Mahabharata YouTube Automation Series

Product Requirements Document (PRD)

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1. PROJECT OVERVIEW

Vision

Create a fully automated YouTube channel that publishes daily 5-10 minute episodic storytelling content covering the complete Mahabharata epic, requiring only 10 minutes/day of manual oversight.

Success Metrics

- **Phase 1 (Month 1-3)**: 30 episodes published, 1,000 subscribers, 4,000 watch hours

- **Phase 2 (Month 4-6)**: YouTube Partner Program monetization achieved

- **Phase 3 (Month 6-12)**: 100,000+ subscribers, $500-2000/month revenue

Budget Constraints

- Maximum $15/month for tools/APIs (startup phase)

- Aggressive use of free tiers and open-source solutions

- Strategic compromises that don't affect viewer experience

- Scale up budget as channel grows and monetizes

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2. CONTENT SPECIFICATIONS

Video Format

- **Duration**: 5-10 minutes per episode

- **Style**: Cinematic narration with AI-generated visuals

- **Tone**: Epic, dramatic, educational yet entertaining

- **Target Audience**:

  - Indian diaspora (18-45 years)

  - Mythology enthusiasts globally

  - Educational content seekers

  - Parents showing culture to children

Episode Structure (Template)

```
00:00-00:15 - HOOK (Attention grabber)
00:15-01:00 - RECAP (Previous episode summary)
01:00-08:00 - MAIN STORY (Current episode narrative)
08:00-09:30 - CLIMAX (Key dramatic moment)
09:30-10:00 - CLIFFHANGER (Setup for next episode)
```

Content Calendar

- **Total Episodes**: 150+ (entire Mahabharata)

- **Publishing Schedule**: 1 episode/day (daily at 6 AM IST)

- **Series Arcs**:

    - Arc 1: Origins (Episodes 1-20)

    - Arc 2: The Education (Episodes 21-40)

    - Arc 3: The Dice Game (Episodes 41-60)

    - Arc 4: Exile (Episodes 61-90)

    - Arc 5: Preparations for War (Episodes 91-110)

    - Arc 6: The Great War (Episodes 111-140)

    - Arc 7: Aftermath (Episodes 141-150)

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3. TECHNICAL ARCHITECTURE

System Components

A. Content Generation Layer

- **Script Generation**: Claude API (Anthropic)

- **Story Database**: Google Sheets (free tier)

- **Character Consistency**: Predefined character reference library

B. Media Production Layer

- **Image Generation**: Leonardo.ai (FREE tier: 150 tokens/day = ~30 images/day)

- **Voice Synthesis (Hybrid Approach)**:

    - **Premium Voice** (ElevenLabs FREE tier): Hooks & cliffhangers only (~10k chars/month)

    - **Main Narration** (Google Cloud TTS): $2-3/month for remaining content

- **Background Music**: Pixabay API (free) or YouTube Audio Library (free)

- **Video Compilation**: FFmpeg (open source, free)

C. Automation & Orchestration Layer

- **Workflow Engine**: n8n (self-hosted)

- **Storage**: Local storage or cloud (Google Drive free tier)

- **Scheduling**: n8n cron triggers

D. Distribution Layer

- **Publishing Platform**: YouTube

- **Thumbnail Generation**: Canva API or Leonardo.ai

- **Metadata Optimization**: Template-based with dynamic variables

Data Flow

```
[Daily Trigger 6AM]
   ↓
[Fetch Episode Data from Google Sheets]
   ↓
[Generate Script via Claude API]
   ↓
[Parse Script → Extract Scenes]
   ↓
[For Each Scene]:
   - Generate Visual (Leonardo.ai)
   - Generate Voiceover (ElevenLabs)
   - Save to local storage
   ↓
[Compile Video with FFmpeg]
   - Add background music
   - Add transitions
   - Render final MP4
   ↓
[Generate Thumbnail]
   ↓
[Upload to YouTube with metadata]
   ↓
[Send Success Notification]
   ↓
[Log to Analytics Sheet]
```

4. STORY ARCHITECTURE

Master Story Breakdown Structure

Google Sheet Columns:

1. episode_number - Sequential ID (1-150)
2. episode_title - Catchy title for YouTube
3. story_arc - Which major arc (1-7)
4. key_events - Bullet points of main events
5. characters_featured - List of characters in episode
6. emotional_tone - Happy/Sad/Tense/Epic
7. key_dialogue - Important quotes if any
8. cliffhanger_hook - Setup for next episode
9. seo_keywords - Tags for YouTube
10. previous_episode_summary - For context in script generation
11. status - Not Started/In Progress/Published/Failed
12. publish_date - Auto-calculated
13. youtube_url - Post-upload
14. views - Updated manually during daily check

