



WA SCHOOL OF MINES: MINERALS, ENERGY AND CHEMICAL ENGINEERING

**FILTER CARTRIDGE TEST AND OPTIMISATION FOR DOMESTIC
& COMMERCIAL WATER QUALITY MONITORING**

Laboratory Experiment Report

16th February 2024

DATA SECURITY

Data security is the concern of how to protect data from unauthorized access, disclosure, modification, or destruction. Data security measures include physical security, network security, and data access controls. Physical security measures include locks, cameras, and alarms. Network security measures include firewalls, encryption, and intrusion detection systems. Data access controls include user authentication, role-based access control, and data masking.





Table of Contents

INTRODUCTION.....	1
METHODOLOGY.....	2
Experimental rig.....	2
Methods.....	4
Sampling water	4
Experimental procedure	5
Sample analysis.....	5
RESULTS AND DISCUSSION	7
Ngalingkadji	7
Pandanus Park	7
Pia Wadjari.....	8
Burringurrah	9
CONCLUSION AND RECOMMENDATIONS	10
REFERENCES.....	11
Appendix A: Ngalingkadji Lab Analysis Results.....	12
Appendix B: Pandanus Park Lab Analysis Results	13
Appendix C: Pia Wadjari Lab Analysis Results	14
Appendix D: Burringurrah Lab Analysis Results.....	15



Table of Figures

Figure 1. Radial (left) and direct/inverse (right) flow (Viccione, Evangelista and de Marinis 2018).....	1
Figure 2. Experimental rig for filtration	2
Figure 3. (left) Full House cartridge filters.....	2
Figure 4. (right) Under Sink RO system.....	3
Figure 5. Photo of experimental set-up.....	4
Figure 6. Bore sampling locations for experiment	4
Figure 7. Decrease in key contaminants after 3-Stage (left) and RO (right) for Ngalingkadji	7
Figure 8. Decrease in key contaminants after 3-Stage (left) and RO (right) for Pandanus Park	8
Figure 9. Decrease in key contaminants after 3-Stage (left) and RO (right) for Pia Wadjari	8
Figure 10. Decrease in key contaminants after 3-Stage (left) and RO (right) for Burringurrah	9

List of Tables

Table 1. Description of 5-Stage filtration system	3
Table 2. ADWG values for tested characteristics	5

ENCRYPTION

Encryption is the process of converting plain text into cipher text. It is used to protect sensitive data from unauthorized access. The most common type of encryption is symmetric encryption, where the same key is used for both encryption and decryption. Other types of encryption include asymmetric encryption, hash functions, and message authentication codes.



Encryption is a fundamental aspect of cybersecurity, ensuring that data remains secure even if it falls into the wrong hands. It is used in a wide variety of applications, including email, messaging, file transfer, and online banking. The strength of an encryption algorithm depends on the length of the key and the complexity of the algorithm itself. Common encryption standards include AES (Advanced Encryption Standard), RSA (Rivest-Shamir-Adleman), and SHA (Secure Hash Algorithm).



