CCD SaaS Suite

Product Design Documentation

Version 2.0

Crane & Ceeshar Digital

January, 2026

Document Type: Product Design Specification
Status: Final Draft
Confidentiality: Internal Use Only

Table of Contents

1. Executive Summary

CCD SaaS Suite is a comprehensive business management platform designed for digital agencies, consultancy firms, and growing service businesses. The platform consolidates nine essential business functions into a single, unified interface, eliminating the need for multiple disconnected tools and reducing operational complexity.

1.1 Key Differentiators

- Unified Platform: Nine integrated modules replacing 5-10 standalone subscriptions
- User-Type Access Model: Employees see only modules relevant to their job function
- AI-Powered Intelligence: Smart automation and predictions across all modules
- Modern Design: Clean, intuitive interface inspired by Linear, Notion, and Figma
- Cost-Effective: Single subscription replaces multiple software licenses
- Cross-Platform: Progressive Web App accessible on any device

1.2 Business Value Proposition

For a typical 25-person agency currently spending $2,000-5,000/month on separate tools (CRM, project management, content planning, social media management, accounting, HR), CCD provides equivalent or superior functionality at a fraction of the cost while eliminating data silos and improving team productivity.

2. Product Overview

2.1 Vision Statement

To become the all-in-one business operating system for service companies, empowering teams to manage clients, projects, content, and operations from a single, intelligent platform.

2.2 Problem Statement

Service businesses today struggle with significant challenges that impact their efficiency and bottom line:

- Tool Fragmentation: Average agency uses 8-12 different software tools
- Data Silos: Information trapped in disconnected systems
- Context Switching: Productivity loss from jumping between applications
- High Costs: Cumulative subscriptions often exceed $3,000/month
- Complex Onboarding: New employees must learn multiple systems
- Inconsistent Reporting: No unified view of business performance

2.3 The Nine Modules

#	Module	Primary Purpose
1	CRM	Client relationships, sales pipeline, and deal management
2	Analytics	Cross-platform performance tracking and insights
3	Content	Content planning, creation, and scheduling
4	SEO	Website optimisation and digital presence management
5	Social Media	Social account management and engagement
6	Client Portal	External client collaboration and communication
7	Projects	Task management, workflows, and team coordination
8	Finance	Invoicing, expenses, and financial tracking

9	HR	Employee management, payroll, and compliance

2.4 Module Integration Benefits

All nine modules share a common data layer, enabling seamless workflows:

- CRM deals automatically create Projects when won
- Time tracked in Projects flows to Finance for automated invoicing
- HR employee data syncs with Project resource allocation
- Content publishing connects directly to Social Media scheduling
- Analytics aggregates data from all modules for unified reporting
- Client Portal shows real-time project progress from the Projects module

3. Target Market & User Personas

3.1 Primary Target Market

- Digital marketing agencies (10-100 employees)
- Management consultancy firms
- Creative agencies (design, video, branding)
- IT service companies and software consultancies
- PR and communications agencies
- Growing service businesses with multiple departments

3.2 User Personas

Persona 1: Agency Owner (Admin User)

Sarah, 38 - Founder of a 25-person digital marketing agency

- Goals: Complete business overview, reduce software costs, scale efficiently
- Pain Points: Too many tools, no cross-departmental visibility, high costs
- CCD Solution: Single dashboard for all metrics, unified billing, AI insights

Persona 2: Content Manager (Content User Type)

Michael, 29 - Content Lead, managing a team of 4 writers

- Goals: Efficient content calendar, brand consistency, meet deadlines
- Pain Points: Scattered content, no campaign visibility, manual approvals
- CCD Solution: Sees only the Content module, integrated calendar, and AI writing help

Persona 3: HR Director (HR User Type)

Lisa, 34 - HR Director handling 50 employees

- Goals: Streamline payroll, track performance, ensure compliance
- Pain Points: Manual processes, disconnected from projects, compliance issues
- CCD Solution: Sees only HR module, automated payroll, compliance dashboards

Persona 4: Client User

David, 45 - Marketing Director at a client company

- Goals: Track project progress, approve deliverables, easy communication
- Pain Points: No visibility into status, scattered communications
- CCD Solution: Client Portal with project dashboard, approval workflows

4. Platform Recommendation

4.1 Recommendation: Progressive Web Application (PWA)

After careful evaluation, we strongly recommend building CCD as a Progressive Web Application rather than a native desktop application. This decision is based on a comprehensive analysis of cost, maintenance, user experience, and market standards.

