



CHRISTOFER M. PACHECO

## Building More Than Structures: Pluma Construction's Accounting Challenge<sup>1</sup>

*A good construction company is also a good accounting company.*

Christofer (Chris) Pacheco faced a significant dilemma that touched upon the foundational aspects of Pluma Construction's future viability, particularly concerning the selection of an accounting software solution that would best serve the company's evolving needs. Given Pluma's engagement with government contracts, alongside its expanding revenue and workforce, the decision-making responsibility rested heavily on Pacheco's shoulders as the chief executive.

In the year 2023, Pluma Construction experienced remarkable growth, boasting a staff count exceeding fifty and generating annual revenues upwards of ten million dollars. This growth trajectory placed Pluma under the purview of new regulatory mandates at both the Federal and State levels, including the Affordable Care Act (ACA), which mandated the provision of health insurance to full-time employees, and the Occupational Safety and Health Administration (OSHA) reporting enhancements. Additionally, compliance with the Family and Medical Leave Act (FMLA), Equal Employment Opportunity (EEO) reporting requirements, and the auditing and reporting standards as dictated by the Federal Acquisition Regulation (FAR) became imperative, given Pluma's governmental contracts.

The transition to Work in Process (WIP) accounting emerged as a critical strategic move for Pluma, driven by the necessity to gain real-time insights into the company's financial health amidst the management of multiple simultaneous projects. WIP accounting facilitated the monitoring of each project's profitability and progress by tracking ongoing costs against revenue, thereby enabling Pluma to recognize revenue at appropriate intervals. This approach not only augmented cash flow forecasting but also ensured a more accurate representation of the company's financial standing for both stakeholders and regulatory compliance. The absence of an adept system to manage these complexities exposed Pluma to risks of project overruns, profitability erosion, and compromised decision-making capabilities.

The decision to migrate to QuickBooks Enterprise (QBE) was predicated on the expectation that its capabilities in WIP Accounting would significantly transform Pluma's accounting practices, aligning them with the company's operational demands. However, the migration revealed a pronounced discrepancy between Pluma's requirements and QBE's capabilities. This misalignment prompted Pacheco to contemplate various alternatives, including the pursuit of a new software solution more attuned to

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Pluma's accounting needs, the engagement of subject matter experts to customize QBE to Pluma's specifications, the development of external processes to augment QBE's functionality, or the adoption of a hybrid strategy that amalgamates elements from these options.

Each consideration led Pacheco to further explore the intricacies and potential implications of these choices, underscoring the profound impact such decisions would have on the future of Pluma's fiscal management practices.

## Construction Accounting

### The Construction Industry in New Mexico

**Growth and Scale:** The construction sector in New Mexico represented a significant component of the state's economy, with the New Mexico Economic Development Department reporting that the industry generated approximately \$2.92 billion in matched taxable gross receipts in the second quarter of Fiscal Year 2022. This accounted for 14% of New Mexico's total Gross Domestic Product during the same period, positioning the construction sector as the second largest contributor to the state's GDP, following closely behind Retail Trade. Despite the stability in the industry's size from 2021 to 2022, the sector faced considerable economic pressures (Joel Salas, 2022).

Inflationary trends, exacerbated by the global pandemic, led to a substantial escalation in construction costs. Specifically, the expense for non-residential construction witnessed a dramatic surge, increasing by 76% from levels seen before the pandemic. By 2023, the average cost per square foot for non-residential construction escalated from \$437 in 2022 to \$771, reflecting the inflationary pressures on the industry (Stroud, 2023).

Contractors were not only contending with increased costs at the customer level but also faced rising expenses related to labor, materials, and auxiliary services. Wages for workers in the non-residential construction segment rose by 24% from 2021 to 2023. Despite a slight year-over-year decrease from 2022 to 2023, the cost of construction materials remained 37% above pre-pandemic figures, further straining the financial operations of construction firms (Walsh, 2023).

**Regulatory Environment:** The regulatory environment added another layer of complexity to the industry's operational landscape. Construction companies were required to navigate a labyrinth of federal and state regulations, including mandates from the ACA, OSHA, FMLA, and adherence to EEO reporting standards. For contractors engaged in government projects, compliance with the Federal Acquisition Regulation (FAR) was imperative. The cumulative regulatory demands presented a formidable challenge, particularly for smaller contractors who typically lacked specialized compliance and legal departments.

**Financial Burden:** The adherence to a multitude of regulatory frameworks necessitated considerable financial outlay from construction firms. Expenditures were not limited to the direct costs of compliance, such as meeting established safety standards, acquiring necessary permits and licenses, securing insurance policies, and instituting environmental safeguards. Indirect costs also accumulated, notably in the realm of workforce development, where the training of employees to comply with labor laws constituted a significant financial commitment. This dual facet of financial burden underscored the comprehensive nature of regulatory compliance, encompassing both operational and personnel-related expenses.

**Administrative Load:** The task of ensuring regulatory compliance imposed an administrative strain on construction companies, particularly small-scale contractors. The absence of specialized departments

within these firms, such as dedicated compliance or legal teams, compounded the complexity of navigating the regulatory landscape. This scenario left many small contractors in a precarious position, as they struggled to remain abreast of regulatory changes, complete and file the requisite documentation, and maintain all aspects of their operations in alignment with legal mandates. The administrative load was thus characterized by both the direct challenges of compliance and the overarching difficulty of managing regulatory responsibilities without specialized support.