Customer Privacy Policy

Introduction

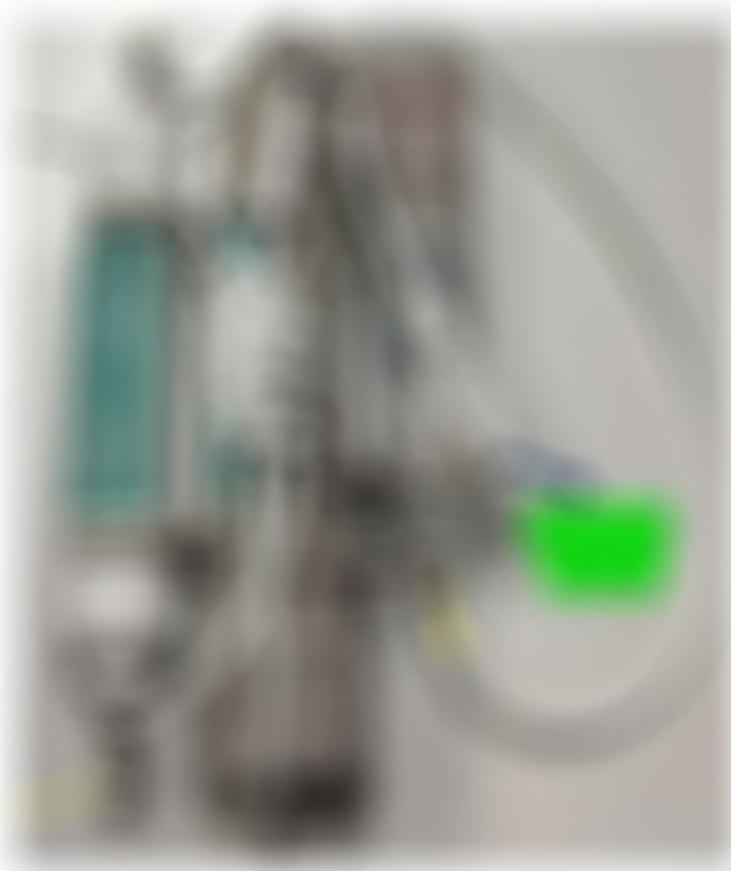
General Information

This privacy policy ("Policy") applies to the website located at www.example.com (the "Website").



Copyright © 2023 Example Company. All Rights Reserved.





Privacy Information



Category	Description	Details
Personal Data	Information such as name, address, and contact details.	Used for identification and communication.
Financial Data	Information such as bank account numbers and transaction history.	Used for financial transactions and reporting.

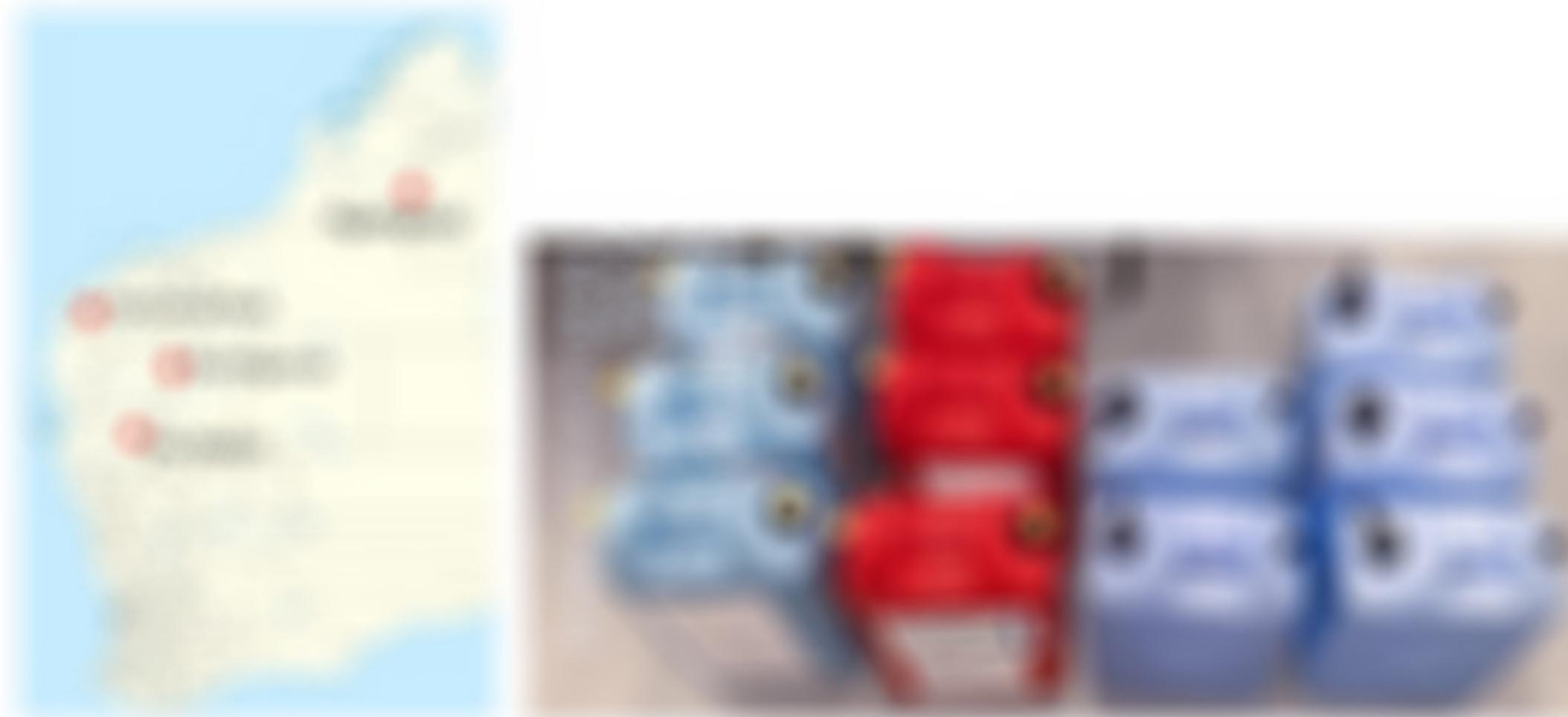
3. Confidentiality

It is important to keep information confidential. This means that you must not share sensitive information about someone else with anyone who does not have a right to receive it. For example, if you are working in a hospital, you must not tell your friends or family members about a patient's medical condition without the patient's permission.



