Digital Privacy – Member Survey 2024

IEEE Digital Privacy Initiative in Partnership with IEEE Strategic Research

Johannes Schaefer, PhD, IEEE Strategic Research

www.digitalprivacy.ieee.org

IEEE Digital Privacy

IEEE Advancing Technology for Humanity

Methodology

Member Survey 2024

- Invitations were sent to a worldwide sample of 29,238 randomly selected IEEE members of all member grades to participate in a self-administered online survey
- Data collection happened between 24 September 2024 and 22 October 2024
- 1,795 Members responded
- Response rate of 6.1% - Margin of error ±2.3

Image Source: : Ziprecruiter

Relevance of the Topic

- 37.4% of the IEEE members in the survey worked either directly (12.1%) or indirectly (25.3%) on digital privacy (indirectly: e.g. digital products that collect personal data)
- Four in five members (81.8%) expected AI to impact digit privacy.
- A majority of six in ten (62.1%) expected AI to severely diminish digital privacy.

Image Source: Paradigm Marketing and Design

➢ Digital privacy is relevant to IEEE members

Informational Needs

- Less than a quarter of the IEEE members in the survey (24.2%) felt well informed about the ways their personal data is being used by companies and government organizations.

- 76.7% of IEEE members assumed that average consumers were not well informed about how their personal data is used and 37.5% self-described as not well informed.

- Nine in ten IEEE members (91.8%) agreed that the public needs to be better informed and educated about the risks associated with the collection of individual data.

Image Source: SurveyMonkey

➢ More information about digital privacy is needed.

Expectations Towards IEEE

- Four in five (81.3%) respondents supported the idea of IEEE providing guidance on technology solutions for digital privacy.
- Four in five respondents (82.2%) said it was important for IEEE to be among the thought leaders on digital privacy.

Image Source: The Education Hub

➢ IEEE should get involved.

Member Perspectives on Digital Privacy

- Equating digital privacy with data security is a rather limited view that is still shared by 36.6% of IEEE members.

- However, twice as many IEEE members (75.8%) agreed with the broader perspective promoted by the IEEE Digital Privacy Initiative stating that digital privacy should start with understanding the needs of individuals before their data is collected instead of focusing only on securing already collected data.

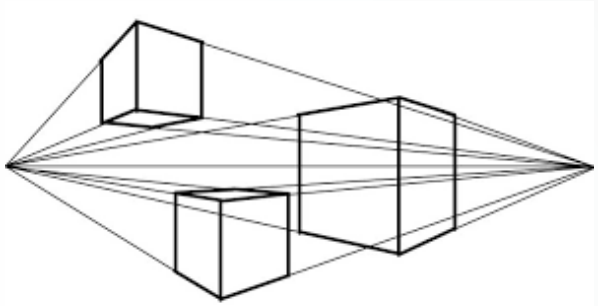


Image Source: https://luukminkman.com/

- Nine in ten IEEE members agreed that companies (89.1%) and government organizations (90.3%) have obligations of trust and dignity and duty of care to prevent harming the individuals they collect data about.

➢ IEEE members support the perspective of the IEEE Digital Privacy Initiative.

Regional Differences

- IEEE members from China were more likely to accept the usage of personal digital usage data by various actors (political parties, health insurers, marketers, employers, national security agencies) than IEEE members in any other region.
- In the US 2.7% assumed that average consumers in the country are well informed about digital privacy vs. 13.8% in China and 20.2% in India.
- In the US 83.4% supported the idea of IEEE providing guidance on technology solutions for digital privacy vs. 69.1% in China.
- In the US 82.6% said it was important for IEEE to be among the thought leaders for digital privacy vs. 71.4% in China.

