

ENTERPRISE PORTAL & WORKFLOW INTELLIGENCE

Custom Web Portal for Managing Submittals and Greenlighting Projects

Project Overview

In the commercial construction industry, delays in paperwork slow down field installation and drag out timelines. This case study details how **DIGITTO media** designed and deployed a custom web portal called **ENTERPRISE PORTAL & WORKFLOW INTELLIGENCE** for a major commercial subcontractor in the Northeast with an annual revenue of \$17 Million.

Before this platform was built, the company struggled with slow submittal approvals, broken file links in common cloud sharing apps, and the manual risk of checking dense architectural spec books. This system fixed those bottlenecks by creating a single, simple dashboard to organize project details, track document versions, and greenlight packages for the field quickly.

Full Code Ownership: The client owns 100% of the custom software. There are no ongoing per-user monthly software fees or licensing costs.

Main Inefficiencies the System Solved

- **Slow Submittal Sign-Offs:** Office staff spent hours chasing down General Contractors (GCs) over email for simple form updates and approvals.
- **Broken File Links:** Standard shared storage paths regularly caused permission errors, blocking crew access to project documents.
- **Material Substitution Risks:** Manually reviewing architectural books left room for error regarding alternative materials and building requirements.

Phase 1: Project Portal & Submittal Approval Workflow

The first phase focused on fixing the main workflow bottlenecks to help the office team coordinate quickly with field supervisors and clients.

Single-Contract Management Model

Instead of creating scattered folders for a single job, the database groups everything under one core contract anchor. Even if a project contains multiple buildings or operational phases, it lives inside one dashboard. This structure easily keeps track of multiple scope sheets, proposals, and material submittal packages at the same time.

Project Profile Setup

Captures important fields immediately: General Contractor names, project names and numbers, explicit scope metrics, coordinator assignments, field leads, and target deadlines.

Direct File Uploads

Files upload straight into an isolated cloud database container. This completely eliminates external folder access blocks and ensures total file control.

Independent Material Package Management

Instead of holding up an entire contract for a minor document revision, material packages move at their own independent speed through distinct stages:

- **GREENLIT** **Roofing & Materials:** Completely approved and pushed to the field team for immediate work.
- **REVISE & RESUBMIT** **Siding & Trim:** Diverted to a quick internal edit loop without stalling other active materials.
- **SENT TO GC** **Waterproofing Scope:** Pending review on the client side.

Passwordless Client Review Links

To make reviewing effortless for clients, General Contractors do not need to create accounts or type passwords. The system sends an encrypted link via email. The GC clicks the link, views the targeted submittal file, and submits their choice instantly.

Role-Based Access Protections: Sensitive internal pricing figures, cost markups, and margin sheets are completely hidden from regular field view layouts, keeping supervisor panels clean and operational.

Phase 2: Spec Comparison & Automated Intelligence

The second phase added an intelligent scanning assistant to help project coordinators catch missing material details and conflict risks before submittals go out.

AI-Assisted Specification Support

The system uses basic text-parsing rules to compare raw architectural spec requirements against the company's submitted scope, proposal, and vendor capabilities. It automatically flags substitution alerts and calls out conflicting specifications that require a human review.

Coordinator Review Board

Coordinators use a clear management dashboard showing flagged items. They can add custom log notes, override notifications, and save the complete review audit trail directly to the primary project file.

Value: Saves a historic record inside the file, protecting the company from long-term material disputes or legal risk.

Manufacturer Reference Library

The portal includes a library holding material variables for frequently deployed options like fiber-cement specifications, trim tolerances, aluminum options, and weather boundaries. This lets the team instantly confirm equal alternatives.

Calculated Financial Value & Capacity Growth	
Administrative Labor Recovery (Office efficiency)	\$42,000 / year
Capital Velocity Optimization (Fewer project delays)	\$55,000 – \$90,000 / year
AI Risk Mitigation (Material substitution protection)	\$38,000 – \$113,000 / year
Total Annual Overhead Savings Potential	\$135,000 – \$245,000 / year
New Top-Line Revenue Capacity Generated	+\$1.25M – +\$2.00M / year

Platform Implementation Lifecycle

Deployment Step	Functional Scope Elements	Operational Target Value
Phase 1 MVP	Unified contract dashboard, modular item submittals, passwordless links, supervisor view.	Removes communication bottlenecks and secures field operational readiness.
Phase 2 Matrix	Automated spec matching, manufacturer reference library, alert panel.	Compresses document verification cycles and blocks material liabilities.
Future Tracks	GC secure login dashboards, cloud directory syncing, internal RFI discussion logs.	Allows ongoing scaling without recurring software vendor fees.

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