4.2 Web App vs Desktop App Comparison

Factor	Web App (PWA)	Desktop Apps
Development Cost	1x (single codebase)	3-4x (Windows, Mac, Linux)
Maintenance	Single deployment	Three separate builds/updates
Updates	Instant, automatic	User must download/install
Cross-Platform	All devices from one codebase	Separate apps per OS
Installation	Optional, instant	Required, friction
Offline Support	Yes (Service Workers)	Yes (native)
Industry Standard	HubSpot, Monday, Notion	Limited examples

4.3 Why PWA is the Right Choice

- Single Codebase: Develop once, deploy everywhere (Windows, Mac, Linux, iOS, Android)
- Instant Updates: Users always have the latest version without manual updates
- 60-70% Cost Savings: No need to maintain three separate native applications
- Industry Standard: HubSpot, Monday.com, Notion, Figma, and Linear all use web platforms
- Installable: Users can install it as a desktop app with a native-like experience
- Offline Capable: Service workers enable offline functionality
- No App Store: Bypass approval processes and fees

4.4 Future Desktop Option

If native desktop features become necessary in the future, the web application can be wrapped using Tauri (Rust-based, lightweight alternative to Electron). Tauri produces smaller binaries and better performance than Electron while reusing the existing web codebase.

4.5 Multi-Tenant Architecture

CCD uses a multi-tenant architecture optimised for SaaS delivery:

- Tenant Isolation: Row-Level Security (RLS) at the database level
- Subdomain Access: company.ccd-app.com for each organization
- White-Label Ready: Custom branding for enterprise clients
- Scalable: Infrastructure supports thousands of tenants

5. User Access Model

5.1 User-Type Based Access (Not Role-Based)

CCD implements a user-type access model that fundamentally differs from traditional role-based access control (RBAC). Instead of granting granular permissions within modules, users are assigned to specific user types that determine which modules they can access.

5.2 Why User-Type Access?

- Reduced Complexity: Employees see only what they need
- Improved Focus: No distractions from irrelevant features
- Faster Onboarding: Less to learn for each user
- Better Security: Natural data segregation by function
- Cleaner Interface: UI adapts completely to user type

5.3 Predefined User Types

User Type	Module Access	Typical Role
Admin	All 9 Modules	Owner, CEO, Operations Director
Sales	CRM, Analytics	Sales Rep, Account Executive
Marketing	Content, SEO, Social, Analytics	Marketing Manager, Specialist
Project Manager	Projects, Analytics	PM, Delivery Manager
Finance	Finance, Analytics	Accountant, Finance Director
HR	HR, Analytics	HR Manager, People Ops
Client	Client Portal Only	External client users

5.4 Custom User Types

Admins can create custom user types with specific module combinations:

- Creative Director: Content + Projects + Analytics
- Client Success: CRM + Client Portal + Projects
- Operations: Projects + Finance + HR
- Growth Lead: CRM + Content + SEO + Social + Analytics

5.5 Interface Adaptation

The interface automatically adapts based on user type:

- Header module selector shows only accessible modules
- Sidebar displays only relevant menu items
- Dashboard widgets filtered to applicable data
- Search results scoped to accessible modules
- Notifications filtered to relevant activities
- Settings show only applicable preferences

6. Module Specifications

6.1 CRM Module

Comprehensive client relationship and sales pipeline management.

Navigation Structure

- Dashboard: Sales overview, pipeline summary, key metrics, recent activities
- Pipeline: Visual Kanban board (Lead → Qualified → Proposal → Negotiation → Closed)
- Deals: List and card views with filtering, search, and bulk actions
- Contacts: People profiles with communication history and relationship mapping
- Companies: Organisation profiles, hierarchies, and account management
- Activities: Call logs, email tracking, meeting schedules, task management
- Reports: Sales analytics, forecasting, activity reports
- Settings: Pipeline stages, custom fields, integrations

AI Features (Professional+)

- Lead scoring with visual indicators
- Email response suggestions
- Deal probability predictions
- Next best action recommendations

6.2 Analytics Module

Centralised analytics providing insights across all business operations.