Image Source: https://www.vecteezy.com/

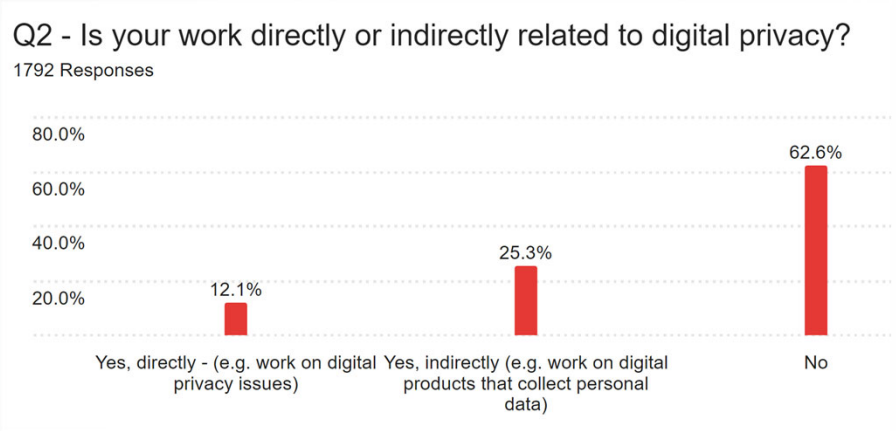
- The traditional perspective of equating digital privacy with data security was more common in China (64.3%) and in India (46.1%) than in Europe (31.9%) or the US (31.7%).
- The expectation that AI models and their data collection will severely diminish digital privacy was more common in the US (69.2%) than in India (57.7%) or in China (47.1%).
- Assigning a duty of care responsibility to companies was more common in the US (94.4%) than in India (79.6%) or China (64.8%).
- Holding governments accountable was more common in the US (94.9%) than in India (83.5%) or China (76.1%).

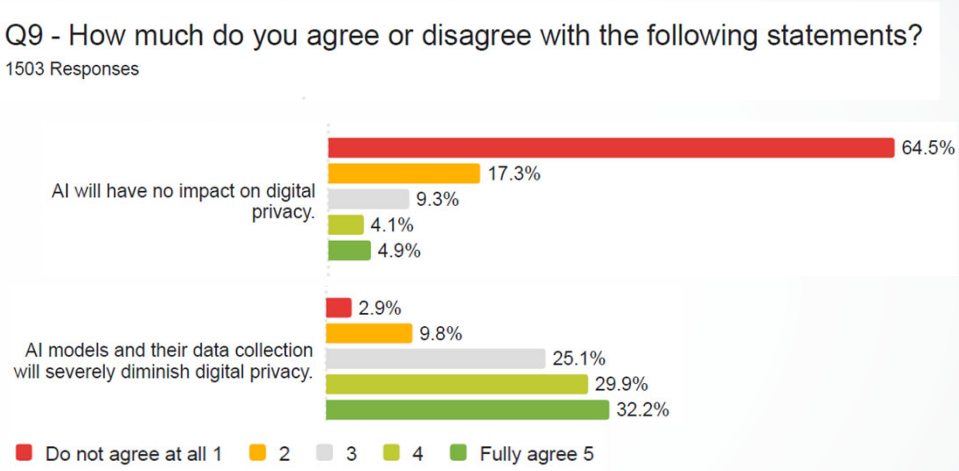
➢ There are differences between countries and regions that should be investigated more.

Appendix

Charts and Tables for Core Questions

Relevance of the Topic

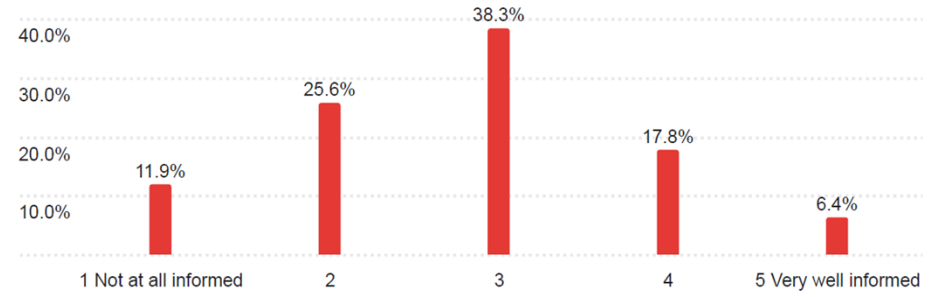




Informational Needs

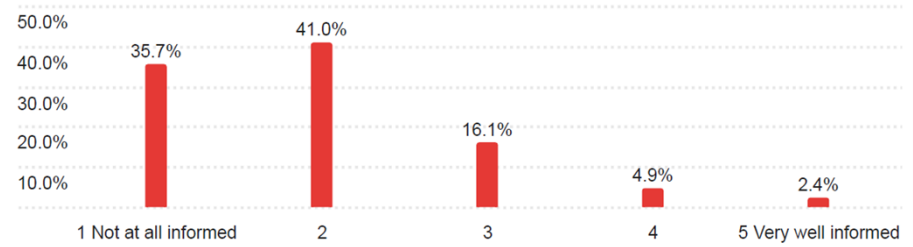
Q3 - How informed or uninformed do you feel about how your personal data is used by companies or government organizations?

