



# How to Master Capital Projects in Life Sciences:

A Complete Guide for Pharma,  
Biotech, and Medical Device  
Companies



By Tom Davies MBCS

# Executive Summary

Capital projects are mission-critical in the life sciences sector, yet they remain notoriously complex to manage. From fragmented funding approvals to siloed data systems and unpredictable cost overruns, life sciences organizations often struggle to achieve the control and visibility they need. This guidebook explores those challenges and demonstrates how project portfolio management (PPM) software, particularly Cora, can transform the way pharma, biotech and medical devices firms plan, execute, and oversee their capital programs.

The guide opens by identifying the most pressing issues – such as inefficient capital authorization request (CAR) and long-range financial plan (LRFP) processes, decentralized reporting, and lack of financial forecasting accuracy. It then explains how PPM software addresses these through centralized intake workflows, ERP integration, standardized governance, and real-time dashboards.

Finally, the guide illustrates how Cora empowers life sciences companies to reduce human error, improve cross-site coordination, and provide executives with accurate, timely insights. By delivering clarity, control, and consistency, it helps organizations optimize capital spend, mitigate risks, and drive long-term value.

# Table of Contents

<b>Chapter 1</b>	The Challenges Life Sciences Firms Face with Capital Projects..... <b>Page 4</b>
<b>Chapter 2</b>	How PPM for Life Sciences Solves Capital Project Challenges..... <b>Page 10</b>
<b>Chapter 3</b>	Benefits of Cora for Life Sciences Capital Project Management..... <b>Page 18</b>
<b>Conclusion</b>	..... <b>Page 19</b>
<b>Author Bio</b>	..... <b>Page 20</b>





# **Chapter 1**

## **The Challenges Life Sciences Firms Face with Capital Projects**



Capital projects in life sciences – whether in biopharmaceutical or medical devices – are rarely simple. Whether it's building a new GMP-compliant production facility or upgrading critical filtration infrastructure across multiple global sites, these projects often face layers of complexity.

In fact, according to research by Turner & Townsend, **77% of life sciences capital projects experience schedule overruns during the detailed design phase alone<sup>1</sup>**

And while many challenges are shared with other industries, life sciences present its own unique obstacles—driven by strict regulatory oversight, long-term strategic planning, and the need for precision and compliance at every level.



1. <https://www.turnerandtowntsend.com/insights/optimising-construction-performance-in-life-sciences/>

## 1.1 Fragmented Funding Requests & Intake (CAR Process)

It all begins with getting the project off the ground. Most pharma and MEDtech organizations rely on a CAR process to initiate funding. This process often requires submitting a high-level business case that includes estimated budgets, timelines, and expected returns.



The problem? These CAR processes are rarely standardized. In some cases, long-range planning requests – known as LRFPS – are submitted years before a project is expected to start. As the proposed start date gets closer, the project must pass through several approval gates, each requiring deeper levels of information and justification. Without standardized tools or workflows, this process becomes inconsistent, slow, and error prone.

## 1.2 Disconnected Project Management Systems & Data Silos

Once a capital project gets the green light, the real challenge begins — and for too many teams, it descends into chaos. Spreadsheets sprawl across desktops, milestones disappear into PowerPoint decks, and vital updates vanish into ERP systems and email chains. It's a manual maze, where chasing down information becomes a full-time job — and where no one can see the full picture.

***“We’re not just dealing with inefficiency — we’re burned out. Everything is manual, everything is urgent, and nothing is connected.”***

***– Program Director, Global Life Sciences Company  
(before using Cora)***

At Cora, we hear the same story repeatedly: teams stuck managing multi-million-dollar projects in Excel, with no visibility, no integration, and no way to get ahead. The human cost is real — low morale, missed goals, and exhausted teams constantly fighting fires. It's not just a tech problem. It's a people problem. And it's why we built Cora: to end the spreadsheet chaos and give teams the clarity, control, and confidence they need to deliver — without burning out in the process.



### 1.3 Project Reporting Delays & Inefficient Consolidation

One of the most cited pain points by capital project managers is reporting. Biopharma and medical devices projects are required to submit frequent updates—weekly highlights, monthly updates, and quarterly board summaries. But because data is scattered across systems and sites, consolidating it is time-consuming.

Moreover, many firms still rely on manually updating PowerPoint for their updates and reporting on top projects. The data is static, and extremely prone to human error. If something changes in the project mid-week, the deck is already outdated.

### 1.4 Limited Visibility into Cash Flow and Risk

In capital projects, financial tracking isn't just about what's been spent—it's about what will be spent and when. Teams need to accurately forecast their ETC (Estimate to Complete) and EAC (Estimate at Completion) so that finance departments can manage long-term cash flow.

When data is siloed, this becomes nearly impossible. Organizations can't identify budget overruns until it's too late, and lack of visibility means executives are making strategic decisions based on incomplete or inaccurate data.