**Additional Costs:** Compliance with the rigorous safety and health standards mandated by the Occupational Safety and Health Administration (OSHA) and similar regulatory bodies necessitated significant investment from construction companies. This investment encompassed the acquisition of safety equipment, the provision of training to employees, and the conduct of regular site inspections to ensure adherence to these standards. Furthermore, legislation such as the Family and Medical Leave Act (FMLA) and the Fair Labor Standards Act (FLSA) introduced specific requirements for the management of employee rights and payroll systems. The financial burden extended to the procurement of adequate insurance coverage, which represented a considerable expense for these firms.

Compliance with OSHA, FMLA, and FAR introduces significant administrative and financial burdens. Small firms, like Pluma, often lack in-house compliance teams, forcing them to rely on costly external consultants. For example, an industry study showed that OSHA compliance costs can range from \$5,000 to \$50,000 per year for small construction firms, affecting cash flow and profitability.

These regulatory measures, while instrumental in promoting safety, fairness, and environmental stewardship within the industry, introduced a myriad of operational, financial, and administrative hurdles. Small construction companies found these challenges daunting, especially those businesses operating just above the regulatory threshold where the full force of these obligations became applicable. The cumulative impact of these additional costs not only strained the resources of small contractors but also complicated their compliance efforts, underscoring the tension between regulatory intentions and the practical realities faced by firms within the construction sector.

**Small Contractor Viability:** According to data from the Small Business Administration (SBA), a sizable portion, specifically 66%, of small construction firms ceased operations within the initial five-year period of their establishment. The reasons for the high failure rate among these contractors were multifaceted; however, one of the primary contributors identified was inadequate fiscal management. A notable challenge faced by many of these firms was their inability to effectively monitor their financial status in real-time. The prevalent practice of assessing financial health only at the fiscal year-end, typically during the preparation of annual financial statements, proved insufficient for sustaining operations (Kokklenberg, 2019). The delay in financial reporting precluded the opportunity for timely interventions, underscoring the necessity for immediate or near-immediate financial insights as a critical factor for success and longevity in the construction industry.

**Pluma Construction During the Pandemic:** The onset of the pandemic created an environment ripe with opportunities for Pluma Construction, notably under the leadership of Chris Pacheco. The firm capitalized on the surge in construction projects within New Mexico, a period characterized by demand significantly surpassing the supply of qualified contractors. Despite this favorable market condition from 2021 to 2022, Pluma observed a stabilization in growth rates, followed by a discernible deceleration by 2023.

Faced with a robust 24-month project backlog, the company encountered emerging challenges, including a reduction in available projects, heightened competition, and escalating operational costs. In response to these developments, Pacheco articulated the imperative need for decisive action regarding the firm's accounting software. His statement, "We need to make a quick decision on our software to keep up with growth and stay on top of our finances. It is all about being ready for what is coming," highlighted the strategic importance of adaptability and proactive financial management as essential components for navigating the fluctuating landscape of the construction industry.

## Role of Accounting in the Construction Industry

**Financial Management:** Effective accounting practices were pivotal for the management of costs, revenue, and profitability within the construction sector. The growth of companies invariably led to an escalation in the complexity of fiscal management. This complexity necessitated a robust accounting framework to navigate the intricacies of financial operations in an industry characterized by significant capital expenditures and variable project timelines.

**Work in Process (WIP) Accounting:** WIP accounting emerged as a cornerstone of financial management in construction. This accounting process was instrumental in calculating the progress of ongoing projects, facilitating a transparent view of completed and pending work. Through the application of the "percentage complete" method, contractors were equipped to generate reports that tracked project development and ensured the alignment of project billing with actual progress.

WIP accounting operated in synergy with revenue recognition principles, particularly the percentage of completion method. This facilitated the accurate and timely invoicing of projects, ensuring that billing corresponded closely with project milestones and costs incurred. The monitoring of overbilling and underbilling was crucial within this framework, as these elements directly influenced a company's cash flow dynamics. Excessive overbilling could result in substantial liabilities should projects not be completed as anticipated, while significant underbilling risked impairing a company's liquidity by performing work without corresponding financial inflows.

The analogy of overbilling could be likened to a scenario where a contractor billed for the total cost of a construction project before commencement, leaving the customer with financial outlay but no tangible progress. Conversely, underbilling was akin to a situation where substantial progress had been made on a project without corresponding billing, impacting the contractor's cash flow negatively.

The essence of WIP accounting lay in its capacity to furnish construction firms with a financial tool for effective budget management. This tool not only highlighted the current billing status of projects—whether over or underbilled—but also provided insights into the company's cash flow position. Accurate and timely WIP accounting served as a precursor for identifying potential budget overruns, thereby reinforcing its importance for fiscal discipline and project oversight.

Chris Pacheco, reflecting on the significance of WIP accounting, succinctly emphasized its role in maintaining financial integrity within the construction industry. He noted, "In our business, it's straightforward: tracking work and billing accurately is imperative. WIP accounting informs us about our financial standing concerning the work completed. Mismanagement of this process can lead to significant financial disarray. Hence, diligent attention to WIP accounting is a fundamental practice for us, ensuring financial stability and project accountability."

## Pluma Construction

### History of Pluma Construction

**Founding:** In 2013, Chris Pacheco established Pluma Construction, anchoring its operations in Albuquerque, New Mexico. Pacheco's transition from Corporate America in 2007 marked the beginning of an extensive exploration into the realms of real estate and construction, with the objective of evolving into a vertical real estate developer. Pluma Construction emerged as the construction arm of this envisioned vertical enterprise.