1561 Responses



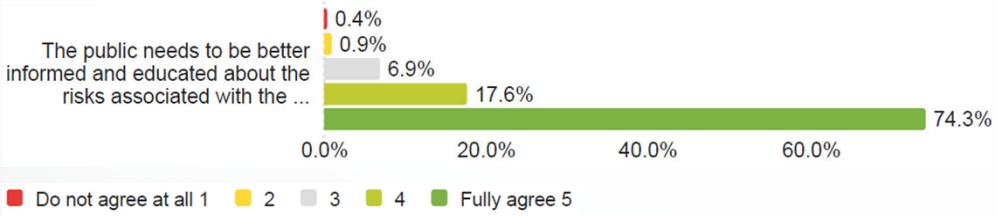
Q4 - How informed or uninformed do you think the average consumer in your country is about how their personal data is used by companies or government organizations?

1562 Responses



Q10 - How much do you agree or disagree with the following statements?

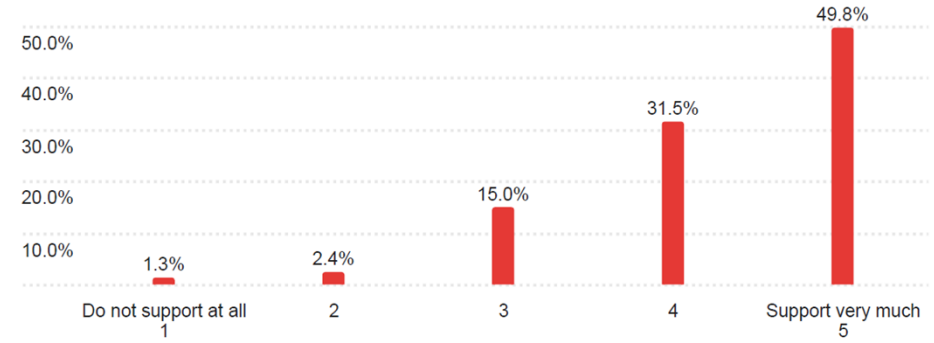
1486 Responses



Expectations Towards IEEE

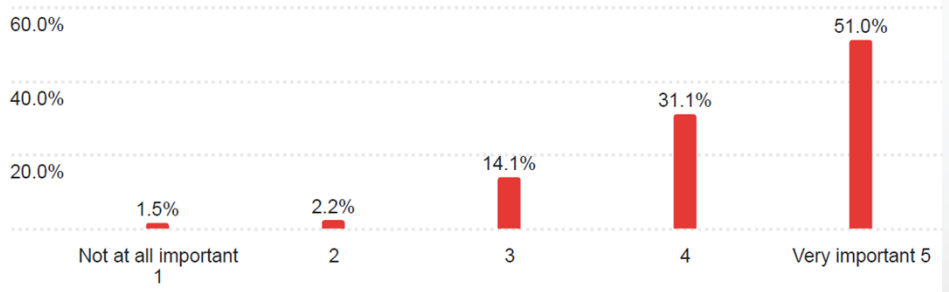
Q6 - How much do you support or not support the idea of IEEE providing guidance on technology solutions for digital privacy?

