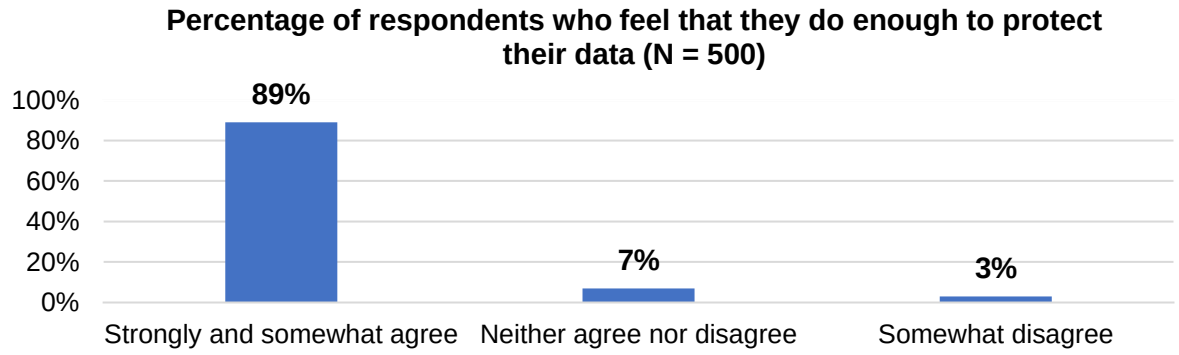

Fig. 22. Respondents' feelings about their own data protection efforts.[18]

[18] No respondent chose the option 'disagree'.

IX. Attitudes Towards Data Receiver

[This] parameter […] refers to [Ghanaians'] attitudes towards institutions to which they disclose their data. These comprise above all their trust in national and foreign governments and (different kinds of) companies pertaining to the protection and correct use of their data.[19]

Trust in others is extremely low among Ghanaian respondents. A large majority (92%) feel that most people cannot be trusted (question taken from EVS/WVS 2021a, p. 7) (Fig. 23).

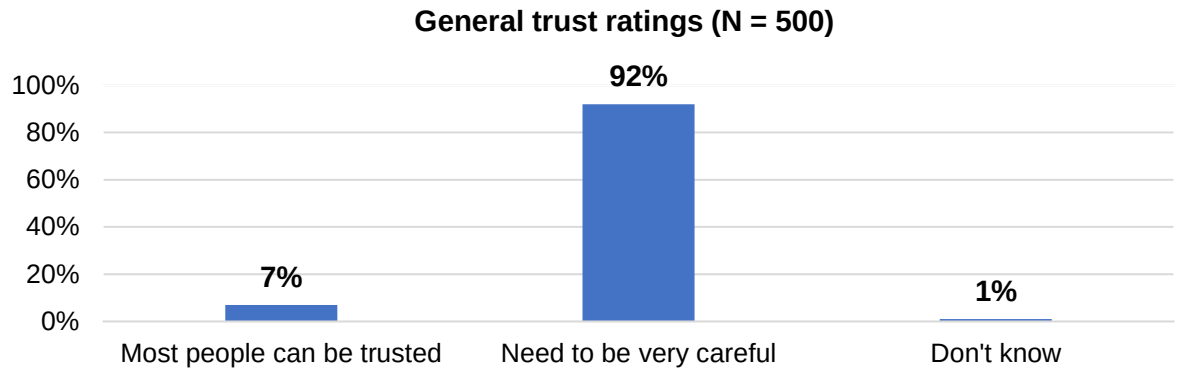

Fig. 23. Trust in others.

This general distrust of others could influence Ghanaians' decisions to disclose data. The following chapters provide more detailed insights into respondents' attitudes towards governments and companies.

1. Attitudes Towards Governments

Ghanaians' attitudes towards their government and political parties reflect the prevailing general distrust of others, in that a clear majority of respondents report that they do not really trust their government (67%), and even more respondents (84%) do not have much or any trust at all in political parties (questions taken from EVS/WVS 2021c, pp. 266, 273, 275) (Fig. 24).