Pacheco, holding a contractor's license, initially aimed to oversee his own development projects. However, he soon recognized the standalone profitability of construction contracting. Beginning with modest facilities maintenance contracts for the State of New Mexico, Pluma Construction witnessed substantial growth. Within a decade, what started as a modest venture between Pacheco and a partner expanded into a company generating annual revenues of \$10 million and employing over fifty individuals.

Chris Pacheco's entrepreneurial journey is marked by a history of establishing and divesting various companies, experiences that endowed him with a profound understanding of the essential nature of cash flow in the sustainability and expansion of small businesses. These ventures imparted crucial lessons in the importance of vigilant and informed cash flow management, shaping Pacheco's approach to business decisions.

Having built and sold multiple companies before founding Pluma Construction, Pacheco developed a keen understanding of financial management, risk mitigation, and strategic decision-making. His emphasis on proactive cash flow management stems from early challenges in his career when unexpected financial shortfalls led to bad outcomes. His preference for structured, data-driven decisions is evident in his cautious approach to software selection.

This depth of experience informed the strategic decisions at Pluma Construction, underscoring the significance of financial management beyond the day-to-day operational considerations. For Pacheco, strategic decision-making was deeply intertwined with a nuanced comprehension of financial metrics, highlighting a commitment to fiscal responsibility and strategic foresight in steering Pluma Construction's growth and success.

**Operations:** Pluma Construction distinguished itself through the provision of a diverse array of services within the construction industry. The company's offerings spanned non-residential construction, tenant improvements, ground-up construction projects, construction management, electrical contracting, and design-build construction services. This comprehensive service range underscored Pluma's versatility and capability in meeting the multifaceted needs of its clientele.

Throughout its operation, Pluma Construction successfully undertook and completed numerous intricate and demanding projects. The company's portfolio boasted collaborations with prestigious clients, including Sandia National Laboratory, Los Alamos National Laboratory, Kirtland Air Force Base, University of New Mexico, the U.S. General Services Administration, the U.S. Department of Veterans Affairs, the State of New Mexico, New Mexico State University, the City of Albuquerque, and Bernalillo County. These collaborations not only demonstrated Pluma's capacity to handle complex projects but also its credibility and reliability as a construction partner.

The excellence in operations and project execution at Pluma Construction did not go unnoticed. The company's outstanding performance and dedication to quality were acknowledged through nominations and awards, marking it as a leader in the New Mexican construction sector. Notably, Sandia National Laboratory nominated Pluma Construction for the prestigious Department of Energy Protégé of the Year award as part of the Mentor-Protégé Program. This nomination was a testament to Pluma's exemplary service and contribution to projects of national significance.

Further solidifying its status within the business community, Pluma Construction was recognized as one of the Top 25 Minority-Owned Businesses in New Mexico by Albuquerque Business First. This accolade reflected the company's commitment to excellence and its significant role in promoting diversity and economic growth within the state's construction industry.

**Legacy:** Pluma Construction experienced growth that far exceeded the initial expectations of its founder, Chris Pacheco. Originally conceived as a boutique firm to complement Pacheco's real estate development ventures, Pluma rapidly evolved into a significant entity requiring sophisticated management and strategic direction to ascend to the next level of industry leadership.

Complications arose as Pacheco contemplated his retirement, with plans to divest the company by 2026/2027. This trajectory altered when his eldest son, a former Special Operations Major in the US Army, chose to integrate into the family business. This pivotal decision shifted Pacheco's strategic planning from preparing Pluma for sale to fostering a robust, multi-generational company poised to leave a legacy.

Reflecting on Pluma's journey, Pacheco recognized the company's dynamic growth from its humble origins to a prominent position within New Mexico's construction sector. The firm not only surpassed the boutique model Pacheco originally envisioned but also gained notable recognition, including a nomination for the Department of Energy Protégé of the Year and accolades as one of New Mexico's top minority-owned businesses. These achievements underscored Pluma's substantial contribution and standing within the industry.

With his son's involvement, Pacheco's aspirations for Pluma Construction expanded beyond immediate success to the establishment of a lasting enterprise that would serve future family generations. He remarked on the transformation of Pluma from a modest component of his broader ambitions to a substantial and meaningful endeavor. For Pacheco, strategic decisions, including those related to accounting software, transcended operational considerations, embodying his vision for Pluma's enduring legacy and its role in the family's future.

He commented, "What started as a small piece of a larger dream had grown into something much bigger. Now, it was not just about making Pluma successful for today, but about building a legacy that could be passed down through my family. The decision about our accounting software wasn't just about the numbers; it was about setting up Pluma for the next chapter in our story."

## **Pluma Construction's Specific Scenario**

**Transition and Growth Challenges:** In the year 2021, Pluma Construction encountered a significant setback with the loss of their corporate accountant, R.J. Mattine P.C., a firm that had provided accounting services to Chris Pacheco and his corporate ventures for over a quarter of a century. The untimely demise of Robert Mattine due to Covid-19 marked not only the loss of a trusted accountant but also a close confidante of Pacheco. At the time of his passing, Mattine was actively involved in formulating a strategic

plan for Pluma to adopt a new software solution capable of managing WIP accounting, a critical need for the company. Faced with the daunting task of finding a replacement for Mattine, Pluma Construction found itself in a position where making an immediate decision became challenging.

Subsequently, within the same year, Pluma Construction sought the expertise of another accounting firm, referred to here as Brand X accounting. This new partnership emphasized Pluma's requirement for an accounting service familiar with WIP accounting principles, aiming to facilitate a smooth transition to a software system that could accommodate their specific accounting needs.