1512 Responses

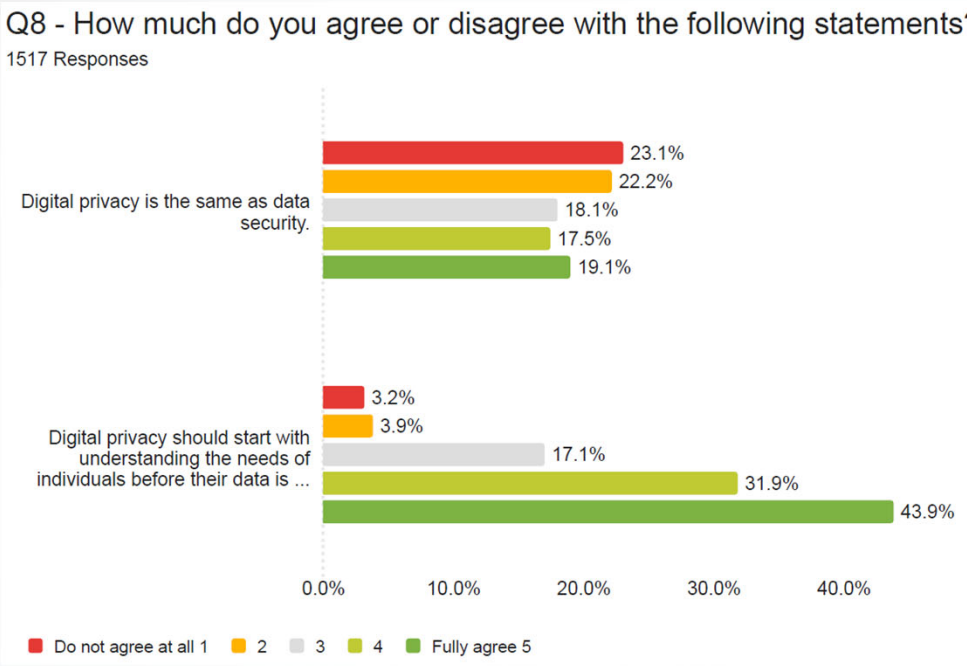


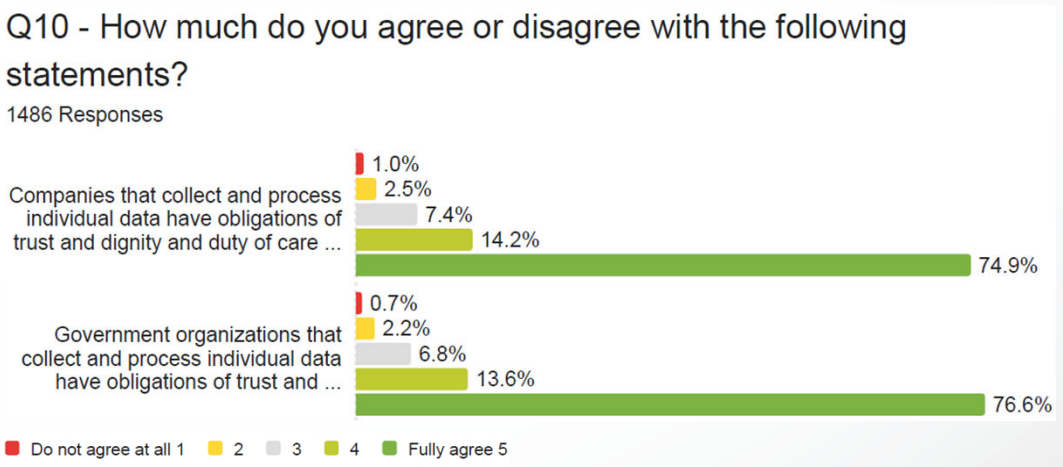
Q7 - How important or unimportant is it for IEEE to be among the thought leaders on digital privacy?

1513 Responses



Member Perspectives on Digital Privacy





Regional Differences – How to Interpret Lettering in the Following Tables

		Variable 2					
		Total	Item 1 A	Item 2 B	Item 3 C	Item 4 D	Item 6 E
Variable 1	Total Count (Answering)	1,215.0	273.0	49.0	374.0	101.0	418.0
	Item 1	12.7%	5.9%	2.0%	11.5%	11.9%	19.6%
					A, B	A, B	A, B, C
	Item 2	17.9%	13.9%	12.2%	16.0%	21.8%	22.0%
							A, C
	Item 3	58.6%	74.0%	71.4%	62.8%	59.4%	43.1%
			C, D, E	E	E	E	
	Item 4	10.8%	6.2%	14.3%	9.6%	6.9%	15.3%
				A			A, C, D

The 19.6% in column E are statistically significantly higher than the 5.9% in column A, the 2.0% in column B, and the 11.5% in column C.

The difference between the 71.4% in column B and the 62.8% in column C is statistically not significant. Both share the same letter.