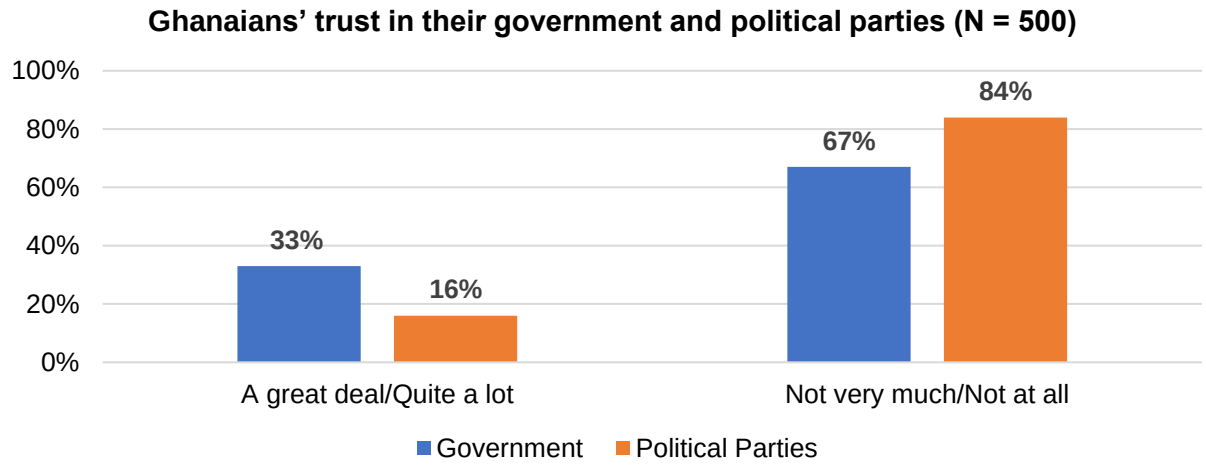

Fig. 24. Ghanaians' trust in their government and political parties.

[19] Wawra (2022, IV. 2.).

In accordance with this, only a minority of Ghanaian respondents (43%) agree (somewhat or strongly) that their government's efforts to protect their data are sufficient (question taken from CIGI-Ipsos 2019c, p. 283) (see also Fig. 26, section IX. 2.). However, a majority of Ghanaians are confident that their government uses their personal data correctly: 54% trust their domestic government and 52% trust local/regional authorities in this regard. Only a minority of 42% have confidence in foreign governments in this regard (question taken from Ipsos 2019, p. 20) (Fig. 25).

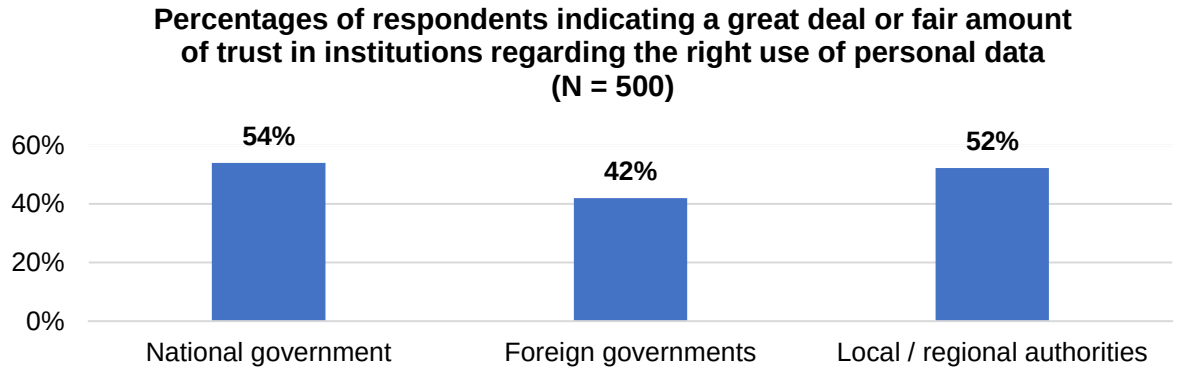

Fig. 25. Percentages of respondents indicating that they trust governments and local/regional authorities a great deal or fair amount regarding the right use of personal data.

2. Attitudes Towards Companies

Ghanaians trust companies more than their government when it comes to handling their data: 65% of respondents think that companies do enough to protect their data, but only 43% say this in relation to their government (question taken from CIGI-Ipsos 2019c, p. 283) (Fig. 26).