Brand X, understanding the intricacies of WIP accounting, recommended that Pluma Construction migrate from their existing accounting software to QBE. This suggestion was a judicious choice, especially considering both the old and new software packages were supported by the same vendor, which was known for its robust software maintenance and readily available support. The vendor's website even claimed that QBE could be tailored to meet the specific requirements of the construction industry, as indicated in **Exhibit 1**.

However, upon reflection, Chris Pacheco recognized that the decision to migrate to QBE could have benefited from a more thorough investigation. The transition from a straightforward accounting system to QBE underscored the inherent difficulties businesses encounter when attempting to upgrade their accounting infrastructures to better align with their evolving operational complexities and growth trajectories. This experience illuminated the critical importance of diligent research and consideration when selecting software solutions to meet the expanding needs of a growing company.

**Strengths and Limitations:** QBE exhibited several strengths that aligned well with Pluma Construction's operational requirements. Notably, QBE excelled in job cost accounting, a critical feature for Pluma to assess the profitability of its individual construction projects accurately. Additionally, QBE effectively managed Time and Materials accounting, a crucial aspect for Pluma, given its engagement in numerous facilities maintenance contracts with significant federal clients. The software also demonstrated commendable integration capabilities with Pluma's existing construction project management software, facilitating a streamlined workflow.

However, QBE fell short in generating a fully functional WIP report, a gap that became evident when examining the produced WIP reports (refer to **Exhibit 2**). The inability of QBE to update and print real-time comprehensive WIP reports was not addressed in the product's development roadmap, indicating a significant limitation in its functionality.

While QBE was marketed as a construction-friendly accounting software, it lacked critical functionalities such as real-time cost adjustments, automatic revenue recognition for WIP accounting, and customizable reporting tools. Unlike industry-standard platforms like Deltek or Oracle, QBE required extensive manual adjustments each month, leading to errors, inefficiencies, and delays in financial reporting. This significantly impacted on cash flow forecasting and regulatory compliance.

**Critical Issue and Resulting Impacts:** A significant flaw identified in QBE's performance was its failure to automatically adjust costs from previous periods. This deficiency led to inaccurate reporting of over/under billing scenarios and necessitated the monthly manual adjustment of previous period costs. Consequently, Pluma's accounting team was compelled to undertake manual adjustments for all project line items each month to ensure accuracy (see **Exhibit 3** for a Manually Corrected WIP Report). This labor-intensive process consumed 25-30 hours of bookkeeping monthly, with an additional 5-10 hours

required by the CFO for making the corresponding adjusting journal entries. The inefficiency introduced by this manual intervention not only diminished operational efficiency but also obscured financial transparency and delayed the publication of accurate financial reports.

**Reflection on the Decision-Making Process:** Reflecting on the decision to adopt QBE, Chris Pacheco acknowledged a hindsight realization of the necessity for a more in-depth evaluation before transitioning to the new software. While QBE appeared suitable on paper, its practical limitations, particularly regarding WIP report generation, were not fully anticipated. Pacheco's retrospective insight underscored the critical importance of thoroughly vetting tools essential for financial tracking within the business. This experience highlighted the broader lesson that meticulous consideration in decision-making, regardless of the perceived scale of the decision, was paramount for ensuring operational smoothness and financial accuracy within the company. Chris looked back on the situation with a practical perspective, saying, "When I think about it now, I realize we could have dug deeper before deciding on QBE. We thought it would work well for us on paper but did not see the big problems it had. This really showed us how important it is to really check out the tools we use, especially when they are so key to keeping track of our money. It's a lesson that every decision, big or small, really matters for how smoothly our business runs."

## Discussion

**Accounting Software Migration:** The migration of accounting software within corporate settings is universally recognized as a formidable challenge, and Pluma Construction's experience was consistent with this understanding. The transition to QBE brought to the fore several significant hurdles for Pluma. Initially, the staff encountered a pronounced learning curve as they adjusted to QBE's functionalities and interface, which were more complex than those of their previous software. This adjustment phase necessitated extensive training, resulting in a temporary dip in productivity as employees adapted to the new system.

A further obstacle emerged in the realm of data migration and integration. The task of transferring Pluma's historical financial data into QBE proved to be intricate and labor-intensive. The paramount importance of maintaining data accuracy and integrity meant that any anomalies could potentially derail financial reporting and analysis efforts. Consequently, Pluma's team engaged in a meticulous review process, often necessitating manual data adjustments and corrections. This endeavor not only demanded significant time and resources but also introduced the risk of data loss or inaccuracies, posing potential long-term repercussions for financial management practices.

Moreover, Pluma encountered difficulties in tailoring QBE to meet its specific operational needs. Given the construction industry's distinctive accounting requirements, such as WIP accounting, the need for specialized software functionalities became evident. Despite QBE's robust capabilities, it fell short of fully addressing Pluma's sector-specific demands, prompting the exploration of additional customizations and add-ons. This process entailed further investments, both financial and temporal, underscoring the challenges associated with aligning generic accounting software with the nuanced needs of specialized sectors.

**Vendor Support:** Post-migration, Pluma discovered that the vendor's support for QBE was not as comprehensive or informed as anticipated, particularly in comparison to the support experienced with their preceding software. This gap in service was especially pronounced in the context of WIP accounting, a critical component of Pluma's financial management framework within the construction industry. The vendor's limited proficiency in addressing WIP-related inquiries markedly hindered Pluma's ability to leverage QBE to its full potential, compelling the company to consider seeking external

expertise. This situation highlighted a significant void in the capacity of mainstream accounting software to adequately serve the specialized requirements of industries such as construction, revealing a critical area for improvement in vendor support services and software customization.

