

Know What You're Doing: Understanding the Security (Mis)conceptions of Cloud Technology Workforce in Bangladesh



Inspiring Excellence

Mashiyat Mahjabin Eshita, Ishmam Bin Rofi, S M Taiabul Haque, Jannatun Noor

Department of Computer Science and Engineering, School of Data and Sciences, Brac University, Dhaka, Bangladesh



Introduction

- The global cloud computing market will grow from \$570 billion in 2022 to \$3 trillion by 2030, at a 20% annual rate.
- Existing studies focus on the Global North, perceptions of the Global South professionals regarding cloud security are underexplored.

Objective

Understanding the security misconceptions of the cloud technology workforce in Bangladesh.

Method

- Surveyed 24 Bangladeshi cloud professionals, including cloud engineers, DevOps engineers, and developers, using snowball sampling.
- Responses were gathered via a Google Form with a 5-point Likert scale, distributed through email and WhatsApp.
- Questions were based on literature and the authors' expertise, including over a decade of cloud technology experience by one author.

Serial	Question	Response			Correct Answer
		Yes	No	Neutral	
1	What do you think about that, "The cloud is inherently Secure" ?	8 (33.3%)	8 (33.3%)	8 (33.3%)	Neutral
2	Do you think that " Cloud Security is Too Difficult to Maintain" ?	8 (33.3%)	9 (37.5%)	7 (29.2%)	No
3	Do you think that "More security tools implies better security" ?	11 (45.8%)	7 (29.2%)	6 (25%)	No
4	Do you think that "Clients are alone responsible for security? "	0 (0%)	20 (83.3%)	4 (16.7%)	No
5	Do you think that "Cloud visibility is complex due to the dynamic nature of cloud" ?	9 (37.5%)	5 (20.8%)	10 (41.2%)	Yes
6	Do you think that "Using a cloud security tool ensures total cloud security? "	3 (12.5%)	13 (54.2%)	8 (33.3%)	No
7	Do you think that "Attacker needs to launch a complex attack to breach cloud security?"	12 (50%)	5 (20.8%)	7 (29.2%)	No
8	Do you think that "Most often cloud is by default secure?"	7 (29.2%)	9 (37.5%)	8 (33.3%)	Neutral
9	Do you think that "Data stored in public cloud provides less security and anyone can access them? "	7 (29.2%)	11 (45.8%)	6 (25%)	No

Table 1: Summary of our survey data

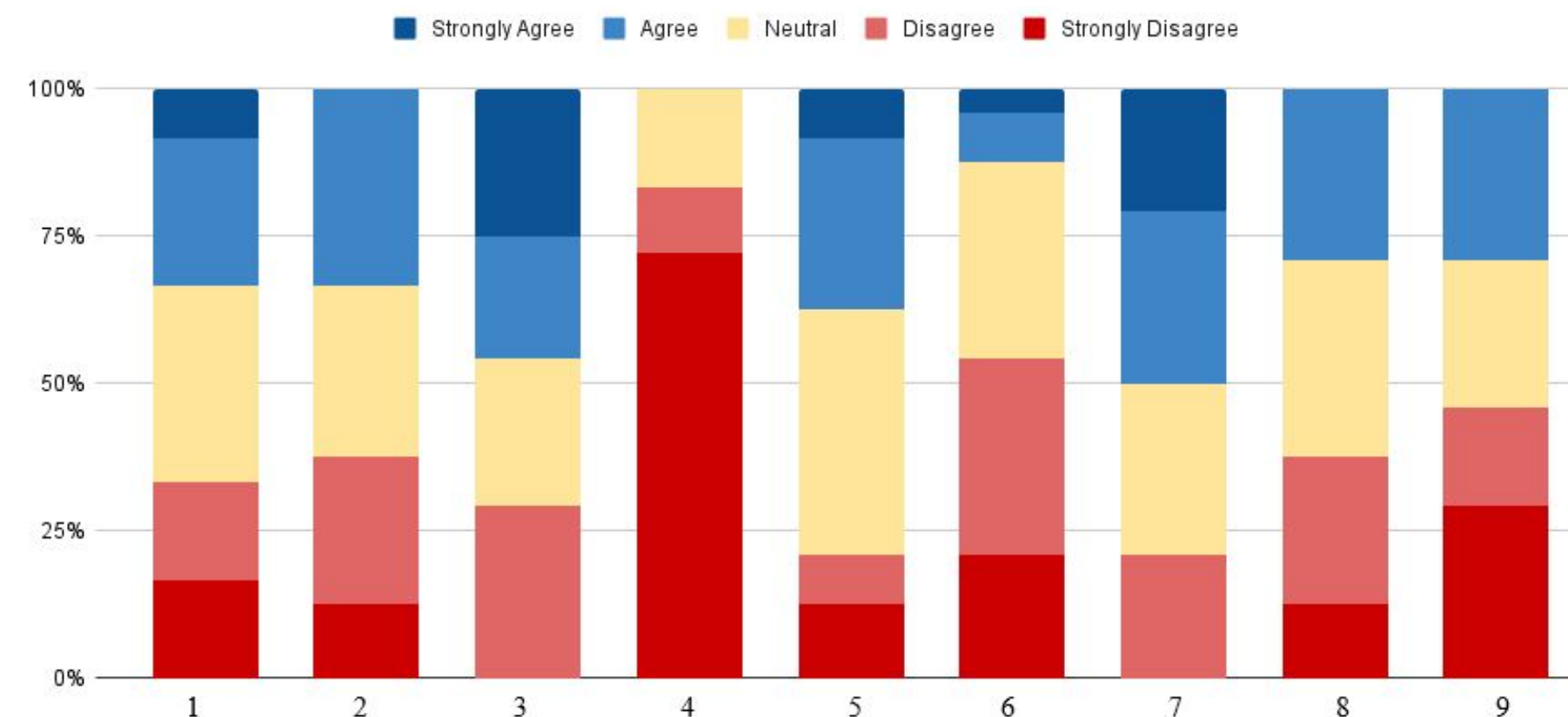


Figure 1: Survey data in Likert scale (Questions are in the same sequence as Table 1)

Results

- Many cloud professionals in Bangladesh lack the necessary security knowledge.
- In many cases, they agree with incorrect statements.
- Understanding of some critical concepts is still vague.

Discussion and Future Work

- Our study identifies the misconceptions among Bangladeshi cloud professionals about security mechanisms, shared responsibilities, and tools.
- We recommend proper guidelines and enhanced training for better understanding of cloud security and privacy.
- We aim to recruit more participants from diverse backgrounds to obtain a comprehensive understanding of the security misconceptions of the cloud technology workforce in Bangladesh.