4. Digital safety

It is important to keep your digital devices safe from viruses and malware. This means that you must not download unknown files from the internet or open attachments from unknown sources. You should also make sure that your device has up-to-date antivirus software installed and that you regularly back up your data.



Copyright © Pearson Education, Inc., or its affiliates. All Rights Reserved.

Customer Information

Customer Information

Customer information is used to identify the customer and their details. This includes name, address, contact information, and other relevant details. Customer information is used to manage customer relationships, provide support, and improve products and services.

Customer Data

Customer data is used to store and manage customer information. This includes name, address, contact information, and other relevant details. Customer data is used to manage customer relationships, provide support, and improve products and services.



Customer ID	Customer Name	Address	Contact Info	Notes
1234567890	John Doe	123 Main St	555-1234	Active
9876543210	Jane Smith	456 Elm St	555-2345	Pending
5432109876	Bob Johnson	789 Oak St	555-3456	On Hold
7654321098	Sarah Williams	234 Pine St	555-4567	Completed
3210987654	Mike Brown	567 Cedar St	555-5678	On Hold
6543210987	Linda Green	890 Birch St	555-6789	Completed
2109876543	David White	432 Maple St	555-7890	On Hold
8765432109	Karen Lee	321 Spruce St	555-8901	Completed
4321098765	Steve Black	654 Chestnut St	555-9012	On Hold
1098765432	Mary Grey	987 Birchwood St	555-0123	Completed
9876543210	Tom Red	543 Cedarwood St	555-1234	On Hold
3210987654	Emily Blue	765 Birchwood St	555-2345	Completed
6543210987	Mark Green	210 Cedarwood St	555-3456	On Hold
2109876543	Samantha White	876 Birchwood St	555-4567	Completed
8765432109	Jeffrey Black	543 Cedarwood St	555-5678	On Hold
4321098765	Elizabeth Grey	987 Cedarwood St	555-6789	Completed
1098765432	Stephen Red	321 Birchwood St	555-7890	On Hold
9876543210	Charlotte Blue	654 Birchwood St	555-8901	Completed
3210987654	Matthew Green	765 Birchwood St	555-9012	On Hold
6543210987	Scarlett White	210 Birchwood St	555-0123	Completed
2109876543	James Black	876 Birchwood St	555-1234	On Hold
8765432109	Olivia Grey	543 Birchwood St	555-2345	Completed
4321098765	William Red	987 Birchwood St	555-3456	On Hold
1098765432	Alexis Blue	321 Birchwood St	555-4567	Completed
9876543210	Christopher Green	654 Birchwood St	555-5678	On Hold
3210987654	Madison White	765 Birchwood St	555-6789	Completed
6543210987	Lucas Black	210 Birchwood St	555-7890	On Hold
2109876543	Isabella Grey	876 Birchwood St	555-8901	Completed
8765432109	Matthew Red	543 Birchwood St	555-9012	On Hold
4321098765	Charlotte Blue	987 Birchwood St	555-0123	Completed
1098765432	James Green	321 Birchwood St	555-1234	On Hold
9876543210	Olivia Red	654 Birchwood St	555-2345	Completed
3210987654	William Blue	765 Birchwood St	555-3456	On Hold
6543210987	Madison Green	210 Birchwood St	555-4567	Completed
2109876543	Lucas Red	876 Birchwood St	555-5678	On Hold
8765432109	Isabella Blue	543 Birchwood St	555-6789	Completed
4321098765	Matthew Green	987 Birchwood St	555-7890	On Hold
1098765432	Charlotte Red	321 Birchwood St	555-8901	Completed
9876543210	James Blue	654 Birchwood St	555-9012	On Hold
3210987654	Olivia Green	765 Birchwood St	555-0123	Completed
6543210987	Matthew Red	210 Birchwood St	555-1234	On Hold
2109876543	Charlotte Blue	876 Birchwood St	555-2345	Completed
8765432109	James Green	543 Birchwood St	555-3456	On Hold
4321098765	Olivia Red	987 Birchwood St	555-4567	Completed
1098765432	Matthew Blue	321 Birchwood St	555-5678	On Hold
9876543210	Charlotte Green	654 Birchwood St	555-6789	Completed
3210987654	James Red	765 Birchwood St	555-7890	On Hold
6543210987	Olivia Blue	210 Birchwood St	555-8901	Completed
2109876543	Matthew Green	876 Birchwood St	555-9012	On Hold
8765432109	Charlotte Red	543 Birchwood St	555-0123	Completed
4321098765	James Blue	987 Birchwood St	555-1234	On Hold
1098765432	Olivia Green	321 Birchwood St	555-2345	Completed
9876543210	Matthew Red	654 Birchwood St	555-3456	On Hold
3210987654	Charlotte Blue	765 Birchwood St	555-4567	Completed
