OUTLINE: IMPLEMENTING DEEP LEARNING TOOLS AND/OR TECHNIQUES IN MEDIA & ENTERTAINMENT RECOMMENDATION SYSTEMS

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CONTENTS

INTRODUCTION (150)

- **Context / Background:**

  - Brief introduction on recommendation systems in media and entertainment (M&E).

  - **Need**: Clear explanation of deep learning in recommendations for M&E.

  - **Significance**: User retention, churn reduction, monetisation. Competing recommendations engines with walled gardens in set top boxes and TV operating systems.

- **Objective of Literature review:**

  - **Audience**: Executives (strategic, commercial, and technical) in the premium video on demand (VOD) industry, who understand the streaming business but lack understanding of Artificial Intelligence.

  - **Purpose**: Streaming executives want to:

    - Understand latest trends to facilitate decision making about directions for recommendations systems for premium VOD services.

    - Discover learnings from related fields like user-generated video or music and gaming.

    - Find opportunities for innovation (ideally revenue-generating.)

    - Understand regulatory repercussions. (E.g. TikTok's algorithm in EU)

- Paper structure

METHODOLOGY (100)

- **Review structure** (Paul & Criado, 2020)

  - Systematic literature review

    - Domain-based

      - Structured

- **Search strategy:**

  - Keywords

  - Sources?

- **Criteria / rationale for literature selection**

  - Age:

    - Last 6 years

    - Foundational maximum 15 years

  - Industry

    - Industry expert blogs, e.g. Netflix

    - Industry analyst reports, e.g. McKinsey, Omdia

    - Identify key companies providing products and services.

    - IBC conference proceedings

  - Academic

    - Research papers, e.g. Netflix.

    - Journals

    - Conference proceedings

LITERATURE OVERVIEW / KEY IDEAS (600)

Recommendation Systems (100)

- Overview of M&E recommendation systems and importance

    o What is one?

    o Why needed?

- Types of recommendation systems?

Deep Learning Techniques in Recommendation Engines (100)

- Brief overview of deep learning and its advantages

- Deep Learning in recommendation systems

Media & Entertainment Recommendation Engines (400)

- Primary focus area: premium video on demand services (film, TV)

    o E.g. Netflix

- Secondary focus area: video on demand services (user-generated)

    o E.g. YouTube / TikTok

- Tertiary focus area: music and gaming

    o E.g. Spotify, Roblox

LITERATURE CRITICAL EVALUATION (750)

Comparison of Solutions (250)

- Highlight similar and contrasting views.

- Discrepancies.

Strengths, Limitations and Gaps (250)

- Strengths

- Limitations

- Gaps

Discussion of Results (250)

- Commonalities

- Differences

- Implications (answers to questions?)

FUTURE DIRECTIONS (250)

- Emerging trends

- Potential research areas / next steps (from gap analysis)

CONCLUSION (150)

- Summary / Key findings / Answers to research questions?

- Implications for M&E – argue what needs to be done.

- Concluding remarks

REFERENCES

Paul, J. & Criado, A.R. (2020) The art of writing literature review: What do we know and what do we need to know?, *International Business Review* 29(4): 101717. DOI: https://doi.org/10.1016/J.IBUSREV.2020.101717.