## 1.5 Case Example: Dependencies Across Multiple Sites

Genentech, a global life sciences firm that we work with, operates across dozens of international sites. A capital project at one location – such as upgrading security or building new production infrastructure – can directly impact supply chains and regulatory compliance at multiple others.

Without centralized oversight, these dependencies remain invisible, and a delay in one project could cause ripple effects across the enterprise. With Cora, Genentech is now able to have consistency of data and performance across each site, having previously worked independently until then.

As a result of the impact Cora has had on its performance, Genentech has **reduced its time-to-market benchmark by 10%, helping to gain market share over competitors.**

“*We’ve got several instances of the same technology across sister organizations. This allows us to share information among all our groups faster. This adds huge value. It removes layers of bureaucracy. Staff can provide timely information so that we can make better decisions. We are more aware of what’s happening in other parts of the organization, in other parts of the world. We have best practice, and we can share lessons learned.*”

– Patti Viri-Cruz, Director, PT Portfolio, Genentech



# Chapter 2

## How PPM for Life Sciences Solves Capital Project Challenges

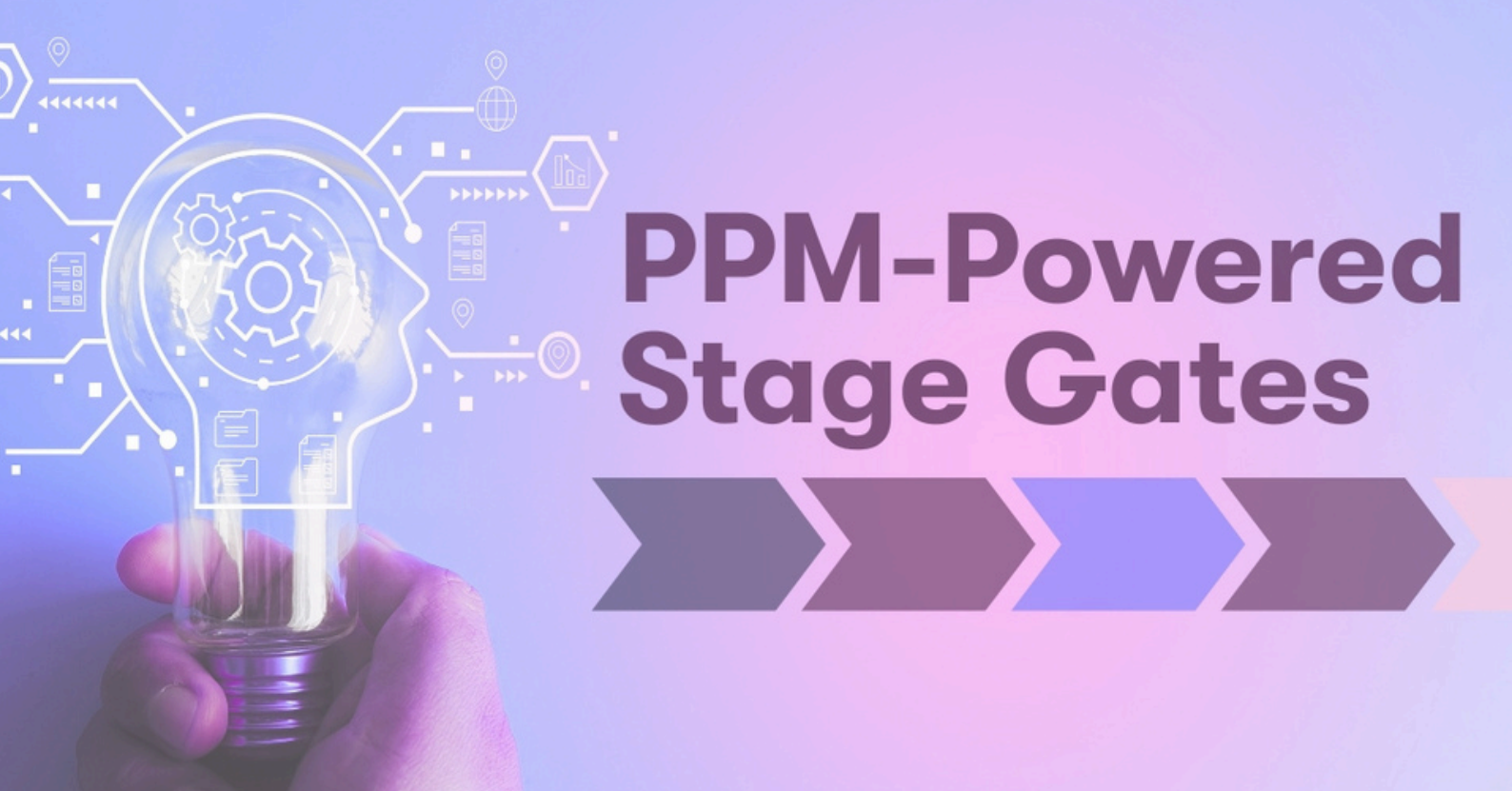


Project portfolio management (PPM) software exists to tackle these exact problems. It **unifies fragmented processes, centralizes data, standardizes templates, and gives leadership real-time visibility into capital project performance across the organization.**

However, it's important to note that using PPM for capital projects in life sciences requires **specific industry know-how.** There are many PPM software vendors who do capital projects, but you must ask yourself who are the PPM vendors that do a great job for capital projects in life sciences?

