Digital Newspaper Website
Use-Case Specification: Generate Reports

Version 1.0

Revision History

Date	Version	Description	Author
14/07/2025	1.0	Complete the document	Trần Hữu Khang

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Use-Case Specification: Generate Reports

1. Use-Case Name: Generate Reports

1.1 Brief Description

This use case describes the process by which an Admin generates reports on the Digital Newspaper Website's performance, user activity, or content metrics using the content management system (CMS). The Admin selects report parameters, generates the report, and exports or views the results.

2. Flow of Events

2.1 Basic Flow

This use case starts when the Admin logs into the Digital Newspaper Website's CMS and accesses the reporting dashboard.

1. The Admin navigates to the "Reports" section in the CMS.
2. The system displays a list of available report types.
3. The Admin selects a report type and specifies parameters.
4. The system validates the input parameters.
5. The Admin selects the output format.
6. The system generates the report based on the selected type and parameters, retrieving relevant data from the CMS database.
7. The system displays the report on-screen or provides a download link for the selected format.
8. The Admin reviews the report and may choose to save, print, or share it via email.
9. The system confirms the successful generation and delivery of the report to the Admin.

2.2 Alternative Flows

2.2.1 *Custom Report Filters*
- At Basic Flow step 3, the Admin applies advanced filters (e.g., specific Writers, article categories, or geographic regions for traffic).
- The system updates the report generation options to reflect the custom filters and proceeds with validation (returns to Basic Flow step 4).

2.2.2 *Export Failure*
- At Basic Flow step 7, if the report export fails (e.g., due to file format issues or server timeout), the system displays an error message (e.g., "Export failed. Please try again or select a different format").
- The Admin can retry the export or choose a different format (returns to Basic Flow step 5).

3. Special Requirements

3.1 Supported Metrics

The CMS must support report generation for at least the following metrics: article views, user registrations, comment activity, and website traffic.

3.2 Performance

The system must generate and display or export reports within 10 seconds under normal server load for datasets up to 10,000 records.

3.3 Export Formats

The system must support report exports in PDF and CSV formats, with PDF reports adhering to a professional layout.

3.4 Browser Compatibility

The system must ensure compatibility with common browsers (e.g., Chrome, Firefox, Safari) for the reporting interface.

3.5 Data Privacy

The system must comply with GDPR for handling personal data included in reports.

4. Preconditions

4.1 Admin Authentication

The Admin must be registered and logged into the CMS with valid credentials.

4.2 Admin Permissions

The Admin must have the role of "Admin" with permissions to generate reports.

4.3 System Accessibility

The CMS must be accessible and operational.

4.4 Data Availability

The CMS database must contain relevant data (e.g., articles, user activity, or traffic metrics) for report generation.

5. Postconditions

5.1 Report Generation

The report is generated and either displayed on-screen or exported as a PDF or CSV file.

5.2 Confirmation

The Admin receives confirmation of the report generation or export.

5.3 Report Delivery

If exported, the report is saved or sent to the Admin's specified destination (e.g., downloaded file or email).

6. Extension Points

6.1 Schedule Report Generation
- Location: Basic Flow, step 3.
- The Admin can schedule recurring reports (e.g., weekly or monthly) by specifying a schedule and delivery method (e.g., email). The system generates and sends the report automatically at the specified intervals.

7. Low Fidelity Prototype For Use Case

7.1 Prompt Used for AI Tool
- Design an Admin Dashboard interface for a Digital Newspaper Website CMS that supports the "Generate Reports" use case.
- Functional Requirements: [2. Flow of Event ……… 6.Extension Points] (*Paste the use case specification from section 2 to 6 here)*
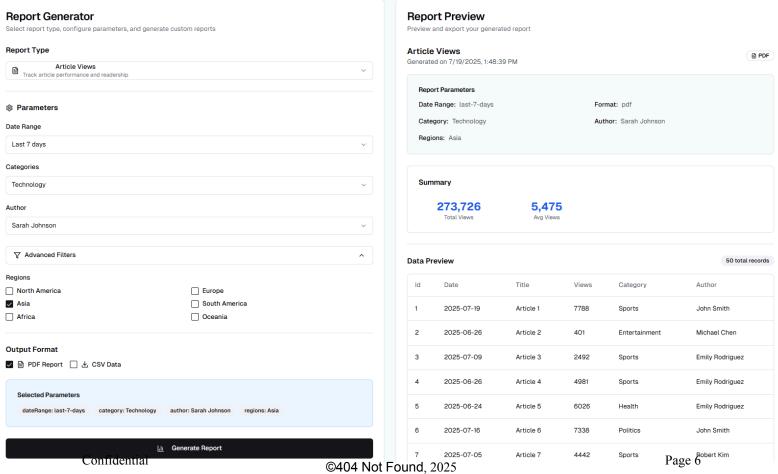

Schedule report for automation:

📅 **Schedule New Report**   ✕

Basic Information

Report Name *

e.g., Weekly Performance Summary

Report Type *   Frequency *

Select report type   ⌄   Select frequency   ⌄

🕐 Delivery Time

09:00 AM 🕐

✉ **Recipients**   + Add

recipient@example.com

Format & Options

Output Format

PDF Report   ⌄

☑ Include charts and visualizations
☐ Automatically archive reports after 90 days

Cancel   📅 **Schedule Report**

Analytics on reports:

Total Reports Generated 📄	Scheduled Reports 📅	Most Popular Report ↗	Export Format 📄
1,234	**23**	**Article Views**	**PDF**
+12% from last month	Active schedules	45% of all reports	Most used format