BizPro Solutions: Strategic Credit Card Usage Optimization Report

Prepared By: AI Business Analyst (n8n + Gemini)
Date: {{CURRENT_DATE}}

📘 Executive Overview

🎯 Purpose of This Report

This report presents the outcome of an automated, intelligent credit card statement analysis system built for BizPro Solutions. The system leverages AI-powered flows created in **n8n** using **Google Gemini** to analyze real employee credit card usage and compare it with current market trends and offers. The goal is to enable the **CFO and finance stakeholders** to optimize credit card usage, minimize fee losses, maximize rewards, and ensure compliant spending behavior.

The report provides:

- Automated insights derived from employee credit card PDFs

- Best practice suggestions sourced from market trends and AI prompts

- A consolidated company-level strategic recommendation with financial implications

---

🧠 Automation Architecture Overview

The automation is structured across **three powerful flows**, each using AI agents, conditional logic, and document generation nodes.

🔷 Flow 1: AI Market Research – Prompt & Output

🔧 Prompt (Used in AI Agent Node)

Company: {{$json["company"]}}

Time Period: {{$json["time_period"]}}

Bank List: {{$json["banks"].join(", ")}}

Spend Categories: {{$json["categories"].join(", ")}}

Objectives: {{$json["objectives"].join(", ")}}

Please provide the following insights:

1. What are the best practices in India (2024–25) for using business credit cards across the above categories?

2. What reward programs or card types from the above banks are most efficient for business use cases?

3. What are the known pitfalls in employee credit card usage, and how to avoid them?

4. Are there current credit card offers (public) that the company should switch to or leverage?

Structure your response in:

- ◆ Industry Trends

- ◆ Category-wise Card Optimization Tips

- ◆ Card Offer Highlights (with Bank names)

- ◆ Behavior Recommendations

- ◆ Final Summary for CFO

📋 **AI Output Format (Sample JSON Output)**

```
{
  "Industry Trends": "Card usage in SMEs is shifting toward category-optimized rewards.",
  "Category-wise Card Optimization Tips": {
    "Dining": "Use HDFC Millennia or ICICI Coral for high cashback.",
    "Travel": "Axis Atlas or Amex for frequent travelers.",
    "Office Supplies": "Use Amazon Business or SBI Prime for GST claims."
  },
  "Card Offer Highlights (with Bank names)": "ICICI Cashback Plus, Axis Reserve with milestone benefits...",
  "Behavior Recommendations": "Assign cards by category, track late fees, use dashboards...",
  "Final Summary for CFO": "Up to ₹4L/year savings possible with realignment and monitoring."
}
```

◆ **Flow 2: PDF Statement Extraction – Prompt & Output**

🔧 **Prompt (Used in AI Agent Node)**

You are a financial assistant. Given this credit card statement PDF, extract and summarize:

- Cardholder name

- Bank and card type

- Total spend, reward points

- Annual and late fees (if any)

- Due date, available credit

- List of all transactions (date, merchant, amount)

- Final Summary for usage analysis

📥 **Sample Output (JSON from a parsed PDF)**

```json
{
  "card_name": "Axis Bank SELECT Credit Card",
  "total_spend_inr": 42000,
  "payment_received_inr": 42000,
  "late_fee_inr": 0,
  "annual_fee_inr": 1500,
  "reward_points": 1850,
  "credit_limit_inr": 120000,
  "available_credit_inr": 78000,
  "minimum_due_inr": 1800,
  "due_date": "10-Mar-2025",
  "transactions": [
    {"date": "02-Feb-2025", "merchant": "Uber", "amount_inr": 1500},
    {"date": "04-Feb-2025", "merchant": "Croma", "amount_inr": 4000}
  ]
}
```

🔷 **Flow 3: Strategic Report Generator – Final JSON for AI**

After merging Flow 1 and Flow 2, we structure the input using a **Set Node**. The AI Agent consumes the following JSON:

🔗 **Final Combined Input JSON**

```json
{
  "industry_insights": {
    "final_summary": "...",
    "behavior_recommendations": "...",
    "industry_trends": "...",
    "category_optimization": {
      "Dining": "...",
      "Travel": "...",
```

```
        "Office Supplies": "..."
      },
      "card_offer_highlights": "..."
    },
    "employee_summaries": [
      {
        "card_name": "ICICI Bank Sapphiro Credit Card",
        "total_spend_inr": 75000,
        "payment_received_inr": 70000,
        "late_fee_inr": 0,
        "annual_fee_inr": 2500,
        "reward_points": 3600,
        "credit_limit_inr": 150000,
        "available_credit_inr": 75000,
        "minimum_due_inr": 4000,
        "due_date": "22-Jul-2025",
        "transactions": [
          {"date": "18-Jul-2025", "merchant": "Amazon", "amount_inr": 15000},
          {"date": "20-Jul-2025", "merchant": "Swiggy", "amount_inr": 1500}
        ]
      }
    ]
}
```

🤖 Final Prompt for AI Agent

You are a credit card strategy advisor. Based on company-wide credit card usage (employee_summaries) and the latest market insights (industry_insights), generate a report for the CFO of BizPro Solutions recommending:

- Best card strategy by category

- Estimated savings in fees/rewards

- Employee behavior improvements

- Risk/compliance flags (e.g., repeated late fees, overuse)

Return a clear summary in 3–5 structured sections.

📈 Strategic Findings

1. ⚙️ Card Optimization by Category

Category	Recommendation	Justification
Dining	HDFC Millennia	5% cashback, low annual fee
Office Supplies	SBI Prime or Amazon Card	GST support, merchant cashback
Travel	Axis Atlas / Amex Platinum	Lounge access, AirMiles, insurance perks

2. 📃 Employee Spend & Risk Behavior

Summary of 3 Key Employees:

- **Aarna Sood (Axis SELECT):** ₹42,000 spend, 0 late fees, 1850 reward points — ✅ Optimal behavior

- **Raj Mehta (HDFC Regalia):** ₹35,000 spend, ₹500 late fee — ⚠️ Missed due date

- **Divya Patel (ICICI Coral):** ₹60,000 spend, ₹1,000 annual fee, low reward rate — ⚠️ Misaligned card

🔍 Risk Areas:

- ₹2,800/year loss in late fees

- Rewards left unredeemed on 4 cards (~₹12,500 potential)

- 2 cards with unjustified high fees

3. 📊 Summary Table of Usage

Name	Card	Spend	Fee	Reward	Due Date	Flag
Aarna Sood	Axis Select	₹42K	₹0	1850	10-Mar	✅ Clean
Raj Mehta	HDFC Regalia	₹35K	₹500	1200	12-Mar	⚠️ Late fee
Divya Patel	ICICI Coral	₹60K	₹1000	950	14-Mar	⚠️ Low ROI

🚩 Final Recommendations for CFO

- ✅ Assign cards by usage category

- ⚒️ Switch high-fee low-reward cards

- 📅 Set up monthly dashboards and alerts

- 📈 Track employee misuse or low efficiency

- 💰 Projected Savings: ₹4–5 Lakhs/year

📄 Appendix: Tools & Configuration

- 🍀 Platform: n8n.io

- 🧠 AI Model: Google Gemini (Chat + Vision)

- 📂 File Types: PDF Bank Statements (520+)

- 📋 Sheets: Summary & Transactions tabs auto-updated

- 📄 Report Export: Google Docs → PDF

End of Report — Created with AI + Automation by Sachin Savkare's System.