The difference between the 9.6% in column C and the 6.9% in column D is statistically not significant. Both are without letters.

Statistical significance of survey results refers to the likelihood that a finding from a survey is not due to random chance but instead represents a true difference or relationship within the population being studied; essentially, it means that the observed result is unlikely to have occurred by chance and is likely a genuine effect within the data.

Regional Differences – Acceptable Usage

Table 1 – Disagreement with statements allowing different actors to utilize private digital usage data for their purposes by country or region

Actor	Percentage of respondents disagreeing									
	Total	Africa	Asia / Pacific	Canada	China	Europe	India	Latin Amer.	Middle East	United States
	1,502	36	188	63	67	317	102	80	37	568
		A	B	C	D	E	F	G	H	I
Political Parties	80.2%	76.5%	78.1%	83.6%	49.2%	89.3%	73.2%	65.8%	62.9%	83.7%
		D	D,G	D,G,H		A,B,D,F,G,H,I	D	D		D,F,G,H
Health Insurers	76.8%	58.3%	66.3%	79.4%	41.5%	81.2%	55.1%	55.7%	55.6%	91.1%
			D	A,D,F,G,H		A,B,D,F,G,H				A,B,C,D,E,F,G,H
Marketers	76.3%	58.8%	71.7%	81.0%	51.5%	82.0%	66.7%	53.2%	61.1%	84.3%
			D,G	A,D,F,G,H		A,B,D,F,G,H	D			A,B,D,F,G,H
Employers	72.2%	60.0%	68.3%	72.6%	53.7%	82.5%	51.5%	59.7%	52.8%	77.5%
			D,F	D,F,H		A,B,D,F,G,H				A,B,D,F,G,H
National Security Agencies	33.6%	25.7%	31.0%	32.2%	18.5%	37.9%	29.6%	32.0%	30.6%	36.1%
						D				D

Regional Differences – Relevance of the Topic

Table 2 – Relevance of the Topic by Country or Region

Work related to digital privacy	Percentage of respondents choosing answer option									
	Total	Africa	Asia / Pacific	Canada	China	Europe	India	Latin Amer.	Middle East	United States
	1,792	36	190	63	70	320	104	80	39	575
		A	B	C	D	E	F	G	H	I
Yes, directly - (e.g. work on digital privacy issues)	12.1%	5.6%	16.3%	11.1%	17.1%	12.8%	17.3%	10.0%	5.1%	9.6%
			I		I		I			
Yes, indirectly (e.g. work on digital products that collect personal data)	25.3%	33.3%	31.1%	12.7%	21.4%	31.6%	32.7%	30.0%	25.6%	19.5%
		C, I	C, I			C, I	C, I	C, I		
No	62.6%	61.1%	52.6%	76.2%	61.4%	55.6%	50.0%	60.0%	69.2%	71.0%
				B, E, F, G					F	B, E, F, G
Statement	**Percentage of respondents agreeing with statements (Top 2 Box responses on 5-point scale)**									
	Total	Africa	Asia / Pacific	Canada	China	Europe	India	Latin Amer.	Middle East	United States
	1,503	36	192	63	70	320	104	80	39	576
		A	B	C	D	E	F	G	H	I
AI models and their data collection will severely diminish digital privacy.	62.1%	58.3%	53.9%	74.6%	47.1%	60.1%	57.7%	53.8%	59.0%	69.2%
				B, D, E, F, G		D				B, D, E, F, G
AI will have no impact on digital privacy.	8.9%	5.7%	13.1%	7.9%	7.1%	7.8%	17.3%	13.8%	12.8%	5.4%
			I				E, I	I		
AI will offer new opportunities for the usage of personal data.	75.0%	66.7%	65.6%	77.8%	68.6%	73.9%	62.5%	77.5%	64.1%	82.6%
				F		B, F		F		A, B, D, E, F, H
AI models and their data collection are a risk for intellectual property.	70.9%	71.4%	69.8%	77.8%	60.0%	65.9%	55.3%	61.3%	69.2%	79.1%
			F	D, F, G						B, D, E, F, G

