

# Anatomy of an Effective Prompt: 6 Essential Components

## 1. Role Definition

*You are an expert data scientist with 10 years of experience in machine learning and statistics.*



Sets expertise context

## 2. Task Specification

*Your task is to analyze this customer churn dataset and identify the top 3 factors driving customer loss.*



Defines clear objective

## 3. Context Provision

*Background: E-commerce company, 50K customers, 15% churn rate.  
Constraints: Must complete analysis in 2 hours.*



Provides relevant details

## 4. Output Format

*Provide your response in this format:*

- Finding 1: [Factor] (Impact: X%)
- Finding 2: [Factor] (Impact: X%)
- Finding 3: [Factor] (Impact: X%)



Structures response

## 5. Examples (Few-shot)

*Example: For telecom churn:  
Finding 1: High monthly charges (Impact: 35%)  
Finding 2: Short tenure (Impact: 28%)*



Shows desired output

## 6. Constraints/Tone

*Use non-technical language.  
Focus on actionable insights.  
Avoid complex statistical jargon.*

Guides style

**Best Practice: Combine ALL components for maximum effectiveness**  
**Order matters: Role → Task → Context → Format → Examples → Constraints**