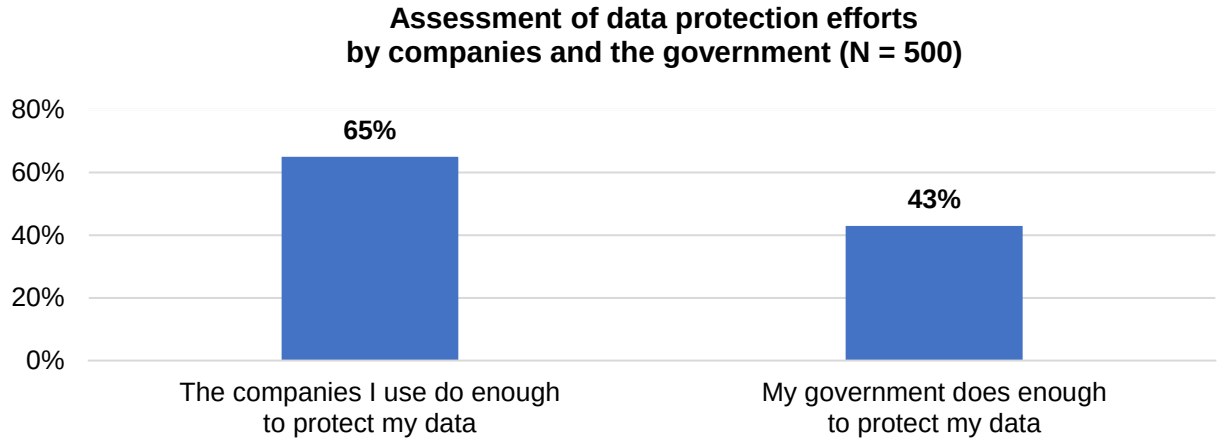

Fig. 26. Percentage of respondents who strongly or somewhat agree that the efforts of companies and their government are sufficient to protect their data.

Ghanaians' confidence in the correct use of their data by companies varies across different industries: the majority have confidence in healthcare providers (82%), financial services companies (71%), shipping and delivery companies (71%), telecommunications companies (67%), and retailers (56%). In contrast, not quite half of the respondents trust search and social media sites (47%) and media companies (47%) (questions taken from Ipsos 2019, p. 20) (Fig. 27).

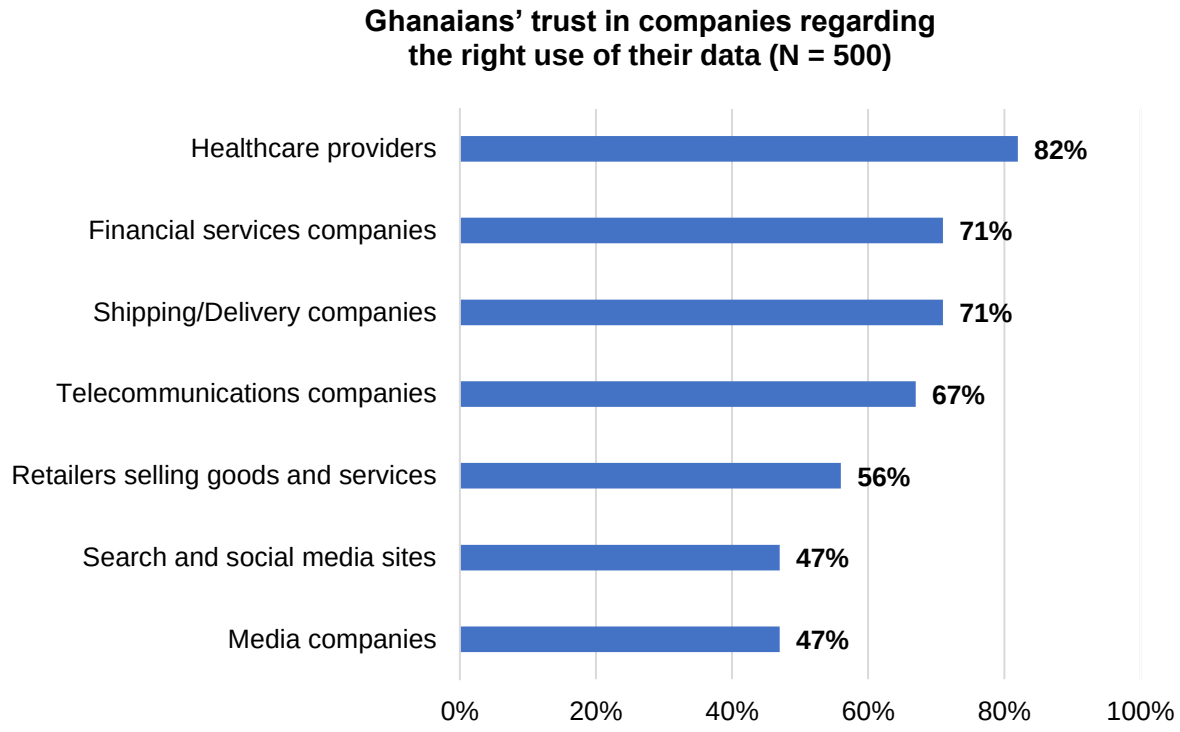

Fig. 27. Ghanaians' trust in companies regarding the right use of their data.