Navigation Structure

- Dashboard: Key metrics overview with customizable widgets
- Website Analytics: Traffic, conversions, user behaviour, funnel analysis
- Social Performance: Cross-platform engagement, reach, growth metrics
- Content Performance: Top-performing content, engagement rates, trends
- SEO Metrics: Rankings, visibility scores, organic traffic analysis
- Competitor Analysis: Benchmarking and competitive intelligence
- Custom Reports: Drag-and-drop report builder
- Goals & KPIs: Business objectives tracking with progress indicators

AI Features (Professional+)

- Performance predictions and forecasting
- Trend analysis and pattern recognition

- Anomaly detection and automated alerts
- Automated insight generation

6.3 Content Module

Comprehensive content planning, creation, management, and scheduling.

Navigation Structure

- Dashboard: Content pipeline status, deadlines, performance summary
- Editorial Calendar: Month/week/day views with drag-and-drop scheduling
- Content Library: Repository of all content pieces, organised by type/status
- Content Creation: Rich text editor with real-time collaboration
- Publishing Queue: Scheduled and pending content with status tracking
- Asset Manager: Digital asset management for images, videos, documents
- Brand Guidelines: Centralised brand voice, style guides, templates
- Approval Workflows: Multi-step review and approval processes

AI Features (Professional+)

- AI writing assistant with content suggestions
- SEO optimisation recommendations
- Content idea generation based on trends
- Headline optimization and A/B testing suggestions

6.4 SEO Module

Tools for optimising websites and digital presence across search engines.

Navigation Structure

- Dashboard: SEO health score, ranking changes, priority issues
- Technical Audit: Site speed, mobile optimisation, crawl error tracking
- Keyword Research: Discovery tools, competition analysis, opportunity tracking
- Ranking Tracker: Daily position monitoring with historical trends
- Profile Optimisation: Social media and business profile audits
- Competitor Analysis: SEO comparison and gap analysis
- Link Building: Backlink tracking and outreach management
- Reports: SEO performance and improvement tracking

AI Features (Professional+)

- Automated optimisation suggestions
- Keyword opportunity detection
- Technical issue prioritisation
- Content gap analysis

6.5 Social Media Module

Unified social media management across all major platforms.

Navigation Structure

- Dashboard: Cross-platform overview with key metrics
- Publishing: Content scheduler with platform-specific optimisation
- Engagement Hub: Unified inbox for comments, mentions, messages
- Content Library: Social-specific templates and assets
- Social Listening: Brand monitoring and sentiment analysis
- Influencer Management: Relationship tracking and campaign management
- Analytics: Platform-specific and cross-channel performance

AI Features (Professional+)

- Optimal posting time recommendations
- Content performance predictions
- Automated response suggestions
- Hashtag optimisation

6.6 Client Portal Module

External-facing portal for client collaboration and transparency.

Navigation Structure

- Dashboard: Personalised project overview, goals, recent updates
- Project Progress: Real-time status tracking with milestones
- Reports & Analytics: Client-specific performance dashboards
- File Sharing: Secure document repository with version control
- Communication: Messaging, meeting scheduling, video calls
- Approval Centre: Content and deliverable review workflows
- Billing & Invoices: Payment history and invoice management
- Support: Help desk integration and knowledge base

White-Label Capability

- Custom domains (portal.clientcompany.com)
- Custom logo and colour scheme
- Branded email templates
- Custom mobile experience

6.7 Projects Module

Comprehensive project and task management for team collaboration.

Navigation Structure

- Dashboard: Active projects, workload overview, upcoming deadlines
- Projects Overview: All projects with status, progress, and quick actions
- Task Management: Kanban boards, list views, Gantt charts
- Team Workload: Resource allocation and capacity planning
- Time Tracking: Timesheet management with project allocation
- File Management: Project documents and deliverables storage
- Workflows: Automated process templates and triggers
- Reports: Project profitability and team productivity analytics

AI Features (Professional+)

- Smart task assignment based on skills and availability
- Project risk assessment and alerts
- Resource optimisation recommendations
- Timeline predictions for project completion

6.8 Finance Module

Complete financial management for service businesses.