It takes expertise and experience to properly solve your industry-specific problems. **An off-the-shelf tool can never adequately address your challenges.** The stakes are too high. A lot of PPM tools focus on R&D – and can be powerful in new product development – but when it comes to capital projects for life sciences, they fall drastically short.





# PPM-Powered Stage Gates



## 2.1 Centralized Intake & Capital Portfolio Planning

With PPM software, organizations can structure their capital intake process using standardized templates and stage-gate workflows. Whether it's a long-range forecast or a short-term facility upgrade, all proposed projects follow the same intake journey – improving consistency and auditability.

Scenario planning tools enable leadership to model multiple funding or resourcing options before committing to a project.

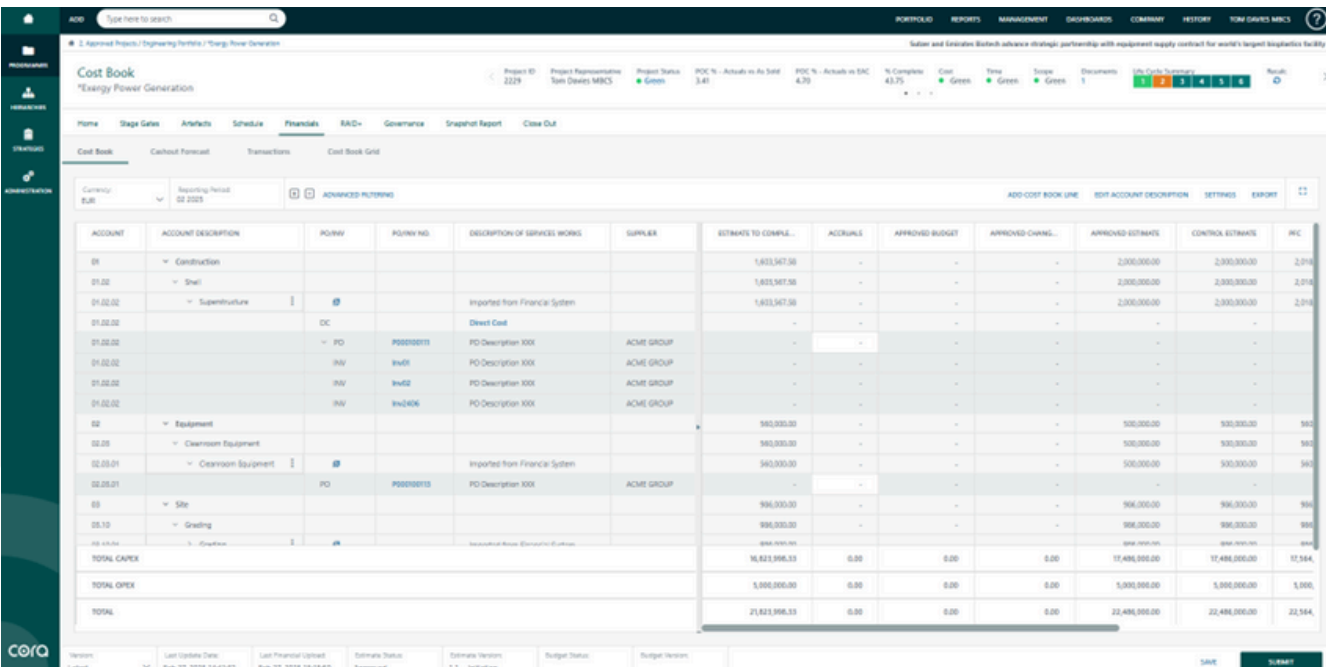
**This is crucial when trying to align a five-year strategic plan with real-world capacity constraints.**

## 2.2 Integrated Financial Control for Capital Projects

One of the most powerful advantages of modern PPM software is its ability to integrate directly with ERP systems like SAP or Oracle. This **eliminates manual data entry for items like purchase orders, invoices, and actual costs, enabling real-time forecasting with live updates to Estimate to Complete (ETC) and Estimate at Completion (EAC).** That means finance teams can make cash flow decisions based on current data instead of outdated spreadsheets.