**Consideration of a Second Migration:** Pluma Construction contemplated undertaking a second migration to a software solution with enhanced capabilities in WIP accounting, such as those offered by Deltek, Oracle, or Pinnacle. This deliberation, however, highlighted the formidable challenges associated with executing two consecutive software migrations:

1. **Resource Allocation:** Each migration required substantial resources, including time, labor, and financial investment. The potential strain on Pluma's operations was a significant concern, with a second migration demanding more from the company's reserves than might be sustainably manageable.
2. **Staff Adaptation:** The prospect of adapting to another new system in a brief period presented concerns regarding staff overwhelm. The risk of diminished productivity and the introduction of errors during the adjustment period were key considerations, given the complexities involved in learning and transitioning to new software platforms.
3. **Data Integrity Risks:** Engaging in multiple migrations heightened the risk of data loss or inaccuracies during the data transfer processes. Such risks threatened the integrity of financial records and the continuity of historical data, which are crucial for accurate financial management and reporting.
4. **Operational Disruptions:** Consecutive migrations had the potential to disrupt Pluma's daily operations significantly. The impact on business activities could lead to project delays and client dissatisfaction, further compounding the challenges faced by the company during transition periods.
5. **Financial Considerations:** The cumulative financial burden of purchasing new software solutions, coupled with training and implementation costs, posed a substantial impact on Pluma's financial health. The direct costs of such migrations were estimated to range from \$25,000 to \$80,000, not accounting for the additional "soft" costs like decreased productivity during transitions and potential operational disruptions.

**Financial Implications:** The decision to proceed with a second migration entailed careful consideration of both the direct and indirect costs associated with adopting a more comprehensive software package. The direct costs encompassed the acquisition of the software and related implementation expenses, while indirect costs included training, potential productivity losses during the transition, and the broader impact on operational efficiency and financial stability.

These multifaceted considerations underscored the complexity of Pluma's decision-making process. Weighing the advantages of advanced software capabilities against the inherent challenges and risks associated with rapid, successive changes in systems elucidated the strategic dilemmas facing the company. The evaluation process illuminated the need for a balanced approach, carefully aligning technological upgrades with organizational capacities, operational requirements, and financial sustainability.

**Engagement of Subject Matter Experts:** In navigating the complexities associated with the transition to QBE and the specialized demands of WIP accounting, Pluma Construction contemplated the engagement of a subject matter expert. The firm recognized the nuanced challenges of introducing a new accounting system that could adequately support its operational needs, particularly in the context of construction-specific financial management. The potential to harness external expertise, possessing a profound understanding of both the construction sector's accounting requirements and QBE's capabilities, was considered a viable solution. Nevertheless, the task of identifying an expert with a comprehensive grasp of construction accounting intricacies and proficiency in QBE presented a formidable challenge.

Reflecting on Pluma's journey through the challenges of software migration and the contemplation of another change, Chris Pacheco, the founder, provided a candid view of the situation. He noted, "Going through one software migration was tough enough, and now we're considering doing it all over again with a more specialized system. It is not just about the software costs, but also about the time and effort our team will have to put in. We are looking at significant resources here, not to mention the potential for operational hiccups. Bringing in a subject matter expert for WIP accounting might help, but it is another layer of complexity and cost. We're really in a tough spot, trying to balance the need for better tools with the reality of running a business day-to-day."

## Insights

**The Complexity of the Decision:** Pluma Construction, under the leadership of Chris Pacheco, encountered a pivotal juncture that necessitated a critical decision affecting the firm's sustainability and future growth: the selection of an appropriate accounting software solution. To external observers, this choice might have appeared straightforward; however, it was imbued with considerable complexity. The company's rapid expansion, coupled with an increasing focus on government contracts, introduced a series of regulatory compliance requirements and financial management challenges that needed immediate attention.

**Challenges Unique to Pluma:** The evolution of Pluma Construction had ushered the company into an entirely new operational landscape. Adherence to an array of Federal and State regulations became imperative, including compliance with the Affordable Care Act (ACA), Occupational Safety and Health Administration (OSHA) standards, and the Federal Acquisition Regulation (FAR). These regulatory demands were particularly pertinent due to Pluma's engagements with government projects. Moreover, the shift towards WIP accounting emerged as a critical requirement, essential for maintaining real-time oversight of financial health in an industry characterized by variable project scopes and costs.

The transition from a basic accounting system to QBE was driven by the need to accommodate advanced WIP accounting functionalities. Nevertheless, this migration highlighted a significant discordance between the specific needs of Pluma and the capabilities offered by QBE, especially concerning the generation of functional WIP reports. The challenges encountered in aligning software functionalities with Pluma's unique requirements underscored the intricate nature of selecting an accounting solution in the construction sector. This scenario illuminated the complexities inherent in making strategic decisions within a business context, particularly when such decisions have far-reaching implications on operational efficiency and regulatory compliance.

**Internal Dynamics and Decision-making:** The exploration into the decision-making dynamics within Pluma Construction necessitated an in-depth understanding of the internal mechanisms at play. Through interviews conducted with key personnel, a layered narrative emerged, revealing the multifaceted

considerations that influenced the company's choice of accounting software. Technical challenges, particularly related to the inadequacies of QBE in managing WIP accounting, were a significant concern. Additionally, the human factor played a crucial role, with staff grappling with the steep learning curve associated with adapting to a new system, thereby amplifying the complexity of the decision-making process.

The broader context of industry standards and regulatory compliance further compounded the complexity. Pluma Construction's commitment to adhering to construction industry benchmarks, coupled with the necessity for financial transparency in dealings with government contracts, introduced additional dimensions to the decision. Consequently, the selection of accounting software transcended mere technical considerations, evolving into a strategic determination with far-reaching implications on regulatory compliance, operational efficiency, and overall financial health.