Character Database

Separate Sheet: Character Profiles

For each major character:

- character_name
- physical_description - For consistent image generation
- leonardo_reference_id - Saved image ID for consistency
- voice_profile - If using different voices per character
- key_traits - For script generation context
- relationships - To other characters

Priority Characters (Generate First):

1. Yudhishthira - Eldest Pandava, righteous

2. Bhima - Strong Pandava, impulsive

3. Arjuna - Skilled archer, protagonist

4. Nakula & Sahadeva - Twin Pandavas

5. Duryodhana - Eldest Kaurava, antagonist

6. Shakuni - Manipulative uncle

7. Karna - Tragic hero

8. Krishna - Divine guide

9. Draupadi - Female lead

10. Dhritarashtra - Blind king

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5. QUALITY STANDARDS

Script Quality Checklist

☐ Hook grabs attention in first 15 seconds
☐ Previous episode recap is clear and concise
☐ Story flows logically and emotionally
☐ Dialogue is authentic to character
☐ Cultural accuracy maintained
☐ Cliffhanger creates anticipation
☐ Educational value present
☐ No grammatical errors

Visual Quality Checklist

☐ Character consistency maintained
☐ Scene descriptions are cinematic
☐ Color grading is consistent
☐ Resolution: Minimum 1920x1080
☐ No visible AI artifacts
☐ Culturally appropriate attire/settings

Audio Quality Checklist

☐ Voice clarity (no robotic glitches)
☐ Background music doesn't overpower narration
☐ Audio levels normalized

- [ ] Emotional tone matches visuals
- [ ] No awkward pauses or cuts

Final Video Checklist

- [ ] Duration: 5-10 minutes
- [ ] Transitions are smooth
- [ ] Thumbnail is compelling
- [ ] Title is SEO-optimized
- [ ] Description includes timestamps
- [ ] Tags include relevant keywords
- [ ] Subtitles/captions available
- [ ] End screen prompts next episode

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6. RISK MANAGEMENT

Technical Risks

Risk	Impact	Probability	Mitigation
API rate limits exceeded	High	Medium	Implement caching, use free tier wisely
AI generates inconsistent characters	Medium	High	Use reference images, locked seeds
FFmpeg compilation fails	High	Low	Test thoroughly, add error handling
YouTube upload fails	High	Low	Retry logic, manual fallback
n8n workflow crashes	High	Low	Error notifications, workflow backups

Content Risks

Risk	Impact	Probability	Mitigation
Copyright claims on music	High	Medium	Use only royalty-free music
Cultural inaccuracies offend audience	Medium	Medium	Research thoroughly, add disclaimers
Low view counts initially	Medium	High	SEO optimization, patience, consistency
YouTube algorithm doesn't promote	High	High	Optimize CTR, watch time, engagement
Burnout from daily commitment	Medium	Medium	Automation reduces manual work

Business Risks

Risk	Impact	Probability	Mitigation
Monetization takes longer than expected	Medium	High	Diversify revenue (Patreon, merch)
API costs exceed budget	Medium	Medium	Monitor usage, optimize prompts
Another channel copies concept	Low	Medium	First-mover advantage, quality focus

7. MONETIZATION STRATEGY

Phase 1: Foundation (Month 1-3)

- Focus on content quality and consistency
- Build subscriber base organically
- No direct revenue expected

Phase 2: YouTube Partner Program (Month 4-6)

Requirements:

- 1,000 subscribers ✓
- 4,000 watch hours in past 12 months ✓

Revenue Streams:

- AdSense ($2-5 CPM for educational content = $20-100/month initially)

Phase 3: Diversification (Month 6-12)

- **Patreon**: Early access to episodes ($5-10/month tier)
- **Merchandise**: Character artwork, quotes (print-on-demand via Printful)
- **Affiliate Links**: Books, audiobooks, mythology courses
- **Sponsorships**: Cultural organizations, educational platforms

Phase 4: Scaling (Month 12+)

- License content to streaming platforms
- Create parallel series (Ramayana, Greek Mythology)

- Sell course: "How I Built This Channel"