X. Communication on Data Use

[This] parameter […] relates to the importance [Ghanaian respondents] attribute to communication on how their personal data are used.[20]

67% of Ghanaian respondents would rather share their personal data with companies that communicate transparently what the data will be used for. 63% would feel better about disclosing their data to a company that explicitly commits to not passing that information on to others (questions taken from Ipsos 2019, p. 14) (Fig. 28).

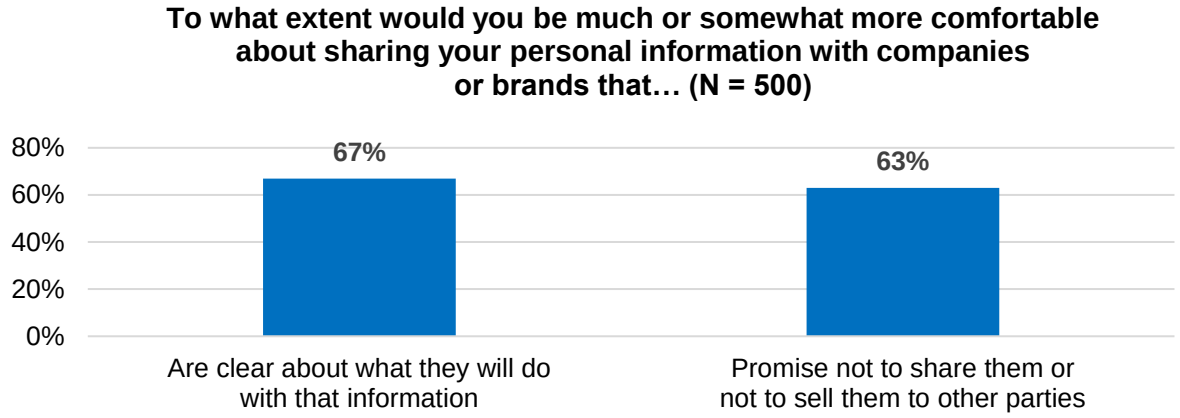

Fig. 28. Communication on data use.

Moreover, a majority of Ghanaian respondents (54%) report they would be most willing to share their data with companies or government institutions that clearly communicate potential risks

[20] Wawra (2022, IV. 2.).

(question taken from Ipsos 2019, p. 17). This was by far the most important condition respondents had for disclosing data among all the options offered. Only a small minority gave other reasons, primarily related to various benefits of data disclosure (see Fig. 16, section VI.).

XI. Key Findings

In this section, the main findings of the studies presented above are summarized and interpreted to provide a quick overview of the main results of the analysis and to facilitate cross-cultural comparison. Furthermore, research gaps are identified. As far as possible, the general direction of the influence of the various factors cited below on the WTS personal data is indicated, i.e. positive (increasing) or negative (reducing) (cf. also Wawra 2022, II. 9. and IV. 2.). It should be noted that we focus on each parameter's influence on the WTS data from a macro perspective. Their individual intensity, ranging from a potentially significant influence to no influence at all, depends on the interplay with other cultural-contextual as well as socio-demographic (e.g. age, education, gender, income) and personality parameters in concrete situational contexts (cf. Wawra 2022, II. 9., III., IV. 3.). This needs to be researched with a micro-level approach. In particular, socio-demographic factors and personality traits are still under-researched in relation to Ghanaians' WTS data (cf. Wawra 2022, IV. 3.).

1. Digital Competitiveness

Ghana is not included in the *IMD World Digital Competitiveness Ranking* (IMD 2021, 2022), and a survey of the respective indicators of digital competitiveness in Ghana is a research gap yet to be closed. Once this is achieved, the effect (of the individual components) of this parameter on people's WTS personal data has yet to be studied in detail (cf. Wawra 2022, IV. 2.).