At the center of this is the project cost management system — **the single source of truth for capital projects.** From the moment a project is approved, multiple cost estimates are developed for different scenarios. Once a path is chosen, that estimate becomes the project baseline, and every element — risks, invoices, budget transfers — is tracked against it.

This integrated, scenario-based approach delivers global visibility, consistency, and control across all projects, helping firms avoid costly surprises and enabling smarter, faster financial decisions.



The screenshot displays the Cora Cost Book interface for a project named "Energy Power Generation". The interface includes a top navigation bar with tabs like Home, Stage Gates, Artifacts, Schedule, Financials, and more. Below the navigation, there's a table with columns for ACCOUNT, ACCOUNT DESCRIPTION, POWER, POWER NO., DESCRIPTION OF SERVICES WORK, SUPPLIER, ESTIMATES TO COMPLETE, ACCRUALS, APPROVED BUDGET, APPROVED CHANGE, APPROVED ESTIMATE, CONTRACT ESTIMATE, and EAC. The table lists various construction and equipment items, including Construction, Shell, Superstructure, DC, PO, INV, and Equipment. The bottom of the table shows summary rows for TOTAL CAPEX, TOTAL OPEX, and TOTAL.

ACCOUNT	ACCOUNT DESCRIPTION	POWER	POWER NO.	DESCRIPTION OF SERVICES WORK	SUPPLIER	ESTIMATES TO COMPLETE	ACCRUALS	APPROVED BUDGET	APPROVED CHANGE	APPROVED ESTIMATE	CONTRACT ESTIMATE	EAC
01	Construction					1,833,347.58	-	-	-	2,000,000.00	2,000,000.00	2,016
01.02	Shell					1,833,347.58	-	-	-	2,000,000.00	2,000,000.00	2,016
01.02.02	Superstructure			Imported from Finance System		1,833,347.58	-	-	-	2,000,000.00	2,000,000.00	2,016
01.02.02	DC			Direct Cost		-	-	-	-	-	-	-
01.02.02	PO			PO Description XXX	ACME GROUP	-	-	-	-	-	-	-
01.02.02	INV			INV Description XXX	ACME GROUP	-	-	-	-	-	-	-
01.02.02	INV			INV Description XXX	ACME GROUP	-	-	-	-	-	-	-
01.02.02	INV			INV Description XXX	ACME GROUP	-	-	-	-	-	-	-
02	Equipment					960,000.00	-	-	-	960,000.00	960,000.00	960
02.05	Cleanroom Equipment					960,000.00	-	-	-	960,000.00	960,000.00	960
02.05.01	Cleanroom Equipment			Imported from Finance System		960,000.00	-	-	-	960,000.00	960,000.00	960
02.05.01	PO			PO Description XXX	ACME GROUP	-	-	-	-	-	-	-
03	Site					996,000.00	-	-	-	996,000.00	996,000.00	996
03.10	Grading					996,000.00	-	-	-	996,000.00	996,000.00	996
TOTAL CAPEX						36,821,398.53	0.00	0.00	0.00	37,498,000.00	37,498,000.00	37,564
TOTAL OPEX						5,000,000.00	0.00	0.00	0.00	5,000,000.00	5,000,000.00	5,000
TOTAL						41,821,398.53	0.00	0.00	0.00	42,498,000.00	42,498,000.00	42,564

Figure 1: Cora Cost Book



# How Pharma Customer Transformed Financial Control With Cora

A customer of Cora, a global leader in the pharma sector, was managing dozens of capital projects across more than 70 sites worldwide. Each location had its own cost structures, ERP integration challenges, and reporting standards. This fragmentation led to delays in financial reporting, inconsistent forecasting, and frequent cost overruns.

By implementing Cora's Project Cost Management System, integrated with SAP, the pharma company achieved near real-time visibility into actuals and committed costs at the appropriate work breakdown structure (WBS) level. The system's ability to automatically map cost codes into a unified cost breakdown structure (CBS) gave their global finance team a consolidated, portfolio-wide view — including live exchange rate conversions and standardized reporting.

With Cora, the pharma provider transitioned from reactive to proactive cost management. Project teams modeled multiple cost scenarios and instantly set baselines when decisions were made. Risks and design changes were no longer managed manually; they were fully embedded in the workflow. The result? Greater cost control, more accurate forecasting, and a confident shift toward enterprise-wide financial accountability.

## Case Study

## 2.3 Transparent Project Reporting & Dashboards

PPM software automates the creation of dashboards and reports using live data from projects across the portfolio. Executives no longer must wait for manually produced, error-prone end-of-month PowerPoints. Instead, they can **view drillable dashboards that provide status, budget, risks, and timeline information at any time**. Alerts can also be built in to notify teams when budgets drift, schedules slip, or risks are raised. This empowers proactive, rather than reactive, decision-making.