Navigation Structure

- Dashboard: Revenue, expenses, cash flow overview
- Invoicing: Create, send, and track invoices with templates
- Payments: Payment processing, tracking, reconciliation
- Expenses: Expense tracking with receipt capture and categorisation
- Client Billing: Time-based and project-based billing automation
- Financial Reports: P&L, cash flow, profitability analysis
- Tax Management: Tax reporting and compliance tracking

AI Features (Professional+)

- Revenue forecasting based on the pipeline
- Automated expense categorisation
- Payment prediction modelling
- Profitability optimisation suggestions

6.9 HR Module

Human resources management for growing teams.

Navigation Structure

- Dashboard: Team overview, pending tasks, HR metrics
- Employee Directory: Staff profiles with organisational chart
- Time & Attendance: Clock in/out with timesheet management
- Performance: Reviews, goals, OKRs, continuous feedback
- Payroll: Salary management with tax calculations
- Benefits: Health insurance and retirement plan administration
- Recruitment: Job postings and applicant tracking
- Compliance: Policy management and training tracking

AI Features (Professional+)

- Performance prediction and improvement suggestions
- Optimal team composition recommendations
- Payroll optimisation and error detection
- Compliance risk assessment

7. AI Integration Strategy

7.1 AI Philosophy

CCD's AI features are designed to augment human decision-making, not replace it. The AI serves as an intelligent assistant that handles repetitive tasks, surfaces insights, and provides recommendations while keeping humans in control of all important decisions.

7.2 AI Design Principles

- Transparency: AI always explains its reasoning
- Control: Users can accept, reject, or modify AI suggestions
- Confidence: Clear indicators show prediction reliability
- Learning: AI improves based on user feedback
- Ethical: AI respects privacy and avoids bias

7.3 AI Features by Module

Module	AI Capabilities
CRM	Lead scoring, email suggestions, deal predictions, next actions
Analytics	Trend predictions, anomaly detection, automated insights
Content	Writing assistance, SEO optimisation, and idea generation
SEO	Keyword opportunities, technical prioritisation, and content gaps
Social	Posting times, performance predictions, response suggestions
Projects	Task assignment, risk assessment, resource optimisation
Finance	Revenue forecasting, expense categorisation, and profitability
HR	Performance predictions, team optimisation, compliance risk

7.4 AI Interface Components

AI Badges

All AI-generated or AI-assisted content displays a subtle 'AI' badge to maintain transparency.

Confidence Indicators

Predictions show confidence levels: High (>80%), Medium (50-80%), Low (<50%).

Explanation System

'Why?' buttons provide plain-language explanations of AI reasoning.

Accept/Reject Controls

Clear buttons for accepting or rejecting AI suggestions, with the ability to edit.

Human Review Prompts

Critical decisions require explicit human confirmation before proceeding.

7.5 AI by Pricing Tier

Plan	AI Access	Usage Limits
Starter	No AI features	Greyed out with upgrade prompts
Professional	Basic AI tools	1,000 AI requests/month
Enterprise	Full AI suite	Unlimited usage
Custom	Tailored capabilities	Custom limits and dedicated models

8. Visual Design System

8.1 Design Philosophy

CCD's visual design reflects the brand's character: clean, intelligent, and forward-focused. The interface should feel premium without being intimidating, modern without being trendy, and clean without being sterile. Consistent use of colour is vital to effective brand recognition, with simplicity and transparency at the core of every design decision.

8.2 Colour Palette

Primary Brand Colours

- Primary: CCD Blue (#0047AB) - Main actions, headers, branding
- Secondary: Lime Green (#9BBD2B) - Accents, CTAs, highlights
- Accent: Off-White/Cream (#FFF6E2) - Background, surface elements

Module Colours

Each module has a distinct colour for visual differentiation:

- CRM: #0047AB (Brand Blue)
- Analytics: #8B5CF6 (Purple)
- Content: #EC4899 (Pink)
- SEO: #9BBD2B (Lime Green)
- Social Media: #F59E0B (Amber)
- Client Portal: #06B6D4 (Cyan)
- Projects: #6366F1 (Indigo)
- Finance: #14B8A6 (Teal)
- HR: #F97316 (Orange)

Semantic Colours

- Success: #9BBD2B (Lime Green)
- Warning: #FFC107 (Yellow)
- Danger: #DC3545 (Red)
- Info: #0047AB (Brand Blue)
- Text/Dark: #1C263C (Charcoal Navy)

8.3 Typography

Primary Font: Jeko - Geometric sans-serif representing structure, technology, and modernity. Secondary Font: Inter - For digital interfaces and system text, ensuring consistency across app and web environments.

