🔄 Integration Points with Your Infrastructure:

```yaml
# Example integration configuration
integration:
  apigee:
    base_path: /namo/emotion
    rate_limit: 2000/req per minute
    caching: 15 seconds for GET requests

  vertex_ai:
    features:
      - natural_language_understanding
      - sentiment_analysis
      - entity_analysis
      - content_classification
    models:
      - text-bison@latest
      - custom-emotion-model-v1
    parameters:
      temperature: 0.1
      max_output_tokens: 512

  firestore:
    collections:
      - emotional_states
      - session_context
      - emotional_triggers
    indexing:
      - session_id
      - timestamp
      - emotional_vector

  bigquery:
    dataset: namo_emotion_patterns
    tables:
      - emotional_patterns
      - trigger_analysis
      - brahmavihara_balance
      - dharma_insights

  cloud_run:
    service_name: namo-emotion-api
```

```
   concurrency: 80
   min_instances: 1
   max_instances: 8
   timeout: 300 seconds
```

🚀 Immediate Implementation Steps:

1. Deploy to Cloud Run:

```bash
gcloud run deploy namo-emotion-api \
  --source . \
  --platform managed \
  --region asia-southeast1 \
  --set-env-vars=PROJECT_ID=your-project-id \
  --cpu=2 \
  --memory=4Gi
```

1. Configure Vertex AI Integration:

```python
# Example emotion analysis with Vertex AI
from google.cloud import aiplatform
from google.cloud.aiplatform import gapic as aip

def analyze_emotion(text_content, session_id):
    client = aiplatform.gapic.PredictionServiceClient()

    instance = {
        "content": text_content,
        "context": {
            "session_id": session_id,
            "analysis_type": "dharma_emotional"
        }
    }

    response = client.predict(
        endpoint="projects/your-project/locations/asia-southeast1/endpoints/emotion-analysis",
        instances=[instance]
    )
```

```
    return process_emotion_response(response)
```

1. Setup Firestore Structure:

```javascript
// Firestore document structure
const emotionalStateDoc = {
  session_id: "session-12345",
  emotional_vector: {
    metta: 0.85,
    karuna: 0.72,
    mudita: 0.63,
    upekkha: 0.91,
    stability: 0.88
  },
  intensity: 7,
  valence: 0.78,
  detected_triggers: ["stress", "uncertainty"],
  dharma_context: {
    anicca_awareness: 0.92,
    dukkha_understanding: 0.85,
    anatta_realization: 0.78
  },
  timestamp: firestore.Timestamp.now(),
  expires_at: firestore.Timestamp.fromDate(new Date(Date.now() + 24 * 60 * 60 * 1000))
}
```

1. Create BigQuery Tables for Analytics:

```sql
CREATE TABLE `your-project.namo_emotion_patterns.emotional_patterns` (
  session_id STRING,
  user_id STRING,
  emotional_vector STRUCT<
    metta FLOAT64,
    karuna FLOAT64,
    mudita FLOAT64,
    upekkha FLOAT64,
    stability FLOAT64
  >,
  intensity INT64,
```

```
  valence FLOAT64,
  triggers ARRAY<STRING>,
  timestamp TIMESTAMP,
  date DATE
) PARTITION BY date;
```