# Product Requirements and Specification Document

## Project Name

**MediaPulse - Entertainment Content Trends**

## Description

MediaPulse is a Power BI dashboard designed to analyze and visualize trends in media content consumption. The dashboard will provide insights into most-watched genres, viewer demographics, and content popularity using imported datasets and DAX measures. The solution targets business and educational stakeholders seeking actionable analytics on entertainment content trends.

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## 1. Objectives

| Objective | Description |
|---|---|
| Trend Analysis | Identify most-watched genres and content types |
| Demographic Insights | Analyze viewer demographics (age, gender, location) |
| Content Popularity | Visualize top-performing content over time |
| User-Friendly Dashboard | Enable intuitive exploration and filtering of data |

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## 2. Stakeholders

| Role | Responsibility |
|---|---|
| Product Owner | Define requirements, approve deliverables |
| BI Developer | Implement dashboard, DAX, data import |
| Data Analyst | Validate data, support metric design |
| End Users | Consume insights, provide feedback |

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## 3. Functional Requirements

| ID | Requirement |
|---|---|
| FR1 | Import media consumption data (CSV/Excel/Database) |
| FR2 | Display most-watched genres (bar/column chart) |
| FR3 | Show viewer demographics (age, gender, location) (pie/donut/map visuals) |
| FR4 | Visualize content popularity trends over time (line chart) |
| FR5 | Enable filtering by date range, genre, and demographic attributes |

| | |
|---|---|
| FR6 | Calculate key metrics using DAX (e.g., total views, average watch time) |
| FR7 | Export dashboard visuals to PDF or image |

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## 4. Non-Functional Requirements

| ID | Requirement |
|---|---|
| NFR1 | Dashboard loads within 5 seconds |
| NFR2 | Data refresh supported (manual/automatic) |
| NFR3 | Responsive layout for desktop and tablet |
| NFR4 | Adheres to Power BI accessibility standards |

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## 5. Data Requirements

| Data Element | Description |
|---|---|
| Content ID | Unique identifier for media content |
| Genre | Content genre/category |
| Viewer ID | Unique identifier for viewer |
| Age | Viewer age group |
| Gender | Viewer gender |
| Location | Viewer location (city/country) |
| Watch Date/Time | Timestamp of content consumption |
| Watch Duration | Time spent watching |

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## 6. DAX Measures (Sample)

```
-- Total Views
Total Views = COUNTROWS('ViewData')

-- Average Watch Time
Avg Watch Time = AVERAGE('ViewData'[Watch Duration])

-- Views by Genre
Views by Genre = CALCULATE([Total Views], ALLEXCEPT('ViewData', 'ViewData'[Genre
```

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## 7. Dashboard Layout

| Section | Visual Type | Description |
|---|---|---|

| | | |
|---|---|---|
| Genre Popularity | Bar/Column Chart | Top genres by total views |
| Demographics Overview | Pie/Donut/Map | Viewer age, gender, location |
| Content Trends | Line Chart | Views over time |
| Filters | Slicers | Date, genre, demographics |
| Key Metrics | Cards | Total views, avg watch time |

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## 8. User Stories

| ID | As a… | I want to… | So that… |
|---|---|---|---|
| US1 | Business User | See most-watched genres | I can inform content strategy |
| US2 | Educator | Analyze viewer demographics | I can tailor educational content |
| US3 | Analyst | Export visuals | I can include them in reports |

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## 9. Acceptance Criteria

- Data imports successfully and updates as required
- Dashboard displays all specified visuals and metrics
- Filters work as intended across all visuals
- DAX measures return accurate results
- Dashboard is responsive and accessible

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## 10. Out of Scope

- Real-time streaming data integration
- Predictive analytics or machine learning features
- Mobile app optimization

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## 11. Timeline & Milestones

| Milestone | Target Date |
|---|---|
| Data Model Design | Week 1 |
| DAX Measures Complete | Week 2 |
| Dashboard Build | Week 3 |
| User Testing & Feedback | Week 4 |
| Final Delivery | Week 5 |

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## 12. Risks & Mitigations

| Risk | Mitigation |
| --- | --- |
| Incomplete data | Use sample/mock data for demo |
| Data privacy concerns | Anonymize viewer data |
| Power BI feature limitations | Adjust visuals as needed |

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## 13. Appendix

- Sample data schema
- Power BI documentation links

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**End of Document**