

# Appendixes

## Appendix A: Interview Guide

As part of a master's thesis on "Key Factors and Challenges in Cloud Adoption: A Case Study of Kartverket," a set of interview questions has been prepared to gather insights from Kartverket about their perspectives on cloud adoption. This team meeting based interview is expected to last between 20 to 30 minutes.

### External Factors:

1. How do specific government regulations concerning geospatial data and national security impact Kartverket's cloud adoption strategy?
2. What role do international standards and best practices play in shaping Kartverket's approach to cloud computing?
3. How do collaborations with other public sector organizations or international partners influence Kartverket's cloud adoption decisions?
4. How does the competitive landscape within the geospatial data industry affect Kartverket's cloud adoption strategy?
5. In what ways do cloud providers build trust and address concerns related to data security and privacy for public sector organizations like Kartverket?

### Internal Factors:

1. How does Kartverket assess its internal readiness and resource availability for cloud migration?
2. How does the collaboration between different departments within Kartverket, such as IT and data management teams, influence cloud adoption decisions?
3. How does Kartverket's current IT infrastructure and legacy systems impact the feasibility and complexity of migrating to the cloud?
4. What are the key cultural factors within Kartverket that might influence the adoption and acceptance of cloud-based solutions?
5. How does Kartverket approach employee training and upskilling to ensure successful cloud adoption and utilization?

## **Issues:**

1. What specific security measures does Kartverket take to ensure the confidentiality and integrity of sensitive geospatial data during and after cloud migration?
2. How does Kartverket plan to address potential risks associated with vendor lock-in or data breaches when using cloud services?
3. What strategies does Kartverket employ to ensure the availability and resilience of critical data and applications in the cloud?
4. How does Kartverket balance cost-effectiveness and scalability considerations when transitioning to cloud services?
5. What measures are in place to ensure compliance with legal and ethical standards, particularly concerning data privacy and national security, while utilizing cloud computing resources?

## **Kartverket's Unique Context:**

1. How does Kartverket classify and manage the different levels of sensitivity associated with its geospatial data?
2. What specific national security considerations are involved when migrating sensitive geospatial data to the cloud?
3. How does Kartverket ensure that its cloud-based data storage and access controls meet national security standards?
4. What measures are in place to prevent unauthorized access or data breaches, particularly concerning data critical for national security?
5. What specific regulations and legal frameworks govern the management and storage of Kartverket's geospatial data?
6. How does Kartverket ensure its cloud adoption strategy complies with these regulations, including data residency requirements?
7. What challenges does Kartverket face in meeting compliance requirements while transitioning to the cloud?
8. How does Kartverket collaborate with regulatory bodies and government agencies to ensure compliance and address any concerns related to data security and privacy in the cloud?

9. How does Kartverket collaborate with other public sector organizations or international partners on geospatial data projects?
10. What are the specific data sharing agreements and security protocols in place when collaborating with external entities?
11. How does cloud adoption impact Kartverket's ability to collaborate and share data with external partners securely?
12. Are there any specific challenges or concerns related to data ownership and intellectual property rights when using cloud-based platforms for collaboration?

**Additional:** Is there anything else you would like to add about your experience or thoughts?

## **Appendix B: Information Letter and Consent Form**

This is a request for your involvement in a research project aimed at assessing cloud adoption within Kartverket. In this letter, we will provide details about the project's objectives and what your participation will entail.

### **Purpose of the project**

We are conducting this research project as part of my master's thesis in Management Information Systems at the University of South-Eastern Norway (USN). The objective of this study is to investigate the factors and obstacles influencing the integration of cloud technology within Kartverket, an entity entrusted with managing sensitive national data. The research questions are as follows:

**RQ1: What are the key factors that Kartverket should consider when planning to migrate to a cloud solution?**

**RQ2: What potential challenges and issues might Kartverket encounter during the cloud adoption process?**

### **Which institution is responsible for the research project?**

**University Of South Eastern Norway** is responsible for the project (data controller).

### **Why are you being asked to participate?**

The inquiry is directed towards IT professionals and decision-makers within Kartverket, specifically those involved in the organization's restructuring initiative. The focus is on individuals who have insights into current operational challenges, understand the growing data storage needs, and play a role in deciding whether to transition to a cloud solution. The goal is to gather input and perspectives from those actively engaged in the decision-making process regarding Kartverket's IT infrastructure, considering options such as on-premise, cloud, or a hybrid model. I got permission from Kartverket to do this research.

### **What does participation involve for you?**

Kartverket employees will participate in interviews, and there will be two biweekly meetings for observation and gathering information through discussions and interview with them. The provided information during these interactions will be documented and utilized for research purposes.

### **Participation is voluntary**

Participation in the project is voluntary. If you chose to participate, you can withdraw your consent at any time without giving a reason. All information about you will then be made anonymous. There will be no negative consequences for you if you chose not to participate or later decide to withdraw.

### **Your personal privacy – how we will store and use your personal data**

We will only use your personal data for the purpose(s) specified here and we will process your personal data in accordance with data protection legislation (the GDPR).

- Access to personal data within the institution(USN) responsible for the project will be limited to specific individuals directly involved in the project. This include the student who is conducting the research, and the designated supervisor overseeing the project. The access will be strictly regulated based on the roles and responsibilities of each individual, ensuring that only those with a legitimate need for the data can access it.
- As the research pertains to an organization, the focus will be on highlighting its activities. While maintaining confidentiality, individual employee names will be anonymized, but their respective designations within the organization will be disclosed.

### **What will happen to your personal data at the end of the research project?**

The planned end date of the project is **May 15, 2024**. Upon the completion of the project, the personal data of Kartverket and their employees who provided information will be permanently erased.

### **Your rights**

So long as you can be identified in the collected data, you have the right to:

- access the personal data that is being processed about you
- request that your personal data is deleted
- request that incorrect personal data about you is corrected/rectified
- receive a copy of your personal data (data portability), and
- send a complaint to the Norwegian Data Protection Authority regarding the processing of your personal data

### **What gives us the right to process your personal data?**

We will process your personal data based on your consent.

Based on an agreement with “University of South Eastern Norway”, The Data Protection Services of Sikt – Norwegian Agency for Shared Services in Education and Research has assessed that the processing of personal data in this project meets requirements in data protection legislation.

### **Where can I find out more?**

If you have questions about the project, or want to exercise your rights, contact:

- **University of South Eastern Norway** via  
**Rifhat Akther Chowdhury** at:  
[259089@usn.no](mailto:259089@usn.no)  
Telephone: +47 94729800

And **Ali Chelli** at:  
[Ali.Chelli@usn.no](mailto:Ali.Chelli@usn.no)  
Telephone: +47 35 57 51 09

- Our Data Protection Officer: : Paal Are Solberg  
Email: [Paal.A.Solberg@usn.no](mailto:Paal.A.Solberg@usn.no)  
Telephone: +47 35 57 50 53

If you have questions about how data protection has been assessed in this project by Sikt, contact:

- email: ([personverntjenester@sikt.no](mailto:personverntjenester@sikt.no))  
or by telephone: +47 73 98 40 40.

Yours sincerely,

Project  
Leader

(Researcher/supervisor)

Student (if applicable)

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### Consent form

I have received and understood information about the project “Cloud Computing Solution for Kartverket” and have been given the opportunity to ask questions. I give consent:

- to participate in(meeting and interview)
- To give information about Kartverket to be published in a way that organization can be recognised

I give consent for my personal data to be processed until the end of the project.

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(Signed by participant, date)