6543210987	James Green	210 Birchwood St	555-5678	On Hold
2109876543	Olivia Red	876 Birchwood St	555-6789	Completed
8765432109	Matthew Blue	543 Birchwood St	555-7890	On Hold
4321098765	Charlotte Green	987 Birchwood St	555-8901	Completed
1098765432	James Red	321 Birchwood St	555-9012	On Hold
9876543210	Olivia Blue	654 Birchwood St	555-0123	Completed
3210987654	Matthew Green	765 Birchwood St	555-1234	On Hold
6543210987	Charlotte Red	210 Birchwood St	555-2345	Completed
2109876543	James Blue	876 Birchwood St	555-3456	On Hold
8765432109	Olivia Green	543 Birchwood St	555-4567	Completed
4321098765	Matthew Red	987 Birchwood St	555-5678	On Hold
1098765432	Charlotte Blue	321 Birchwood St	555-6789	Completed
9876543210	James Green	654 Birchwood St	555-7890	On Hold
3210987654	Olivia Red	765 Birchwood St	555-8901	Completed
6543210987	Matthew Blue	210 Birchwood St	555-9012	On Hold
2109876543	Charlotte Green	876 Birchwood St	555-0123	Completed
8765432109	James Red	543 Birchwood St	555-1234	On Hold
4321098765	Olivia Blue	987 Birchwood St	555-2345	Completed
1098765432	Matthew Green	321 Birchwood St	555-3456	On Hold
9876543210	Charlotte Red	654 Birchwood St	555-4567	Completed
3210987654	James Blue	765 Birchwood St	555-5678	On Hold
6543210987	Olivia Green	210 Birchwood St	555-6789	Completed
2109876543	Matthew Red	876 Birchwood St	555-7890	On Hold
8765432109	Charlotte Blue	543 Birchwood St	555-8901	Completed
4321098765	James Green	987 Birchwood St	555-9012	On Hold
1098765432	Olivia Red	321 Birchwood St	555-0123	Completed
9876543210	Matthew Blue	654 Birchwood St	555-1234	On Hold
3210987654	Charlotte Green	765 Birchwood St	555-2345	Completed
6543210987	James Red	210 Birchwood St	555-3456	On Hold
2109876543	Olivia Blue	876 Birchwood St	555-4567	Completed
8765432109	Matthew Green	543 Birchwood St	555-5678	On Hold
4321098765	Charlotte Red	987 Birchwood St	555-6789	Completed
1098765432	James Blue	321 Birchwood St	555-7890	On Hold
9876543210	Olivia Green	654 Birchwood St	555-8901	Completed
3210987654	Matthew Red	765 Birchwood St	555-9012	On Hold
6543210987	Charlotte Blue	210 Birchwood St	555-0123	Completed
2109876543	James Green	876 Birchwood St	555-1234	On Hold
8765432109	Olivia Red	543 Birchwood St	555-2345	Completed
4321098765	Matthew Blue	987 Birchwood St	555-3456	On Hold
1098765432	Charlotte Green	321 Birchwood St	555-4567	Completed
9876543210	James Red	654 Birchwood St	555-5678	On Hold
3210987654	Olivia Blue	765 Birchwood St	555-6789	Completed
6543210987	Matthew Green	210 Birchwood St	555-7890	On Hold
2109876543	Charlotte Red	876 Birchwood St	555-8901	Completed
8765432109	James Blue	543 Birchwood St	555-9012	On Hold
4321098765	Olivia Green	987 Birchwood St	555-0123	Completed
1098765432	Matthew Red	321 Birchwood St	555-1234	On Hold
9876543210	Charlotte Blue	654 Birchwood St	555-2345	Completed
3210987654	James Green	765 Birchwood St	555-3456	On Hold
6543210987	Olivia Red	210 Birchwood St	555-4567	Completed
2109876543	Matthew Blue	876 Birchwood St	555-5678	On Hold
8765432109	Charlotte Green	543 Birchwood St	555-6789	Completed
4321098765	James Red	987 Birchwood St	555-7890	On Hold
1098765432	Olivia Blue	321 Birchwood St	555-8901	Completed
9876543210	Matthew Green	654 Birchwood St	555-9012	On Hold
3210987654	Charlotte Red	765 Birchwood St	555-0123	Completed
6543210987	James Blue	210 Birchwood St	555-1234	On Hold
2109876543	Olivia Green	876 Birchwood St	555-2345	Completed
8765432109	Matthew Red	543 Birchwood St	555-3456	On Hold
4321098765	Charlotte Blue	987 Birchwood St	555-4567	Completed
1098765432	James Green	321 Birchwood St	555-5678	On Hold
9876543210	Olivia Red	654 Birchwood St	555-6789	Completed
3210987654	Matthew Blue	765 Birchwood St	555-7890	On Hold
6543210987	Charlotte Green	210 Birchwood St	555-8901	Completed
2109876543	James Red	876 Birchwood St	555-9012	On Hold
8765432109	Olivia Blue	543 Birchwood St	555-0123	Completed
4321098765	Matthew Green	987 Birchwood St	555-1234	On Hold
1098765432	Charlotte Red	321 Birchwood St	555-2345	Completed
9876543210	James Blue	654 Birchwood St	555-3456	On Hold
3210987654	Olivia Green	765 Birchwood St	555-4567	Completed
6543210987	Matthew Red	210 Birchwood St	555-5678	On Hold
2109876543	Charlotte Blue	876 Birchwood St	555-67	