**Reflective Insights from Pluma's Team:** Chris Pacheco's reflections, together with feedback from Pluma's staff, illuminated the intricate nature of this strategic decision. It became evident that the choice of accounting software extended beyond the evaluation of technical capabilities. It required holistic alignment with Pluma's operational needs, industry-specific demands, and regulatory obligations. Balancing the software's technical suitability with its impact on personnel, workflow efficiency, and the company's strategic objectives was paramount.

Personal accounts from Pluma's staff during the transition period provided a vivid illustration of the operational challenges encountered, notably the labor-intensive requirement to manually adjust WIP reports monthly. These first-hand experiences underscored the potential inefficiencies and errors inherent in the existing system, offering critical insights into the complexities underlying what might initially appear as a straightforward software selection process.

**Navigating Complex Decision-making Landscapes:** This insider perspective shed light on the reality that Pluma's decision-making scenario was not merely about selecting the optimal software solution. It was an intricate navigation through a confluence of operational, regulatory, and strategic challenges, each intertwined with Pluma's distinct context and evolutionary path. The case of Pluma Construction demonstrated that decision-making within the business realm, particularly in sectors experiencing rapid change like construction, was inherently complex and laden with challenges that may not be immediately apparent.

In summarizing the internal decision-making ethos at Pluma, Chris Pacheco articulated a philosophy centered around collective engagement and forward-thinking. The process of selecting accounting software was emblematic of a broader strategic endeavor, emphasizing the importance of team consensus and the alignment of technological tools with the company's long-term aspirations. This collaborative approach underscored the significance of unified direction and shared vision in navigating the intricate landscape of business decision-making.

Reflecting on the internal decision-making process at Pluma, Chris Pacheco remarked, "When it came to choosing our software, it really was all about getting our team on board and thinking about our future. It was not just picking the most advanced tool; we had to consider what would work best for our people and our long-term plans. It was a team effort, and we had to make sure we were all moving in the same direction."

## The Decision

The accompanying decision matrix offers a visualization of the strategic options available to Pluma Construction during the evaluation of potential changes to its accounting software. This analytical tool delineates four distinct quadrants, each representing a different strategic approach for the company's decision-making process. The axes constituting this matrix—'Cost & Disruption' and 'Solution Effectiveness'—serve as the basis for categorizing the available options.

If Pluma Construction chose to do nothing, they would avoid immediate costs, but the ongoing inefficiencies in financial reporting could lead to compliance risks and lost revenue. Engaging a subject matter expert would improve WIP reporting but would not resolve the system's inherent limitations. A hybrid solution, such as integrating a custom-built reporting module into QBE, might balance cost and effectiveness. However, transitioning to a completely new system, while disruptive, could provide long-term scalability and automation.

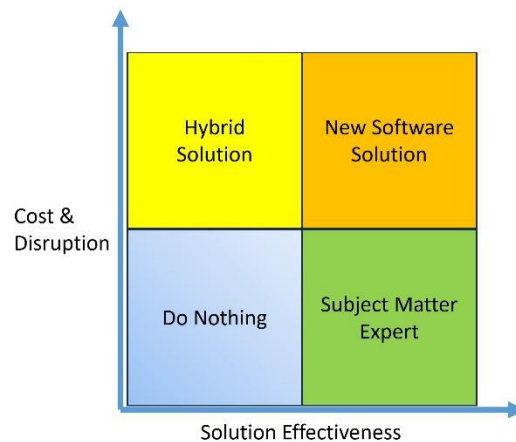


Figure 1 - Pluma's Decision Matrix

### Quadrant Analysis:

#### ***Do Nothing (Bottom Left Quadrant):***

This quadrant represented the least cost and disruption but also the least effective solution. If a company is considering maintaining the status quo, it should evaluate the potential risks of inaction against the benefits of avoiding change-related costs and disruptions. It's implied that while there's minimal immediate impact, the long-term effectiveness of the existing system may not support growth.

#### ***Subject Matter Expert (Bottom Right Quadrant):***

Here, the focus was on improving effectiveness with less emphasis on cost. Engaging a subject matter expert could enhance the existing system's effectiveness without the disruption of a full software change. However, this may have incurred consultancy fees or training costs. This alternative is chosen when the existing system's foundation is solid, but specialized knowledge is needed to optimize performance.

***Hybrid Solution (Top Left Quadrant):***

Positioned in the upper left quadrant, a hybrid solution indicates a moderate increase in both cost and disruption but promises a corresponding enhancement in solution effectiveness. This strategic option may involve integrating new software modules with the existing system, offering a balance between improvement and continuity.

***New Software Solution (Top Right Quadrant):***

This represented a high-cost, high-disruption choice that was expected to be the most effective. Choosing a new software solution meant the company was ready to invest significantly in a system that would meet all its needs and support future growth. It was the most radical approach, involving purchasing new software, training staff, and migrating data, with the expectation that the long-term benefits would outweigh the initial upheaval.

**Conclusion**

In the process of assessing the options for updating its accounting software, Pluma Construction conducted a comprehensive evaluation of its current operational standing, resource availability, and strategic aspirations. The company's deliberation was steered by critical inquiries regarding the efficacy of the current accounting solution and the extent of resources—financial and operational—that Pluma was prepared to allocate for enhancement purposes. Integral to the decision-making process were considerations of the potential disruptions that could arise from system changes and whether such challenges could be mitigated through a hybrid software solution or the engagement of subject matter experts.