## 2.4 Capital Project Risk, Change & Issue Management

Capital projects in pharma and medical devices are high-risk endeavors – delays or failures can cost millions. **PPM software includes structured change registers, risk logs, and issue trackers that allow teams to document, track, and mitigate disruptions**. Better yet, these items are tied directly to financial and timeline metrics. So, if a change order impacts cost, it will reflect in the forecast automatically. Cora also generates dynamic heat maps to ensure risks have effective mitigation.

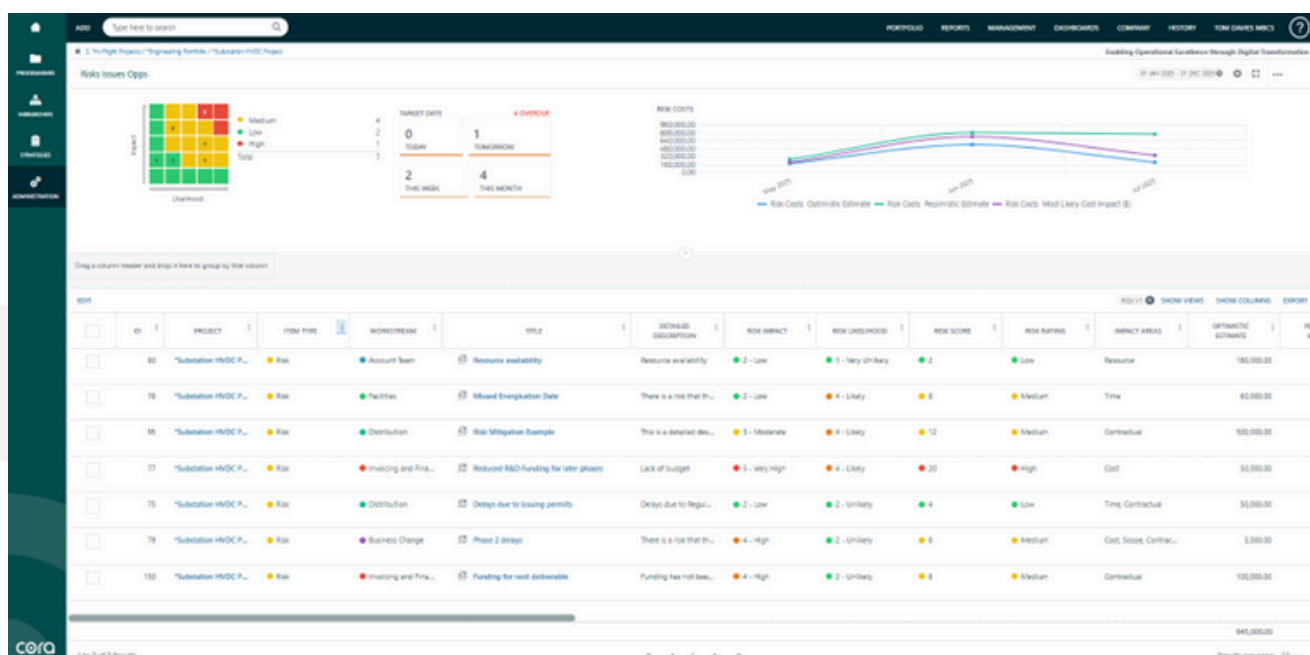


Figure 2: Ensuring risks have effective mitigation



## 2.5 Advanced Project Scheduling & Dependency Visibility

Many life sciences teams outsource the actual build of infrastructure to contractors. So, while full task-level schedules aren't always necessary, key milestones and stage gates are essential. PPM tools enable milestone-level planning tied to contractor deliverables, making it easier to track completion.

Dependencies across projects or sites can be visualized in real time, making cross-site coordination far more efficient.

## 2.6 Standardized Workflows & Governance

Standardization is critical in biotechnology, pharmaceuticals, and medical devices. With a PPM platform, templates for business cases, risk tracking, and financial planning can be applied consistently across all business units and geographies. This enables portfolio-level comparisons and ensures regulatory alignment.

Governance frameworks – such as approval gates or mandatory risk reviews – are embedded into the system, enforcing discipline while reducing bureaucratic overhead.



# Streamlining Sub-Contractor Management with Cora

A global life sciences organization transformed its sub-contractor management process by using the Cora Portal to enable construction vendors to self-serve — without needing direct access to the core platform. Scopes of work are routed automatically to project managers for approval, while any project changes are submitted via the Portal and seamlessly integrated into Cora's registers and workflows.

This automation has significantly reduced manual effort, ensured strict adherence to governance processes, and improved overall project clarity. Sub-contractors now submit all documentation — including invoices and change notifications — through the Portal, where it's stored directly in the correct project folder. Project managers receive automatic alerts and can review, approve, or return documents with comments, streamlining communication and accelerating turnaround times.