Our own survey revealed that Ghanaian respondents tend to believe that Ghana's data protection regulation has had a mostly positive effect on various factors related to the country's digital competitiveness. Thus, a majority of respondents from Ghana (56%) consider Ghana's data protection regulation to have a positive effect on digital development and the implementation of digital innovations. Moreover, the majority of Ghanaian respondents believe that data protection regulation in their country has led to a more professional handling of data by companies (58%), and that it allows consumers to easily adjust their privacy needs (60%). However, most respondents (51%) think that it generates an excessive amount of bureaucracy for consumers.

2. General Value of Informational Privacy

Whether or not Ghanaian respondents consider government surveillance acceptable depends on the situational context and the data receiver. A majority of Ghanaians (74%) accept government surveillance in public areas. However, only a small minority approve of government email and Internet monitoring (24%) as well as secret data collection by the government in general (28%). Thus, informational privacy is assigned a significantly lower value in the context of state surveillance in the public sphere than in online environments, where it is highly valued by the vast majority of Ghanaian respondents. In addition, informational privacy is highly valued by a clear majority when it comes to surreptitious state intervention.

The acceptance of employer monitoring in the workplace is very high among Ghanaian respondents: 77% would not mind their performance being monitored using technical devices. However, employer monitoring outside the professional context is rejected by most respondents, with almost two-thirds (64%) rejecting their employer's access to their personal data, such as their social media profiles.

Regarding the use of personal data collected by companies, a majority of Ghanaians believe that consumers should be able to refuse this (65%). 3 in 4 respondents (75%) believe that consumers should be compensated for the use of their data. Merely one-fifth (21%) of Ghanaian respondents do not mind companies using collected personal data. More generally, a large majority of respondents (82%) believe they can make self-determined decisions about the disclosure of their personal data.

In sum, informational privacy in the context of employer monitoring is not a high priority for most of the Ghanaian respondents when it comes to their work performance, but it is outside the professional sphere, i.e. in relation to their personal data in general. Moreover, a clear majority value their informational privacy as consumers. In addition, a majority of Ghanaian respondents believe that concessions to their informational privacy in this regard are worth compensation. Notably, a large majority of Ghanaian respondents regard themselves as self-determining in their data disclosure decisions.

3. Degree of Privacy of Data

According to Ghana's Data Protection Act 2012 (DPA 2012), sensitive personal data, referred to as "special personal data", are data related to a person's

- color or their racial, ethnic or tribal origin
- religious or similar beliefs
- political opinion
- physical, medical, and mental health, their mental condition or DNA
- sexual orientation
- criminal records

as well as

- personal data of minors.

The sensitivity ratings of Ghanaian respondents for certain data – that go beyond the categories of sensitive personal data listed in the DPA – show that the following are above a medium privacy threshold of 3.00 (1 indicating that the respective type of data are not at all considered to be sensitive, 5 that it is very sensitive): finances (3.48), personal identification number (3.36), property information (3.33), genetic data (3.23), information on health (3.13), biometric information (3.11), and correspondence records and contents (3.07). The following data are below or well below a medium privacy threshold: location (2.96), social media profile (2.83), sexual orientation (2.78), mobile phone number (2.65), political orientation (2.53), views on the present government (2.42), political views (2.38), racial or ethnic origin (2.13), religious beliefs and/or membership in a religious organization (1.98) as well as gender identity (1.81). This demonstrates that not all personal data defined as sensitive by Ghanaian law – such as one's racial or ethnic origin, or religious beliefs – are also considered highly sensitive by Ghanaian respondents. It is noteworthy that the three categories identified as the most sensitive – finances, personal identification number, and property information – do not fall under the legal definition of sensitive data.

4. Benefits Associated with Data Disclosure

The benefits of disclosing personal data cited by the majority of Ghanaian respondents are that it helps

- companies to better tailor information, products, and services to their needs (82%)
- them as consumers to find relevant information, products, and services (82%)
- them as consumers to save time (69%) and money (57%).

However, when asked directly for what reasons they would be most willing to share their personal data with a company or government organization, only a small minority of respondents (14%) name products and services that exactly meet their needs. Thus, the possibility of product and service customization may ultimately play only a minor role in Ghanaian's decision to disclose their data. Other potential benefits that merely a small minority of respondents consider important reasons for disclosing data to companies or government organizations include the consideration of certain aspects of one's personal situation and needs (16%), faster access or navigation of a website or app (6%) and allowing the people one is dealing with to get to know them better (5%).