Regional Differences – Informational Needs

Table 3 – Informational Needs by Country or Region										
Statement	**Percentage of respondents choosing answer option * / Agreement with statement ** (Top 2 Box responses on 5-point scale)**									
	Total	**Africa**	**Asia / Pacific**	**Canada**	**China**	**Europe**	**India**	**Latin Amer.**	**Middle East**	**United States**
		A	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**
Respondents feeling not well informed about how their personal data is used by companies or government organizations *	37.5% (n = 1,561)	14.7% (n = 34)	37.2% (n = 172)	50.9% (n = 55)	46.2% (n = 65)	36.9% (n = 282)	25.5% (n = 94)	41.3% (n = 75)	27.8% (n = 36)	38.7% (n = 520)
		A	A, F, H	A, F	A, F		A, F		A, F	
Respondents rating average consumers in their country as not well informed about how their personal data is used by companies or government organizations *	76.7% (n = 1,562)	67.6% (n = 34)	62.2% (n = 172)	90.9% (n = 55)	60.0% (n = 65)	81.2% (n = 282)	51.1% (n = 94)	82.7% (n = 75)	72.2% (n = 36)	89.4% (n = 521)
				A, B, D, F, H		B, D, F		B, D, F	F	A, B, D, E, F, H
The public needs to be better informed and educated about the risks associated with the collection of individual data. **	91.8% (n = 1,486)	94.4% (n = 36)	91.1% (n = 190)	95.2% (n = 63)	76.1% (n = 71)	90.9% (n = 320)	83.7% (n = 104)	93.8% (n = 80)	82.1% (n = 39)	96.2% (n = 573)
		D	D	D, F, H		D, F		D, F, H		B, D, E, F, H

Regional Differences – Expectations Towards IEEE

Table 4 – Expectations Towards IEEE										
Statement	**Percentage of respondents choosing answer option**									
	Total	**Africa**	**Asia / Pacific**	**Canada**	**China**	**Europe**	**India**	**Latin Amer.**	**Middle East**	**United States**
		A	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**
Support the idea of IEEE providing guidance on technology solutions for digital privacy (Top 2 Box responses on 5-point scale measuring support)	81.2% (n = 1,504)	88.9% (n = 36)	79.2% (n = 192)	84.4% (n = 64)	69.1% (n = 68)	79.2% (n = 318)	83.7% (n = 104)	84.8% (n = 79)	84.6% (n = 39)	83.4% (n = 573)
		D		D			D	D		D
Importance for IEEE to be among the thought leaders on digital privacy (Top 2 Box responses on 5-point scale measuring importance)	82.2% (n = 1,513)	97.2% (n = 36)	81.1% (n = 190)	90.6% (n = 64)	71.4% (n = 70)	81.5% (n = 319)	80.8% (n = 104)	88.8% (n = 80)	76.9% (n = 39)	82.6% (n = 575)
		B, D, E, F, H, I		D				D		D

Regional Differences – Member Perspectives on Digital Privacy

Table 5 – Member perspectives on Digital Privacy by Country or Region

Statement	Percentage of respondents agreeing with statements (Top 2 Box responses on 5-point scale)									
	Total	Africa	Asia / Pacific	Canada	China	Europe	India	Latin Amer.	Middle East	United States
	1,517	36	192	64	70	320	104	80	39	575
		A	B	C	D	E	F	G	H	I
Digital privacy is the same as data security.	36.6%	38.9%	46.1%	29.7%	64.3%	31.9%	43.3%	37.5%	35.9%	31.7%
			C, E, I		A, B, C, E, F, G, H, I		E, I			
Digital privacy should start with understanding the needs of individuals before their data is collected instead of focusing only on securing already collected data.	75.8%	75.0%	78.6%	79.4%	81.4%	76.6%	81.4%	76.3%	69.2%	73.6%
	1,486	36	190	63	71	320	104	80	39	573
Companies that collect and process individual data have obligations of trust and dignity and duty of care to prevent harming the individuals they collect data about.	89.1%	88.9%	87.9%	90.5%	64.8%	89.7%	79.6%	92.5%	74.4%	94.4%
		D	D, H	D, H		D, F, H	D	D, F, H		B, D, E, F, H
Government organizations that collect and process individual data have obligations of trust and dignity and duty of care to prevent harming the individuals they collect data about.	90.3%	88.9%	87.9%	93.7%	76.1%	90.6%	83.5%	92.5%	69.2%	94.9%
		H	D, H	D, H		D, F, H		D, H		B, D, E, F, H