*“Portals have added a lot of value for us. Our vendors submit invoices, change notifications are tracked, and the workflows connect the process.”*

*PMO Leader, Global Life Sciences Organization*



# **Chapter 3**

## **Benefits of Cora for Life Sciences Capital Project Management**

Cora's PPM platform has been specifically designed to support capital project management in highly regulated, multi-site industries – especially life sciences. Here's how it delivers value across the enterprise.



### 3.1 Confident Financial Decision-Making

Cora gives you full control over capital project finances by delivering accurate, real-time data you can trust. By seamlessly integrating with ERP systems like SAP and Oracle, Cora ensures that purchase orders, invoices, and committed costs are always up to date — without manual entry or data gaps.

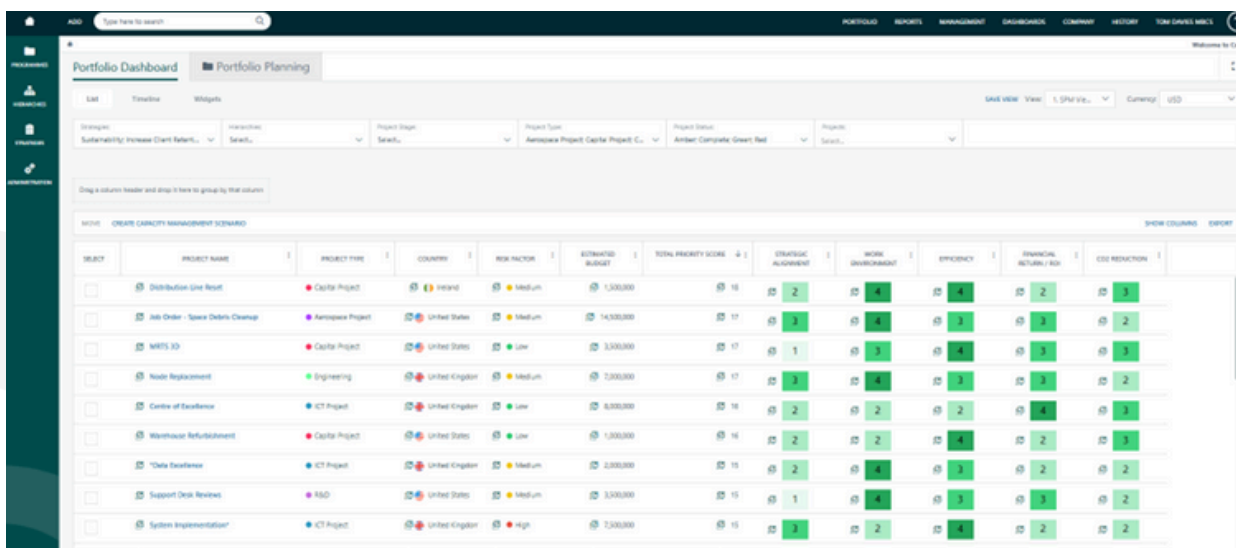
This means **fewer errors, faster access to reliable forecasts, and better cash flow control**. Finance teams can act with confidence, while **executives gain the clarity they need to make informed, strategic decisions — before risks turn into overruns**.

## 3.2 Prioritize Projects That Deliver Most Value

Cora helps organizations focus their capital on the projects that deliver the greatest impact. By applying a standardized scoring model across all proposals, leadership can confidently prioritize initiatives based on strategic value, ROI, technical complexity, and resource availability.

Cora seamlessly connects annual operating plans with LRFP cycles, so short-term priorities stay aligned with long-term strategy.

Ensure funding goes to the right projects — not just the loudest ones. **With Cora, the result is smarter decision-making across annual planning and long-range forecasting cycles.** Even in constrained environments, teams can **adapt quickly, align with corporate strategy, and feel confident that every dollar is supporting long-term value and enterprise-wide goals.**



The screenshot displays the Cora Portfolio Prioritization interface. It features a top navigation bar with tabs for Portfolio, Reports, Management, Dashboards, Compare, History, and Take Action. Below the navigation bar, there's a 'Portfolio Dashboard' section with a 'Portfolio Planning' tab. The main area shows a table of projects with columns for Project Name, Project Type, Country, Risk Factor, Estimated Budget, Total Priority Score, Strategic Alignment, Work Environment, Efficiency, Financial Return / ROI, and CO2 Reduction. The table lists several projects, each with a corresponding icon and a color-coded status indicator.