Similarly, a majority of Ghanaian respondents (66%) say they feel more comfortable disclosing their data if companies offer them some kind of compensation for it. However, when asked directly about their willingness to disclose, only 16% of Ghanaian respondents indicate they would be very willing to share personal data (six-point agreement on a six-point Likert scale) if they benefit or are rewarded in some way (lower costs and personalized service are given as examples, but no differentiation is made), while almost half (47%) show at least a tendency to be willing (4-6-point agreement). Analogous to the GfK survey (2017), health and financial data as well as driving records and information on energy use are mentioned as examples of personal data in our survey, but no differentiation is made between data types. Given that health data are sensitive personal data according to Ghanaian law, and as these and financial data have been categorized as being above a medium privacy threshold in the Ghanaian context (see Degree of Privacy of Data above), this could explain why a majority of Ghanaian respondents (54%) say they are not very willing to share their data, even if they could expect a benefit: For Ackermann et al. (2021) conclude that the higher the perceived sensitivity of data, the less other variables (such as benefits of disclosure) affect people's WTS data:

"In other words, consumers will be very unlikely to share private data that they perceive as very sensitive, irrespective of what type of compensation they are offered in return or the degree of anonymity that is granted to them" (Ackermann et al. 2021).

If, however, data are

"not perceived as very sensitive, other factors, such as what compensation is offered and whether the data allow for personal identification […], will likely have a considerable impact on individual decisions to share these data" (Ackermann et al. 2021).

Further studies that distinguish between more and less sensitive types of data are needed to determine whether this also applies to Ghanaian data disclosure culture. Moreover, they should systematically differentiate between different kinds of benefits, as there could be cultural differences with regard to the value attributed to certain benefits, and this might influence people's WTS data accordingly. Previous research has, for example, differentiated between three categories of benefits: (1) "financial rewards", (2) "personalization benefits", and (3) "social adjustment benefits" (Buchwald et al. 2017). The latter were defined as "the establishment of social identity by integrating into

desired social groups" (Lu et al. 2004, p. 572), which allows individuals to "fulfil their need for affiliation" (Buchwald et al. 2017). Another important issue meriting further investigation is whether certain types of benefits are more relevant than others in certain contexts of data disclosure. For example, Ghanaian respondents attribute little importance to the benefit of familiarizing the people one is dealing with with oneself in the context of data disclosure to companies and government agencies. However, this particular type of social adjustment benefit may have a greater impact on people's data disclosure decisions in contexts where the interpersonal level and social integration are paramount.

5. Privacy Concerns and Risks

a. Data Security

Data Security is important to Ghanaians: the majority of respondents would be more comfortable giving personal information to a company that has never experienced a breach, leak, or fraudulent usage of data (62%) or to one they have a lot of experience with (71%). Moreover, 79% of Ghanaian respondents want their data to be stored on a secure server, preferably in their own economy (73%). A minority of less than one-third want their data to be stored abroad (30%) and do not mind if their data leave the country (27%). Consequently, an impeccable track record of data security and data storage, preferably in their own country, is likely to have a positive impact on the willingness of most Ghanaians to share personal data.

b. Data Control

Because of their concerns about control over their data, many Ghanaians limit themselves in their online behavior in various ways. The most widespread limitations include avoiding certain Internet sites (86% of respondents) and web applications (74% of respondents) and sharing less personal information online than before (68% of respondents). About half of respondents say they self-censor what they say online, and make fewer online purchases (46% in each case). However, only about 4 in 10 respondents say they reduce the amount of biographically accurate information shared online (42%) and make fewer financial transactions online (41%). Moreover, Ghanaians seem reluctant to limit their online social life: only a small minority say they have closed their Facebook or other social media accounts (13% and 8%, respectively). As far as measures to secure their devices or accounts are concerned, around half of the Ghanaian respondents report using anti-virus software (55%) and changing their password on a regular basis (46%).

The fact that many of the above measures were found to be relatively widespread among the Ghanaian respondents suggests that they are significantly concerned about data control on the Internet. According to previous research (cf. e.g. Hoffmann et al. 1999, Roeber et al. 2015, and Ackermann et al. 2021), the feeling of control over one's own personal data can be improved by providing a delete option for data and/or by guaranteeing anonymity. Ackermann et al. (2021) even identified the granting of anonymity as "the most effective single factor for evoking WTS". However, this does not seem to apply to very sensitive data (cf. Ackermann et al. 2021, see above). Surveys and further empirical studies on this aspect of data disclosure are needed, particularly also with Ghanaian respondents.