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8. EXECUTION ROADMAP

Week 1: Foundation Setup

Days 1-2: Planning & Research

- ☐ Finalize Mahabharata story breakdown (30 episodes minimum)
- ☐ Research character descriptions
- ☐ Create Google Sheets structure
- ☐ Set up YouTube channel (name, branding, description)

Days 3-4: Tool Setup

- ☐ Create API accounts (Claude, Leonardo.ai, ElevenLabs)
- ☐ Set up n8n environment
- ☐ Install FFmpeg
- ☐ Test each API individually

Days 5-7: Character Creation

- ☐ Generate 10 main character reference images
- ☐ Test voice profiles in ElevenLabs
- ☐ Document character visual IDs
- ☐ Create character consistency guide

Week 2: Workflow Development

Days 8-10: Build Core Workflow

- ☐ Node 1-3: Trigger → Sheets → Script Generation
- ☐ Test script quality with 3 different episodes
- ☐ Refine Claude prompts for consistency
- ☐ Validate JSON output parsing

Days 11-12: Media Generation

- ☐ Add image generation nodes
- ☐ Add voiceover generation nodes
- ☐ Test scene-by-scene output
- ☐ Verify file storage

Days 13-14: Video Compilation

- ☐ Build FFmpeg compilation logic

- [ ] Add background music integration
- [ ] Test full video render
- [ ] Optimize render time

Week 3: Testing & Refinement

Days 15-17: End-to-End Testing

- [ ] Run complete workflow for Episode 1
- [ ] Manually review all outputs
- [ ] Fix any errors or quality issues
- [ ] Create Episode 2 and 3 for validation

Days 18-19: YouTube Integration

- [ ] Add thumbnail generation
- [ ] Build YouTube upload node
- [ ] Test metadata formatting
- [ ] Create description template

Days 20-21: Quality Assurance

- [ ] Review all 3 test episodes
- [ ] Get feedback from friends/family
- [ ] Make final adjustments
- [ ] Prepare launch checklist

Week 4: Launch & Monitor

Day 22: Soft Launch

- [ ] Publish Episode 1 manually
- [ ] Share with close network
- [ ] Monitor comments and feedback
- [ ] Track analytics

Days 23-24: Full Automation

- [ ] Enable daily trigger
- [ ] Set up error notifications
- [ ] Document 10-minute daily routine
- [ ] Create backup procedures

Days 25-28: Optimize

- [ ] Analyze Episode 1-3 performance
- [ ] Adjust thumbnails if needed

- ☐ Refine titles and descriptions
- ☐ Engage with early audience

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9. DAILY MANAGEMENT ROUTINE (10 Minutes)

Morning Check (5 minutes) - 6:30 AM

1. **Verify Automation Success** (2 min)
   - Check n8n workflow execution log
   - Confirm video uploaded to YouTube
   - Verify thumbnail and metadata

2. **Quick Quality Check** (2 min)
   - Watch first 30 seconds of new episode
   - Check audio/visual sync
   - Ensure no obvious errors

3. **Approve/Fix** (1 min)
   - If good: Make video public
   - If issues: Note for evening fix

Evening Engagement (5 minutes) - 9 PM

1. **Community Management** (3 min)
   - Respond to top comments
   - Pin best comment
   - Like engaging comments

2. **Analytics Review** (2 min)
   - Check views, watch time, CTR
   - Note any patterns
   - Plan adjustments if needed

Weekly Deep Dive (30 minutes) - Sunday

- Review week's performance
- Adjust workflow if needed
- Plan next week's content

- Update story database

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10. SUCCESS CRITERIA

Month 1 Goals

☐ 30 episodes published

☐ 100+ subscribers

☐ 500+ watch hours

☐ 90%+ workflow success rate

☐ Average watch time > 4 minutes

Month 3 Goals

☐ 90 episodes published

☐ 1,000+ subscribers (YPP requirement met)

☐ 4,000+ watch hours (YPP requirement met)

☐ 5+ positive comments per episode

☐ CTR > 3%

Month 6 Goals

☐ 180 episodes published

☐ 10,000+ subscribers

☐ Monetization active

☐ $100+ monthly revenue

☐ 10+ minutes average watch time

Month 12 Goals

☐ 365 episodes published (full Mahabharata + extras)

☐ 100,000+ subscribers

☐ $500-2000 monthly revenue

☐ Merchandise store launched

☐ Patreon with 100+ supporters

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11. NEXT IMMEDIATE ACTIONS

Action 1: Create Story Database (You do this)