SELECT	PROJECT NAME	PROJECT TYPE	COUNTRY	RISK FACTOR	ESTIMATED BUDGET	TOTAL PRIORITY SCORE	STRATEGIC ALIGNMENT	WORK ENVIRONMENT	EFFICIENCY	FINANCIAL RETURN / ROI	CO2 REDUCTION
<input type="checkbox"/>	Distribution Line Rebuild	Capital Project	Ireland	Medium	1,300,000	18	2	4	4	2	3
<input type="checkbox"/>	Job Order - Space Debris Cleanup	Aerospace Project	United States	Medium	14,300,000	17	3	4	3	3	2
<input type="checkbox"/>	WETS 3D	Capital Project	United States	Low	3,300,000	17	1	3	4	5	3
<input type="checkbox"/>	Router Replacement	Engineering	United Kingdom	Medium	7,000,000	17	3	4	3	3	2
<input type="checkbox"/>	Centre of Excellence	ICT Project	United Kingdom	Low	8,000,000	16	2	2	2	4	3
<input type="checkbox"/>	Warehouse Refurbishment	Capital Project	United States	Low	1,300,000	16	2	2	4	2	3
<input type="checkbox"/>	Data Excellence	ICT Project	United Kingdom	Medium	2,000,000	15	2	4	3	2	2
<input type="checkbox"/>	Support Desk Reviews	R&D	United States	Medium	3,300,000	15	1	4	3	3	2
<input type="checkbox"/>	System Implementation	ICT Project	United Kingdom	High	7,300,000	15	3	2	4	2	2

Figure 3: Cora Portfolio Prioritization



### 3.3 Stay Compliant and In Control

Cora gives you the visibility and control needed to stay compliant and avoid costly surprises. **With a full audit trail for every decision, change, and risk, you're always inspection-ready — a critical advantage in highly regulated industries like life sciences.**

Live risk dashboards highlight issues before they escalate, enabling proactive interventions and tighter oversight. Whether you're facing internal audits or external regulators, Cora helps you demonstrate control, ensure accountability, and protects your project outcomes.

### 3.4 Drive 30% Faster Decision Cycles

Faster, smarter decisions mean improved project outcomes, better resource use, and greater confidence at every level of the organization. By enabling real-time access to portfolio data, Cora's life sciences customers have achieved 30% faster decision cycles.



### 3.5 See Every Capital Project Clearly Now

Cora's Portfolio Dashboard delivers a single, up-to-the-minute view of your entire project landscape—consolidating health, budget, schedule, and risks into one easy-to-understand interface. Tailored for every role, it gives executives strategic clarity and empowers project managers with detailed insights.

**This comprehensive transparency enables faster, more confident decisions, earlier risk detection, and more accurate forecasting—essential for managing complex, multi-site life sciences portfolios.** With Cora, you can stay ahead of challenges and keep projects aligned with business goals every step of the way.