6. Data Protection Literacy

Slightly more than half of the respondents from Ghana (54%) are aware of the data protection and privacy rules that apply in their country. However, only one-third of respondents (33%) believe the privacy laws in their country have a positive impact, while most respondents have a neutral attitude

in this respect (60%). Notably, about 9 in 10 respondents (89%) consider their efforts to protect their own data to be sufficient.

Further studies should systematically differentiate between different aspects of data protection literacy, such as between declarative and procedural knowledge, in order to (better) determine the effect (of the individual components) on people's WTS personal data (cf. Baruh et al. 2017, Wawra 2022, II. 2.).

7. Attitudes Towards Data Receiver

a. Attitudes Towards Governments

In general, Ghanaians' trust in others is very low: only 7% of respondents say that most people can be trusted and 92% express caution in this regard. Ghanaians' trust in political institutions also tends to be rather low: 67% of respondents report that they do not trust their government very much or not at all, and 84% say this for political parties. Accordingly, only a minority of 43% agree that their government's efforts to protect their data are sufficient. However, a slight majority have confidence in their domestic government (54%) and local or regional authorities (52%) to use their personal data correctly, while only 42% trust foreign governments in this respect.

This mixed picture makes predictions about Ghanaians' basic WTS with their own government somewhat difficult. Since there seems to be a general tendency among most Ghanaians to distrust their government, their willingness to share data with government institutions is also likely to be rather low. The willingness of most Ghanaians to share their data with foreign governments is likely to be even lower.

b. Attitudes Towards Companies

A majority of Ghanaians (65%) consider the data protection measures of the companies they have done business with to be sufficient. Notably, only a minority of 43% consider those of the government to be sufficient, which means that Ghanaians trust companies more than their government with regard to data protection.

Ghanaians' trust in companies regarding the proper use of their data varies by industry. Industries trusted by a (large) majority of respondents in this regard include healthcare providers (82%), financial services companies (71%), shipping and delivery companies (71%), telecommunications companies (67%), and retailers (56%). Industries for which distrust prevails include search and social media sites and media companies, which are trusted by just under half of respondents (47% each) with regard to the correct use of personal data. It can be deduced from this that for the majority of Ghanaians, the WTS data is highest for healthcare providers, followed by financial services companies, shipping and delivery companies, telecommunications companies, and retailers and lowest for search and social media sites and media companies.

8. Communication on Data Use

The majority of Ghanaian respondents would be more willing to disclose personal data if companies communicated the use of the data transparently (67%) and promised that they would not pass on the data (63%). Moreover, when respondents were asked for which of several given reasons they would be most willing to share their personal data with companies or government institutions, more than half of respondents (54%) cited clear communication of potential risks as by far the most important reason.

Thus, if companies communicate these contents, it should potentially have a positive impact on the WTS data of a majority of Ghanaians.

XII. Conclusion and Outlook

This study captures the narrower cultural context of data disclosure in Ghana (cf. Wawra 2022, II. 8., III.). It provides an overview of Ghanaian respondents' perceptions of informational privacy, data protection, and data control issues pertaining to personal data disclosure from a macro perspective. It reflects the cultural preconditions of information governance in Ghana by shedding light on the prevailing attitudes, assumptions, views, and reported behaviors of respondents from Ghana that can influence their WTS personal data.

This study has mainly provided statistical insights into

- the views of Ghanaians on the impact of their country's data protection regulation on factors related to Ghana's digital competitiveness
- the value Ghanaians place on their informational privacy in different contexts
- what types of data are defined as sensitive personal data according to Ghanaian law and which data are considered more or less private or sensitive by Ghanaian respondents
- whether a better adaptation of information, products, and services to consumers' needs, facilitation of finding these, as well as a potential saving of time and money, are considered to be benefits by a majority of respondents and whether the expected benefits and rewards would provide an incentive for a majority to disclose personal data
- the value Ghanaians place on data security
- reported behavior that follows from perceived privacy concerns and risks
- Ghanaians' awareness of and evaluation of data protection and privacy rules and the assessment of their own data protection efforts
- Ghanaians' general trust levels and their trust in domestic and foreign governments and different types of companies, as well as their trust in these institutions with regard to their personal data
- whether certain communication content makes Ghanaian consumers feel more at ease when asked to share personal data.