Customer Information

First Name:	John
Middle Name:	David
Last Name:	Doe
Address:	123 Main Street



本報為非營利性質之社會公報，歡迎各界人士提供資訊。

http://www.sciencedirect.com/science/journal/00406034



A large black rectangular redaction box covers the central area of the page, obscuring several paragraphs of text. The box is positioned horizontally across the middle of the page, with its top edge aligned with the top of the page content and its bottom edge aligned with the bottom of the page content.

the same time, the number of people who have been infected with the virus has increased rapidly, and the number of deaths has also increased. The government has taken several measures to control the spread of the virus, such as closing schools and universities, canceling public events, and encouraging people to stay at home. These measures have been effective in slowing down the spread of the virus, but the situation remains very serious.



Customer Privacy

- Data protection
- Privacy policy
- Data security
- User consent
- Data minimization
- Data retention
- Data deletion
- Data sharing
- Data breach
- Data protection officer
- Data subject access request
- Data portability
- Data anonymization
- Data pseudonymization
- Data encryption
- Data masking
- Data tokenization
- Data classification
- Data mapping
- Data lineage
- Data quality
- Data validation
- Data integration
- Data governance
- Data compliance
- Data audit
- Data privacy impact assessment
- Data protection impact assessment
- Data protection officer
- Data subject access request
- Data portability
- Data anonymization
- Data pseudonymization
- Data encryption
- Data masking
- Data tokenization
- Data classification
- Data mapping
- Data lineage
- Data quality
- Data validation
- Data integration
- Data governance
- Data compliance
- Data audit
- Data privacy impact assessment
- Data protection impact assessment



Customer privacy refers to the protection of personal information collected from individuals. It involves various measures and regulations to ensure that data is handled securely, transparently, and ethically. Key components of customer privacy include:

- Data protection: Measures to safeguard sensitive information from unauthorized access, disclosure, or modification.
- Privacy policy: A document outlining how a company collects, uses, and protects consumer data.
- Data security: Measures to protect data from cyber threats, such as hacking and data breaches.
- User consent: Obtaining explicit permission from individuals before collecting their data.
- Data minimization: Collecting only the minimum amount of data necessary for a specific purpose.
- Data retention: Keeping data for a limited period of time and then deleting it.
- Data deletion: Removing data from systems when it is no longer needed.
- Data sharing: Transferring data between companies or third parties.
- Data breach: An unauthorized disclosure of sensitive data.
- Data protection officer: A designated individual responsible for managing data protection compliance.
- Data subject access request: A request from an individual to view or correct their own data.
- Data portability: The ability for individuals to transfer their data between different services.
- Data anonymization: Removing personally identifiable information from data.
- Data pseudonymization: Using a unique identifier instead of a person's name.
- Data encryption: Protecting data by converting it into a code that can only be decrypted with a key.
- Data masking: Hiding sensitive data by replacing it with a placeholder value.
- Data tokenization: Replacing sensitive data with a unique identifier.
- Data classification: Assigning categories to data based on its sensitivity.
- Data mapping: Creating a relationship between data from different sources.
- Data lineage: Tracking the history and flow of data through a system.
- Data quality: Ensuring data is accurate, relevant, and complete.
- Data validation: Checking data for errors or inconsistencies.
- Data integration: Combining data from multiple sources into a single system.
- Data governance: Establishing policies and procedures for managing data effectively.
- Data compliance: Adhering to legal requirements and industry standards for data handling.
- Data audit: Reviewing data practices to ensure they meet established standards.
- Data privacy impact assessment: Evaluating the potential impact of data processing activities on individual privacy.
- Data protection impact assessment: Assessing the risk of data protection incidents and developing mitigation strategies.



Customer Privacy

What's new from Bloomberg?

Bloomberg offers many features designed to protect your privacy. We've added several new features to help you manage your data and control who sees it. These include the ability to share specific data with others, and the option to delete or edit your profile information. We're also working on ways to make it easier for you to manage your privacy settings across all our products and services.



CONFIDENTIALITY AND COMMUNICATIONS

Any disclosure of sensitive information to third parties without the explicit written consent of the relevant authority is prohibited. This includes, but is not limited to, the following:

- Disclosing sensitive information to third parties without the explicit written consent of the relevant authority.
- Using sensitive information for purposes other than those explicitly authorized by the relevant authority.
- Sharing sensitive information with unauthorized individuals or entities.
- Transferring sensitive information to third parties without the explicit written consent of the relevant authority.
- Releasing sensitive information to the public without the explicit written consent of the relevant authority.
- Violating any laws or regulations related to the protection of sensitive information.

Violations of these rules will result in disciplinary action, including termination of employment. In addition, any individual found to have violated these rules may be subject to legal action, including criminal charges. The relevant authority reserves the right to take any other action it deems necessary to protect the organization's sensitive information.



the first time ever that we've had to do that. We've got to make sure that we're not going to have to do that again.

It's been a very difficult year for us. It's been a very difficult year for our country. It's been a very difficult year for our families. It's been a very difficult year for our business. It's been a very difficult year for our employees. It's been a very difficult year for our customers. It's been a very difficult year for our suppliers. It's been a very difficult year for our investors. It's been a very difficult year for our shareholders. It's been a very difficult year for our community. It's been a very difficult year for our nation. It's been a very difficult year for our world.



Wetlands & Freshwater (in French: **Fleuves**)

A large, solid black icon of a padlock is centered on the page. The padlock is oriented vertically, with its shackle at the bottom and its body forming an arch above. The icon has a thick, rounded rectangular border and a smaller circular border inside it, representing the keyhole.

Figure 9. Results from the first six trials.



Downloaded from <http://www.jstor.org> by Michigan State University Library on 09/02/13.

A large, solid black icon of a padlock is centered on the page. The icon is a simple outline with a thick border, representing security or protection.





How to Use This Guide

Section	Definition	Example	Notes
Acronyms	A list of commonly used acronyms and their meanings.	See the Acronym section for definitions.	
Definitions	Definitions of key terms used throughout the guide.	See the Definitions section for details.	
Explanations	Explanations of specific concepts or processes.	See the Explanations section for details.	
FAQs	Frequently Asked Questions related to the topic.	See the FAQs section for answers.	
Resources	Links to external resources for further reading and reference.	See the Resources section for links.	
Tools	Information about various tools and software used in the field.	See the Tools section for details.	
Case Studies	Real-world examples of how the concepts are applied in practice.	See the Case Studies section for examples.	
Conclusion	A summary of the key takeaways and next steps.	See the Conclusion section for summary.	
Appendix	Additional information, such as tables or figures, that support the main content.	See the Appendix section for details.	
Index	A comprehensive index of all the terms and concepts covered in the guide.	See the Index section for a full list of terms.	