Pluma's analysis of each quadrant within the decision matrix was contextualized by the company's particular requirements and the intricacies inherent in their financial reporting obligations. The goal was to identify an equilibrium among these factors, ensuring that the chosen direction would bolster Pluma's growth trajectory and operational efficacy. The decision-making framework adopted by Pluma encapsulated a holistic approach, integrating the nuanced dimensions of the company's internal dynamics with the broader imperatives of industry practices and regulatory compliance. The ultimate resolution aimed to align the selected software solution with the company's ongoing development and the pursuit of enhanced fiscal management and reporting capabilities.

The case of Pluma Construction highlights the complexity of selecting accounting software in a highly regulated industry. Pacheco's experience underscores the importance of thorough due diligence, stakeholder involvement, and long-term scalability. In hindsight, he acknowledges that engaging a subject matter expert earlier might have mitigated transition challenges. "Looking back, I would have done more industry benchmarking before making a decision. The right software is not just a financial tool—it is a critical business enabler."

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## Biography



Chris Pacheco is a DBA Candidate at the University of South Florida. Chris earned a BS degree with a concentration in mathematical economics from the United States Military Academy at West Point and an MSBA with a concentration in macroeconomics from Boston University.


## Exhibit 1: Extract from the Vendor's Web Site

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## Exhibit 2: QBE Produced WIP Report

Exhibit 2 illustrates QBE's WIP report limitations, highlighting inconsistencies in overbilling adjustments.

Pluma, LLC Job Work in Progress (WIP) Summary April through September 2023									
Est. Cost	Act. Cost	(%) Complete	Est. Revenue	Earned Revenue	Act. Revenue	(S) Diff.			
3,083.83	0.00	0.0%	4,154.54	0.00	0.00	0.00			
637,095.52	605,763.30	63.69%	865,698.16	551,361.88	369,517.24	181,844.64			
21,738.58	21,738.58	100.0%	48,200.39	48,200.39	48,200.39	0.00			
650,834.10	427,501.88	64.89%	913,898.55	599,562.27	417,717.63	175,309.84			
38,180.22	5,358.80	14.04%	62,153.34	8,726.33	0.00	6,726.33			
4,161.85	4,161.85	100.0%	4,945.73	4,945.73	4,945.73	0.00			
3,575.71	5,302.01	100.0%	2,267.08	2,267.08	2,267.08	0.00			
1,180.00	1,180.00	100.0%	2,267.08	2,267.08	2,267.08	0.00			
47,005.24	17,414.16	37.05%	74,780.21	27,706.07	12,626.87	15,079.20			
11,576.83	11,577.67	100.0%	26,060.73	26,060.73	26,060.73	0.00			
11,576.83	11,577.67	100.0%	26,060.73	26,060.73	26,060.73	0.00			
0.00	0.00	0.0%	63,901.25	0.00	0.00	0.00			
1,880.08	1,880.08	100.0%	9,450.58	9,450.58	9,450.58	0.00			
1,880.08	1,880.08	100.0%	9,450.58	9,450.58	9,450.58	0.00			
32,569.65	64,584.98	100.0%	44,277.38	44,277.38	44,277.38	0.00			
32,569.65	64,584.98	100.0%	44,277.38	44,277.38	44,277.38	0.00			
12,474.92	74.92	0.60%	22,992.65	137.95	0.00	137.95			
23,900.00	0.00	0.0%	33,750.00	0.00	0.00	0.00			
3,053.66	0.00	0.0%	5,150.40	0.00	5,150.40	-5,150.40			
113,125.98	36,025.94	31.85%	168,890.64	53,791.67	81,549.30	-27,757.63			
36,571.85	36,571.85	100.0%	118,577.96	118,577.96	118,577.96	0.00			
1,006.18	1,006.18	100.0%	2,450.00	2,450.00	2,450.00	0.00			
22,477.46	1,191.44	100.0%	2,450.00	2,450.00	2,450.00	0.00			
432,700.00	3,302.94	14.89%	33,666.41	4,945.60	33,704.06	-28,758.46			
12,138.43	12,138.43	2.81%	489,633.49	13,758.70	331,563.57	-317,804.87			
11,265.10	11,265.10	100.0%	11,641.42	11,641.42	11,641.42	0.00			
10,865.74	10,865.74	100.0%	10,865.74	10,865.74	10,865.74	0.00			
7,007.47	7,007.47	100.0%	40,832.49	40,832.49	40,832.49	0.00			
8,480.58	525.92	100.0%	800.00	800.00	800.00	0.00			
10,000.00	10,400.00	100.0%	11,215.89	11,215.89	11,215.89	-11,215.89			
666,342.59	142,109.84	21.33%	946,465.32	201,885.32	701,115.65	-489,230.33			
1,351,259.25	380,984.60	28.19%	1,851,533.03	521,947.16	257,036.74	264,910.42			
12,035.73	19,858.74	100.0%	16,276.32	16,276.32	16,276.32	0.00			
18,477.80	18,477.80	100.0%	36,635.29	36,635.29	36,635.29	0.00			
7,156.73	7,156.73	100.0%	14,079.00	14,079.00	14,079.00	0.00			
18,429.43	0.00	0.0%	33,653.00	0.00	0.00	0.00			
59,362.78	0.00	0.0%	83,579.26	0.00	0.00	0.00			
1,468,969.20	428,725.35	29.19%	2,045,792.00	597,166.95	317,788.03	270,378.92			

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**Pluma, LLC**  
**Job Work in Progress (WIP) Summary**  
April through September 2023

