# Vercel Deployment Guide for AI Sales-Enablement Platform

#### **Overview**

This guide provides step-by-step instructions for deploying the Al Sales-Enablement Platform to Vercel, including environment setup, build configuration, and troubleshooting.

## **Prerequisites**

- GitHub repository: https://github.com/git-bonda108/ai-sales-platform
- Vercel account (free tier available)
- Node.js 18+ for local development

## **Step 1: Connect GitHub Repository to Vercel**

#### 1.1 Create Vercel Account

- 1. Visit vercel.com (https://vercel.com)
- 2. Sign up using your GitHub account for seamless integration
- 3. Authorize Vercel to access your GitHub repositories

## 1.2 Import Project

- 1. Click "New Project" on your Vercel dashboard
- 2. Select "Import Git Repository"
- 3. Choose git-bonda108/ai-sales-platform from the list
- 4. Click "Import"

### 1.3 Configure Project Settings

- Framework Preset: Next.js (auto-detected)
- Root Directory: app (important: the Next.js app is in the /app subdirectory)
- Build Command: npm run build (default)
- Output Directory: .next (default)
- Install Command: npm install (default)

## **Step 2: Environment Variables Setup**

### 2.1 Required Environment Variables

Add these environment variables in Vercel dashboard under Project Settings > Environment Variables:

```
# OpenAI Configuration (when ready to integrate)
OPENAI_API_KEY=your_openai_api_key_here

# Database Configuration (for future CRM integration)
DATABASE_URL=your_database_connection_string

# Authentication (for future user management)
NEXTAUTH_SECRET=your_nextauth_secret_here
NEXTAUTH_URL=https://your-vercel-domain.vercel.app

# API Configuration
API_BASE_URL=https://your-vercel-domain.vercel.app/api

# Feature Flags
ENABLE_CHAT_FEATURE=true
ENABLE_CRM_INTEGRATION=false
ENABLE_ANALYTICS=true
```

### 2.2 Environment Variable Configuration

- 1. Go to your project dashboard on Vercel
- 2. Navigate to Settings > Environment Variables
- 3. Add each variable with appropriate values for:
  - Production
  - Preview (optional)
  - Development (optional)

## **Step 3: Build Configuration**

### 3.1 Vercel Configuration File

The project includes a next.config.mjs file with optimized settings:

```
/** @type {import('next').NextConfig} */
const nextConfig = {
   experimental: {
     appDir: true,
   },
   images: {
     domains: ['localhost'],
   },
   env: {
     CUSTOM_KEY: process.env.CUSTOM_KEY,
   },
}
```

### 3.2 Build Settings Override (if needed)

If you need to customize build settings:

- 1. Go to Project Settings > General
- 2. Modify build settings:
  - Build Command: cd app && npm run build

- Output Directory: app/.next
- Install Command: cd app && npm install

## Step 4: Deploy

### 4.1 Automatic Deployment

- Vercel automatically deploys on every push to the main branch
- Preview deployments are created for pull requests
- Check deployment status in the Vercel dashboard

### 4.2 Manual Deployment

If needed, trigger manual deployment:

- 1. Go to your project dashboard
- 2. Click "Deployments" tab
- 3. Click "Redeploy" on the latest deployment

## **Step 5: Custom Domain Setup (Optional)**

#### 5.1 Add Custom Domain

- 1. Go to Project Settings > Domains
- 2. Add your custom domain
- 3. Configure DNS records as instructed by Vercel
- 4. Wait for SSL certificate provisioning (automatic)

### **5.2 Domain Configuration**

- A Record: Point to Vercel's IP (provided in dashboard)
- CNAME: Point to cname.vercel-dns.com
- SSL: Automatically handled by Vercel

## **Step 6: Performance Optimization**

## **6.1 Recommended Settings**

- Enable Edge Functions for API routes
- Configure caching headers for static assets
- Use Vercel Analytics for performance monitoring

## 6.2 Build Optimization

```
"buildCommand": "npm run build",
  "devCommand": "npm run dev",
  "installCommand": "npm install",
  "framework": "nextjs"
}
```

## **Troubleshooting**

#### **Common Issues and Solutions**

#### 1. Build Failures

**Problem**: Build fails with module not found errors

#### Solution:

- Ensure all dependencies are in package.json
- Check that the root directory is set to app
- Verify Node.js version compatibility

#### 2. Environment Variables Not Working

**Problem**: Environment variables are undefined in production **Solution**:

- Double-check variable names (case-sensitive)
- Ensure variables are set for the correct environment
- Restart deployment after adding variables

#### 3. API Routes Not Working

Problem: API endpoints return 404 errors

#### Solution:

- Verify API routes are in app/api/ directory
- Check route.ts file naming convention
- Ensure proper export of HTTP methods

#### 4. Static Assets Not Loading

Problem: Images or CSS files not loading

#### Solution:

- Check next.config.mjs image domains configuration
- Verify asset paths are relative
- Use Next.js Image component for optimized loading

#### 5. Database Connection Issues

Problem: Cannot connect to database

#### Solution:

- Verify DATABASE\_URL format
- Check database provider's IP whitelist
- Ensure connection string includes all required parameters

## **Debug Commands**

```
# Check build logs
vercel logs [deployment-url]

# Local development with Vercel CLI
npx vercel dev

# Pull environment variables locally
npx vercel env pull .env.local
```

## **Monitoring and Analytics**

## **6.1 Vercel Analytics**

- Enable Vercel Analytics in project settings
- Monitor Core Web Vitals
- Track user interactions and performance

### **6.2 Error Monitoring**

- Set up error tracking (Sentry integration available)
- Monitor API endpoint performance
- · Set up alerts for deployment failures

## **Security Considerations**

#### 7.1 Environment Variables

- Never commit sensitive keys to repository
- Use Vercel's encrypted environment variables
- Rotate API keys regularly

### 7.2 CORS Configuration

```
// In API routes
const corsHeaders = {
   'Access-Control-Allow-Origin': process.env.ALLOWED_ORIGINS || '*',
   'Access-Control-Allow-Methods': 'GET, POST, PUT, DELETE, OPTIONS',
   'Access-Control-Allow-Headers': 'Content-Type, Authorization',
}
```

## **Deployment Checklist**

- [ ] GitHub repository connected
- [ ] Root directory set to app
- [ ] Environment variables configured
- [ ] Build settings verified
- [ ] Custom domain configured (if applicable)
- [ ] SSL certificate active
- [ ] Analytics enabled
- [ ] Error monitoring set up
- [ ] Performance optimizations applied
- [ ] Security headers configured

## Support and Resources

- Vercel Documentation (https://vercel.com/docs)
- Next.js Deployment Guide (https://nextjs.org/docs/deployment)
- Vercel Community (https://github.com/vercel/vercel/discussions)

# **Next Steps After Deployment**

- 1. API Integration: Add real API endpoints for CRM and AI features
- 2. Authentication: Implement user authentication system
- 3. **Database**: Set up persistent data storage
- 4. **Monitoring**: Configure comprehensive logging and monitoring
- 5. **Testing**: Set up automated testing pipeline
- 6. CDN: Optimize asset delivery with Vercel's global CDN

**Deployment URL**: Your app will be available at https://your-project-name.vercel.app

**Repository**: https://github.com/git-bonda108/ai-sales-platform