1. Open Google Sheets

2. Create new sheet: "Mahabharata Episodes"

3. Add columns as specified in Section 4

4. **I will provide**: Pre-filled 30 episodes breakdown

Action 2: Set Up API Accounts (You do this)

1. **Anthropic Claude**: https://console.anthropic.com/

   - Sign up

   - Add $10 credit

   - Copy API key

2. **Leonardo.ai**: https://leonardo.ai/

   - Sign up (free tier)

   - Navigate to API section

   - Copy API key

3. **ElevenLabs**: https://elevenlabs.io/

   - Sign up

   - Choose $5/month plan

   - Copy API key

Action 3: Environment Prep (You do this)

1. Open your n8n instance

2. Create new workflow: "Mahabharata Automation"

3. Install FFmpeg on your server/machine

4. Verify Python is installed (for helper scripts)

Action 4: Request Assets (I do this)

Tell me when you're ready and I'll provide:

☐ Complete 30-episode story breakdown (CSV/Google Sheets format)
☐ Character description prompts (for Leonardo.ai)
☐ Script generation prompt template (optimized for Claude)
☐ FFmpeg command templates

12. APPENDIX

A. Estimated Costs Breakdown

OPTIMIZED BUDGET VERSION ($10-15/month)

Service	Plan	Monthly Cost	Usage	Notes
Claude API	Pay-as-you-go	~$8-12	30 scripts/month	Optimize prompts for token efficiency
Leonardo.ai	FREE Tier	$0	150 tokens/day	Enough for 30 episodes/month
ElevenLabs	FREE Tier	$0	10,000 chars/month	~3-4 episodes, supplement with alternatives
Google TTS	Pay-as-you-go	~$2-3	Remaining episodes	$4 per 1M characters
Pixabay	Free	$0	Background music	Royalty-free
n8n	Self-hosted	$0	Unlimited	Run on your server
FFmpeg	Open source	$0	Unlimited	Local processing
Google Sheets	Free	$0	Data storage	Unlimited
YouTube	Free	$0	Hosting	Unlimited
TOTAL		**$10-15/month**		

Budget Strategy:

- **Month 1-2**: Stay at $10-12 while testing and optimizing
- **Month 3+**: Scale to $20-30 as channel grows (use AdSense revenue)
- **Month 6+**: Premium tools justified by monetization

How We're Saving:

1. **ElevenLabs Free Tier**: 10,000 chars/month = 3-4 episodes with premium voice
   - Use for HOOK sections (first 15 seconds) - most critical
   - Use Google TTS for main narration (still good quality)

2. **Leonardo.ai Free Tier**: 150 daily tokens is MORE than enough
   - Each episode needs ~5-8 images
   - 150 tokens = ~30 images/day = plenty for 1 episode/day

3. **Claude API Optimization**:

- Efficient prompts (shorter = cheaper)

- Batch processing where possible

- Target 30,000 tokens/month = ~$10-12

Alternative Voice Strategy (Hybrid Approach):

- **Hook + Cliffhanger**: ElevenLabs (premium voice, ~500 words = 3-4 episodes)

- **Main Narration**: Google Cloud TTS (still cinematic, much cheaper)

- Result: Viewers get hooked with premium voice, stay for story

B. File Naming Conventions

```
Episodes: mahabharata_ep{001}_final.mp4
Scripts: mahabharata_ep{001}_script.json
Images: mahabharata_ep{001}_scene{01}.jpg
Audio: mahabharata_ep{001}_scene{01}.mp3
Thumbnails: mahabharata_ep{001}_thumb.jpg
```

C. Video Metadata Template

```
Title: "Mahabharata Episode {N}: {Epic_Title} | Indian Mythology Series"

Description:
In this episode of our Mahabharata series: {one_line_summary}

{2-3 sentence episode description}

🔔 Subscribe for daily episodes!
📺 Watch Episode {N-1}: {previous_url}
📺 Watch Episode {N+1}: {next_url}

⏱ Timestamps:
00:00 - Recap
01:00 - {Key Event 1}
04:00 - {Key Event 2}
08:00 - Cliffhanger

#Mahabharata #IndianMythology #EpicStory #Storytelling

Tags: mahabharata, indian mythology, hindu mythology, epic story, ancient india, pandavas, kauravas, krishna, arjuna, mahabharata in english, mythology explained
```

APPROVAL & SIGN-OFF

Project Owner: [Your Name] **Document Version**: 1.0 **Last Updated**: [Current Date] **Status**: Ready for Execution

Next Step: Action Items 1-3, then proceed to Phase 1 implementation.