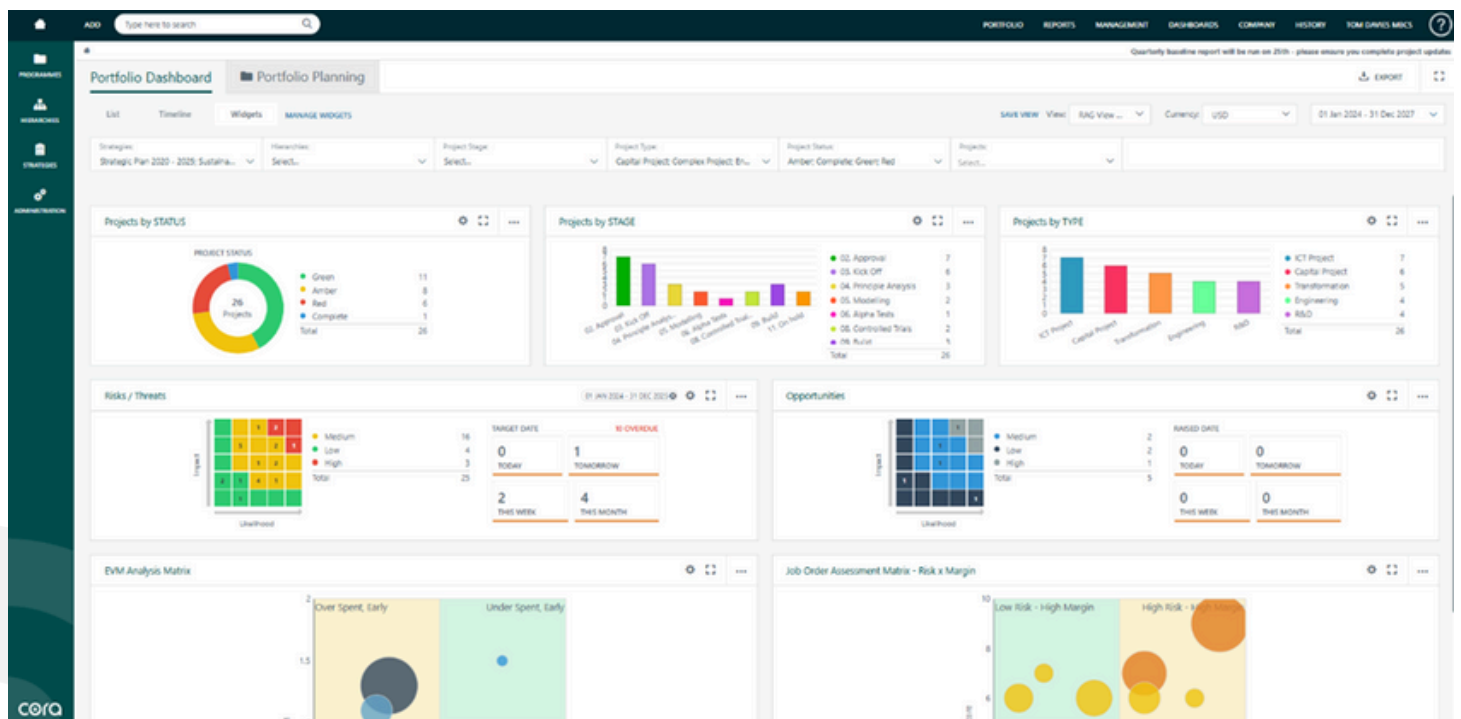


Figure 4: Cora Portfolio Dashboard

### 3.6 Benefit from Proven ROI

Life sciences clients—including biotechnology, pharmaceuticals, and medical device companies—have seen tangible benefits, such as **\$2.5 million in annual savings through smarter project prioritization.**

**Cora's low-code platform makes it easy to tailor the solution to each organization's unique needs without costly, time-consuming development.** By customizing templates, dashboards, and workflows to fit existing governance, teams work more efficiently, gain clearer insights, and accelerate decision-making—all driving better project outcomes and sustained cost savings.

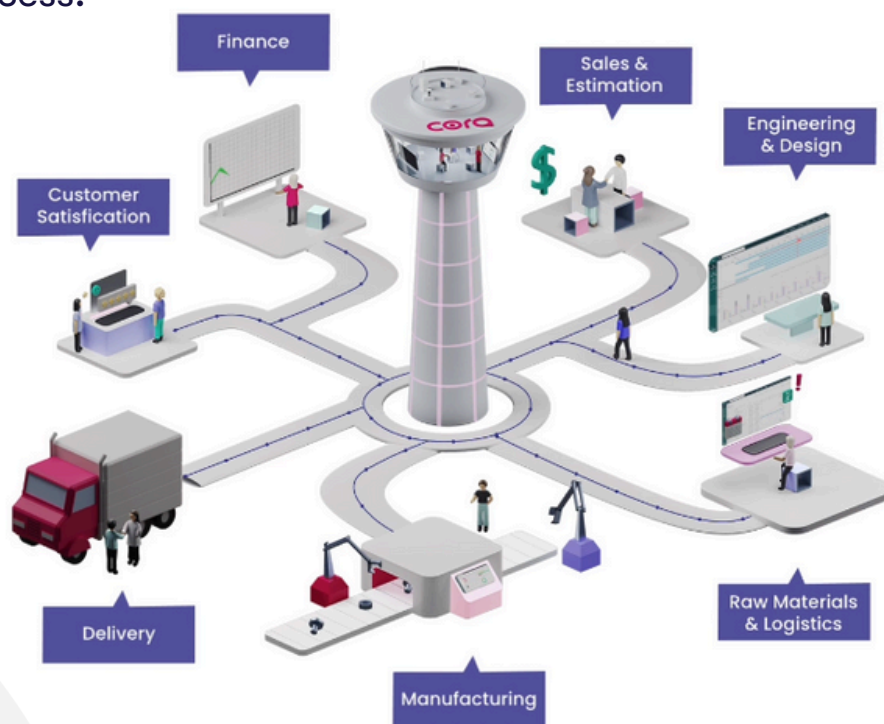


# Conclusion

Managing capital projects in life sciences is uniquely complex — and generic project management tools simply don't cut it. Cora PPM is engineered from the ground up specifically for capital project management in regulated industries, delivering powerful functionality right out of the box that meets life sciences exacting needs.

With Cora, organizations can effortlessly streamline project intake, enforce standardized governance, and unify reporting — all while driving projects forward with unparalleled confidence, reduced risk, and tighter financial control.

By breaking down silos and enabling truly strategic decision-making, Cora transforms your capital project execution into a distinct competitive advantage — built for life sciences, built for success.





# Author Bio



## **Tom Davies MBCS**

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Tom Davies MBCS has had several senior roles as part of the client success and consultancy teams at Cora Systems for over a decade. He's presently working as a Senior Solutions Consultant, leading a global team of consultants, and helping to shape digital transformation initiatives with Cora's roster of clients, working in every area of industry, around the globe.



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