Est. Cost	Act. Cost	(%) Complete	Est. Revenue	Earned Revenue	Act. Revenue	(\$) Diff.
71,983.34	71,983.34	100.0%	124,506.39	124,506.39	124,506.39	0.00
105,664.17	0.00	0.0%	142,321.82	0.00	0.00	0.00
177,647.51	71,983.34	40.52%	266,828.21	108,118.79	124,506.39	-16,387.80
76,134.06	0.00	0.0%	104,353.03	0.00	52,900.23	-52,900.23
771,117.40	381,389.14	49.49%	1,048,719.71	518,696.77	294,876.07	223,820.70
229.18	229.18	100.0%	737.50	737.50	737.50	0.00
11,170.20	11,170.20	100.0%	18,393.30	18,393.30	18,393.30	0.00
180,449.74	81,562.84	45.20%	180,449.74	81,563.28	70,853.52	10,609.76
72,025.17	25,209.89	35.14%	98,017.65	34,443.37	0.00	34,443.37
10,000.00	1,337.76	13.38%	10,000.00	1,338.00	435.73	902.27
82,903.80	186.02	0.22%	111,989.89	246.18	0.00	246.18
345,378.41	108,395.51	31.38%	400,366.17	125,634.90	71,389.25	54,245.65
10,772.79	0.00	0.0%	14,651.00	0.00	0.00	0.00
372,609.76	50.17	0.01%	506,749.25	50.67	0.00	50.67
43,690.88	29,118.17	66.65%	63,691.00	42,450.05	59,489.55	-17,039.50
416,300.64	29,168.34	7.01%	570,440.25	39,987.86	59,489.55	-19,501.89
76,060.29	0.00	0.0%	97,388.84	0.00	0.00	0.00
180,262.48	136,593.14	75.77%	245,156.98	185,755.44	17,650.79	168,104.65
180,262.48	136,593.14	75.77%	245,156.98	185,755.44	17,650.79	168,104.65
26,382.68	0.00	0.0%	35,350.00	0.00	0.00	0.00
302,154.26	71,840.79	23.78%	410,929.79	97,719.10	286,617.40	-188,896.30
302,154.26	71,840.79	23.78%	410,929.79	97,719.10	286,617.40	-188,896.30
14,314.43	10,900.81	76.15%	23,218.40	17,680.81	23,218.40	-5,537.59
10,362.00	10,362.00	100.0%	14,718.00	14,718.00	14,718.00	0.00
84,453.60	0.00	0.0%	101,558.60	0.00	0.00	0.00
109,130.03	21,262.91	19.48%	139,495.00	27,173.63	37,936.40	-10,762.77
7,701.19	7,850.00	100.0%	12,677.97	12,677.97	0.00	12,677.97
7,701.19	7,850.00	100.0%	12,677.97	12,677.97	0.00	12,677.97

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**Pluma, LLC**  
**Job Work in Progress (WIP) Summary**  
April through September 2023

Est. Cost	Act. Cost	(%) Complete	Est. Revenue	Earned Revenue	Act. Revenue	(\$) Diff.
39,776.29	0.00	0.0%	43,533.52	0.00	0.00	0.00
28,609.42	0.00	0.0%	35,485.01	0.00	0.00	0.00
93,366.69	93,366.69	100.0%	118,667.30	118,667.30	118,080.37	586.93
93,366.69	93,366.69	100.0%	118,667.30	118,667.30	118,080.37	586.93
41,566.40	817.61	1.97%	51,069.93	1,006.08	0.00	1,006.08
31,694.18	31,694.18	100.0%	42,053.12	42,053.12	42,053.12	0.00
33,555.26	16,530.03	49.26%	39,138.86	19,279.80	8,912.15	10,367.65
51,934.05	2,637.45	5.08%	63,666.05	3,245.51	0.00	3,245.51
158,639.89	51,569.27	32.51%	196,149.96	63,788.35	50,965.27	12,803.08
95,000.00	95,000.00	100.0%	142,145.20	142,145.20	142,145.20	0.00
55,412.09	55,412.09	100.0%	82,391.20	82,391.20	82,391.20	0.00
150,412.09	150,412.09	100.0%	224,536.40	224,536.40	224,536.40	0.00
7,485.30	114.01	1.52%	10,148.61	154.26	10,148.61	-9,994.35
7,485.30	114.01	1.52%	10,148.61	154.26	10,148.61	-9,994.35
40.76	40.76	100.0%	375.00	375.00	375.00	0.00
40.76	40.76	100.0%	375.00	375.00	375.00	0.00
1,120.00	0.00	0.0%	2,250.00	0.00	0.00	0.00
1,120.00	0.00	0.0%	2,250.00	0.00	0.00	0.00
33,712.55	9,765.89	28.97%	107,445.34	31,126.91	107,566.31	-76,439.40
5,046.12	1,112.04	22.04%	7,715.77	1,700.56	0.00	1,700.56
29,104.39	1,071.00	3.68%	39,581.96	1,458.62	0.00	1,458.62
67,863.06	11,948.93	17.61%	154,743.09	27,250.26	107,566.31	-80,316.05
4,726.72	0.00	0.0%	6,466.99	0.00	0.00	0.00
66,402.68	75.53	0.11%	83,416.85	91.76	0.00	91.76
66,402.68	75.53	0.11%	83,416.85	91.76	0.00	91.76
<b>6,055,690.36</b>	<b>2,241,278.81</b>	<b>37.01%</b>	<b>8,426,782.59</b>	<b>3,118,752.24</b>	<b>3,005,205.71</b>	<b>113,546.53</b>
<b>TOTAL</b>						