- Display/Hero: 48px Bold
- H1/Page Title: 36px Bold
- H2/Section: 24px Semi-bold
- H3/Subsection: 20px Semi-bold
- Body: 16px Regular
- Small/Caption: 14px Regular
- Micro: 12px Medium

8.4 Spacing System

Consistent 8px base unit for all spacing:

- 4px (0.5x) - Tight spacing
- 8px (1x) - Default element spacing
- 16px (2x) - Component padding
- 24px (3x) - Section spacing
- 32px (4x) - Major sections
- 48px (6x) - Page sections

8.5 Key Components

Buttons

Primary (filled), Secondary (outlined), Ghost (text only). Sizes: Small (32px), Medium (40px), Large (48px).

Cards

White background, 12px border radius, subtle shadow, slight lift on hover.

Forms

Rounded inputs, floating labels, and clear error/success states.

Tables

Clean headers, alternating rows, hover effects, contextual actions.

9. User Experience Guidelines

9.1 Layout Structure

Header (64px height)

- Logo (left)
- Module Selector dropdown
- Global Search (centre)
- Organisation switcher, Notifications, User menu, Settings (right)

Sidebar (280px width)

- Module-specific navigation
- Coloured header matching module
- Collapsible menu sections
- Smooth transition animations

Main Content Area

- Clean white background
- Consistent card-based layout
- Responsive grid system

9.2 Responsive Behaviour

Desktop (Primary)

Full layout with visible sidebar, optimised for productivity.

Tablet

Reduced sidebar width, adjusted spacing.

Mobile

Collapsed sidebar (hamburger menu), stacked content, touch-optimised.

9.3 Onboarding Flow

- Welcome screen with value proposition
- Step-by-step setup wizard
- Interactive guided tour of key features
- Progress indicators showing completion
- Contextual help tooltips

9.4 Empty States

When modules are empty, display:

- Friendly, relevant illustration
- Clear explanation of module purpose
- Primary action button to get started
- Help links for additional guidance

9.5 Loading & Error States

Loading

- Skeleton screens for content loading
- Progress bars for file uploads
- Smooth animations to maintain engagement

Errors

- Clear messages in plain language
- Specific suggestions for resolution
- Easy access to support

10. Pricing Strategy

10.1 Pricing Tiers

Plan	Price/User/Month	Features
Starter	$29	Core modules, no AI, 5 users max
Professional	$59	All modules, basic AI, 25 users max
Enterprise	$99	All modules, full AI, unlimited users
Custom	Contact Sales	Custom features, dedicated support

10.2 Competitive Positioning

Comparison with separate tool costs for a 25-person agency:

- HubSpot CRM: $450/month
- Monday.com: $300/month
- Hootsuite: $200/month
- QuickBooks: $150/month
- BambooHR: $250/month
- Total: $1,350/month vs CCD Professional: $1,475/month

While pricing is comparable, CCD provides integrated data, unified experience, and AI capabilities not available with separate tools.

11. Success Metrics

11.1 User Experience Goals

- Time to Productivity: New users are productive within 30 minutes
- Task Efficiency: Common tasks completed in under 3 clicks
- User Satisfaction: NPS score above 50
- Support Tickets: Less than 5% of users need support monthly

11.2 Business Goals

- Monthly Recurring Revenue: $100K within 12 months
- Customer Acquisition Cost: Below $500
- Customer Lifetime Value: Above $5,000
- Churn Rate: Below 5% monthly
- Feature Adoption: 70% of users are using AI features

11.3 Technical Goals

- Page Load Time: Under 2 seconds
- API Response Time: Under 200ms (95th percentile)
- Uptime: 99.9% availability
- Mobile Performance: Lighthouse score above 90