The less basic WTS data the survey indicates, the more effort organizations requesting personal data potentially have to put into convincing people to disclose their data anyway. This can be achieved through communication and business or political strategies aimed primarily at increasing people's trust in the data recipient and reducing privacy concerns. It should also be noted that previous research on data disclosure suggests that the degree of privacy or sensitivity of the data, the granting or denial of anonymity, and whether or not data are requested in line with an organization's mission and responsibilities are the factors that have the greatest influence on people's decisions to disclose data (see above; cf. Ackermann et al. 2021).

This study was able to reveal general tendencies in the views of Ghanaian respondents on issues closely related to data disclosure decisions. It was also able to show the general direction of influence of most of the cited parameters on people's WTS data. In actual data disclosure scenarios, the different variables can have a greater or lesser (or no) impact on people's final decision to share personal data. It should also be taken into account that depending on the situation in which personal data are requested, the decision to disclose may not always be made consciously, and actual

behavior may differ from reported behavior (cf. e.g. Kim et al. 2015, Ackermann et al. 2021, Wawra 2022, II. 9.). The complex interplay of the many variables that can influence the WTS data – including not only cultural-contextual, but also socio-demographic factors and personality traits – needs to be addressed on a micro level and therefore further explored in concrete situational contexts.

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XIV. Appendix 1. – Sample details

Most of the 500 respondents in the sample were male (76%), about a quarter were female (23%) and 1% identified as diverse (Fig. 29). The vast majority (87%) were aged 35 years old or younger, with 26–35-year-olds making up the largest age group, accounting for almost half of the sample (48%; Fig. 30). Furthermore, more than three-quarters of the respondents (79%) came from an urban region, while about one-fifth (21%) resided in a rural region at the time of the survey (Fig. 31). Most respondents (72%) were highly educated, having completed a university education. About one-fifth (22%) had completed senior high school (Fig. 32).

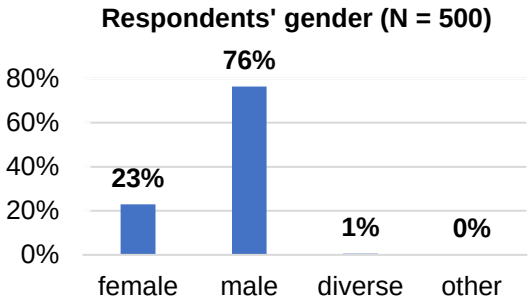

Fig. 29. Gender distribution of the sample

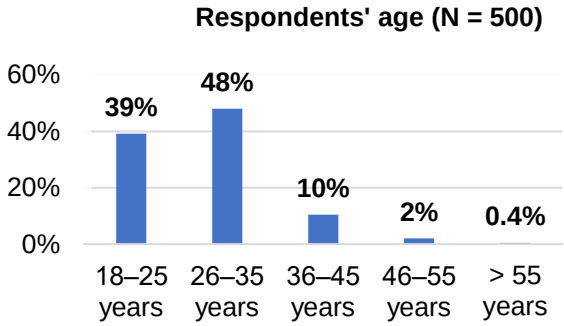

Fig. 30. Age distribution of the sample

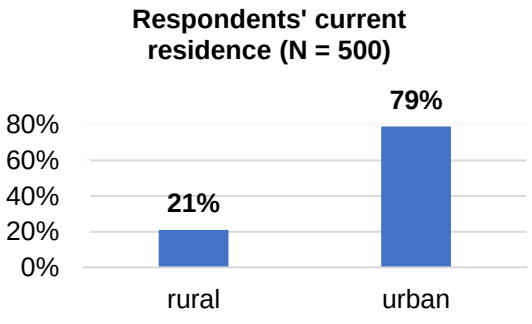

Fig. 31. Regional distribution of the sample

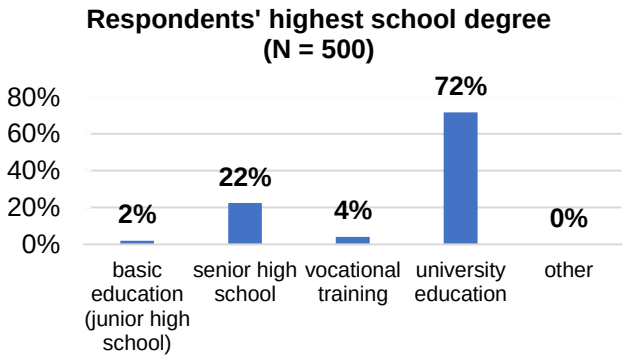

Fig. 32. Distribution of education levels in the sample